# How to Create A Professional Pivot Table

# with i4Query data in 4 Easy Steps



Following is the technique used by Satisfaction Software to create professional looking pivot tables.

Pre-requisite: Excel version 2007 or later.

# 1. Create pivot table

For this example we will use the Payroll Transaction (pytran) file.

- Highlight the i4Query data sheet (click on cell A0)
- Select
  - $\rightarrow$  Insert tab
  - $\rightarrow$  Pivot table

First you must upload i4 Query data into excel normally by i4 Excel plugin – or upload CSV data that is saved as an excel sheet

► Normally you will accept defaults as follows then click ok

| Create PivotTable  | X |
|--|---|
| Choose the data that you want to analyze                 |   |
| ⊙ Select a table or range                                |   |
| Table/Range: i4query_excel_rosters!\$A:\$AJ              |   |
| O Use an external data source                            |   |
| Choose Connection  |   |
| Connection name:   |   |
| Choose where you want the PivotTable report to be placed |   |
| ⊙ <u>N</u> ew Worksheet                                  |   |
| C Existing Worksheet                                     |   |
| Location:  |   |
| OK Cancel  |   |



• Design your pivot table. For this example, sort payroll transaction data by:

- $\rightarrow$  Branch
- $\rightarrow$  Employee number & name
- $\rightarrow$  Allowance code & description (Type)
- $\rightarrow$  Columns for each batch
- $\rightarrow$  Subtotalling hours & Gross

| PivotTable Field List            | ▼ ×              |
|----------------------------------|------------------|
| Choose fields to add to report:  |                  |
| ✓ Surname                        | <u>^</u>         |
| ✓ First Name                     |                  |
| ✓ Description                    | =                |
| Company                          |                  |
| Job Administrator                |                  |
| Units                            |                  |
| Accounting Period                |                  |
| 🗹 Employee Number                |                  |
| Gross                            |                  |
| ✓ Branch                         |                  |
| Batch Number                     |                  |
| ✓ Hours                          | ~                |
|                                  |                  |
| Drag fields between areas below: |                  |
| Y Report Filter                  | Column Labels    |
|                                  | Batch Number 🔹   |
|                                  | ∑ Values ▼       |
|                                  |                  |
|                                  |                  |
| Row Labels                       | Σ Values         |
| Company 🗸 🔺                      | Count of Hours 🔻 |
| Branch 💌 🗏                       | Count of Gross 🔹 |
| Employee Number                  |                  |
| Surname 🗸 🗸                      |                  |
| Defer Layout Update              | Update           |

## 2. Now lets get the Design correct

• Close the above pivot table and select the **Design** tab under Pivot Table Tools

#### 2.1 Subtotals

Select "Show All Subtotals at Bottom of Group"

-II) = (21 · cpc plugin\_payroll\_rec v1 04 - Microsoft Excel PivotTable Tools Options Design Insert Formulas Data Home Page Layout Review View Row Headers 📃 Banded Rows ubtotals Grand Report Blank 🔽 Column Headers 📃 Banded Columns Layout \* Rows Totals tTable Style Options Do Not Show Subtotals Options.. sabled Show all Subtotals at Bottom of Group В С D Show all Subtotals at <u>T</u>op of Group 2 3 Column Labels 💌 6023 6028 4 5 Row Labels Count of Hours Count of Gross Count of Hours C 6 **■ CP ■ CP** 7 8 ⊟3 JENSEN

## 2.2 Report Layout

Select "Show in Tabular Form"

This is effective visually especially if subtotalling by more than 2 values on rows in Pivot Table (as we are in the example).

|         |           |                   |                  |                    |  | ~                     |                 |        |                             |      |         |            |          |       |      |
|---------|-----------|-------------------|------------------|--------------------|--|-----------------------|-----------------|--------|-----------------------------|------|---------|------------|----------|-------|------|
| C       | 2 19      | - (21 −           |                  | , cl               | oc plugi                               | n_payrol              | l_rec           | v1 04  | 4 - Microsoft               | Exce | l f     | PivotTable | Tools    |       |      |
|         | н         | ome               | Insert           | Page I             | ayout.                                 | Formul                | as              | Da     | ta Review                   | 1    | View    | Options    | Desig    | n     |      |
| Sul     | btotals G | Grand<br>otals •  | Report<br>Layout | Blank<br>Rows *    | <ul><li>✓ Rov</li><li>✓ Colu</li></ul> | v Headers<br>umn Heac | iers [          | Ba     | inded Rows<br>inded Columns |      |         |            |          |       |      |
| <u></u> | Security  | Layoı<br>y Warnin |                  | Show in <u>(</u>   | Compact                                | Form                  | ole Sty<br>oled | yle Oj | otions<br>Options           |      |         |            |          |       | Pivo |
|         | А         | 3                 |                  | Sh <u>o</u> w in ( | Dutline Fo                             | orm                   |                 |        |                             |      |         |            |          |       |      |
| 1       |           |                   |                  | Show in ]          | [abular F                              | orm                   |                 |        | В                           |      | (       | )          | D        |       |      |
| 2       |           |                   | _                |                    |  |                       |                 |        |                             |      |         |            |          |       |      |
| 3       |           |                   |                  |                    |  |                       |                 |        | olumn Label                 | s 💌  |         |            |          |       |      |
| 4       |           |                   |                  |                    |  |                       |                 | -      | (                           | 6023 |         |            |          | 6028  |      |
| 5       | Row La    | abels             |                  |                    |  |                       |                 | - C    | ount of Hour                | S    | Count o | f Gross    | Count of | Hours | Co   |
| 6       | ■CP       |                   |                  |                    |  |                       |                 |        |                             |      |         |            |          |       |      |
| 7       | ■CP       | )                 |                  |                    |  |                       |                 |        |                             |      |         |            |          |       |      |
| 8       | 8         | 3                 |                  |                    |  |                       |                 |        |                             |      |         |            |          |       |      |
| 9       | (         |                   | EN               |                    |  |                       |                 |        |                             |      |         |            |          |       |      |

This is the Aussie/Kiwi way; the default is the American way with subtotals at the top.

## 2.3 Select Pivot Style

Green is our scene – but you can be as individual as you like. Use the drop down arrow to select your colour scheme.

| ÷               |   |                         |         | P                 | ivotTable Too  | ols    | cpc plugin_p   | ayroll_rec v1 | 04 sample | - Microsoft E | xcel |  |
|-----------------|---|-------------------------|---------|-------------------|----------------|--------|----------------|---------------|-----------|---------------|------|--|
| nsert Page Lay  | out Formula   | s Data                  | Review  | View              | Options        | Design |                |               |           |               |      |  |
| Report Blank    | <ul> <li>Row Headers</li> <li>Column Heade</li> </ul> | Banded R<br>rs Banded C | ows     | Light             |                |        | <b>T</b> 11111 |               |           |               |      |  |
| ayout ▼ Rows ▼  | PivotTabl   | e Style Options         |         | =====             |                |        |                |               |           |               |      |  |
| Data connection | s have been disab                                     | led Options             |         |                   |                |        |                |               |           |               |      |  |
|                 | <i>J</i> ∗ WILLIS                                     |                         |         |                   |                |        |                |               |           | =====         |      |  |
| C               | D   | E                       |         |                   |                |        |                |               |           | =====         |      |  |
| ⊟ 153           | PERSHOUSE   | RICKY                   | BFID    |                   |                |        |                |               |           |               |      |  |
|                 |   |                         |         |                   |                |        |                |               |           |               |      |  |
|                 |   |                         | LHA Tot |                   |                |        |                |               |           |               |      |  |
|                 |   |                         | ■T01    |                   |                |        |                |               |           |               |      |  |
|                 |   |                         | TO1 Tot |                   | 1              |        |                |               |           |               |      |  |
| 153 Total       |   |                         |         | Medium            |                |        |                |               |           | _             |      |  |
| ⊟15/            | BENNETT   | Stephanie               |         |                   |                |        |                |               |           |               |      |  |
| 157 Total       |   |                         | FINITOL |                   |                |        |                |               |           |               |      |  |
| ■210            | ■WILLIS   | ■Craig                  | ⊟PTN    |                   |                |        |                |               |           |               |      |  |
|                 |   |                         | PTN Tot |                   |                |        |                |               |           |               |      |  |
| 210 Total       |   |                         |         |                   |                |        |                |               |           | -             |      |  |
| ≡ 260           | ■ TYLER   |                         | ■PTD    |                   |                |        |                | =====         | EEEEE     | ====          |      |  |
|                 |   |                         | PTD Tot |                   |                |        |                |               |           |               | -    |  |
|                 |   |                         | ⊟PTN    | New 1             | PivotTable Sty | le     |                |               |           |               |      |  |
|                 |   |                         | PTN Tot | Leg <u>C</u> lear |                |        |                |               |           |               | .:   |  |
|                 |   |                         | ■ SAP   |                   |                | ł      | ART HME-Sa     | turday Rate   |           |               | _    |  |
|                 | SAP Total   |                         |         |                   |                |        |                |               |           |               |      |  |

## 3. Let's get the Subtotalling correct

Now you have a pivot table that is acceptable - except it subtotals too many times, and counts records rather than totals values (of hours and gross).

So let's get this correct!

To reselect Pivot table wizard, **right click** on any cell of the pivot table and select **Show Field List** 



### **3.1** First let's make the subtotalling more sensible

We know that the Employee Number, Surname & First Name is the same thing – Excel does not. So let's tell Excel! You need to click on each field that you wish to turn subtotalling off.

Example:

- Select field Surname under the Row Labels section > Field Settings
- Change Subtotals from Automatic to None as follows then click ok.
- Repeat Process for First Name
- Repeat process for Description so only shows subtotal by Allowance code (rather than Allowance code and repeat for Allowance Description).

| Field Settings                     | ? 🛛      |
|------------------------------------|----------|
| Source Name: Surname               |          |
| Custom Name: Surname               |          |
| Subtotals & Filters Layout & Print |          |
| Subtotals                          |          |
|                                    |          |
| ○ None                             |          |
| ◯ <u>C</u> ustom                   |          |
| Select one or more functions:      |          |
| Sum                                | <u>^</u> |
| Average                            |          |
| Max                                |          |
| Product                            | $\sim$   |
| Filter                             |          |
| Include new items in manual filter |          |
|                                    |          |
|                                    |          |
|                                    |          |

# **3.2** Now Let's tell Excel to subtotal hours and gross rather than count records

- ► Right click on any pivot table cell
- ► Select Show Field List (as before)
- Drag Hours and Gross from the Row Labels field into the bottom right hand box (Values).
- ► Now select Count of Hours field



#### Select Value Field Settings and change:

- Count to Sum (as wish to total hours)
- Custom Name from Sum of Hours to <space> Hours - note the leading space is to avoid the error "Pivot Table Field Name Already Exists" error if you typed Hours without a leading space – as this field already exists!
- You could even change the Custom Name (for this pivot table only) to something else such as "Time" if this is more preferable for users of the pivot table.

| Value Field Se                                   | ettings                               |                       | ? 🗙       |
|--|---------------------------------------|-----------------------|-----------|
| Source Name: H                                   | ours                                  |                       |           |
| <u>C</u> ustom Name:                             | Sum of Hours                          |                       |           |
| Summarize by                                     | Show values as                        |                       |           |
| <u>S</u> ummarize v                              | alue field by                         |                       |           |
| Choose the typ<br>the data from s                | e of calculation tha<br>elected field | it you want to use to | summarize |
| Sum<br>Count<br>Average<br>Max<br>Min<br>Product |                                       |                       |           |
| <u>N</u> umber Format                            |                                       | ок                    | Cancel    |



| Value Field Settings 🛛 🔹 🔀  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Source Name: Gross  |  |  |  |  |  |  |
| Custom Name: Sum of Gross   |  |  |  |  |  |  |
| Summarize by Show values as   |  |  |  |  |  |  |
| Summarize value field by  |  |  |  |  |  |  |
| Choose the type of calculation that you want to use to summarize the data from selected field |  |  |  |  |  |  |
| Sum<br>Count<br>Average<br>Max<br>Min<br>Product  |  |  |  |  |  |  |
| Number Format OK Cancel   |  |  |  |  |  |  |

Use a similar approach to change "Count of Gross" to sum and call field "Wages"

- Click on Count of Gross
- Select Value Field Settings
- ► Change Count to Sum

Fremat Call

Change Custom Name to Wages

As this is an Amount lets show it in a currency amount format.

- ► Now Select Number Format:
  - $\rightarrow$  Highlight entire pivot table (A, 0) and right click.
  - → Select Format Cells and click Currency
  - → Our preferred format is Currency (Second image below) as this shows credits in red

| Unital Cells   |          |
|--|----------|
| Number         Category:         General         Number         Currency         Accounting         Date         Time         Percentage         Fraction         Scientific         Text         Special         Custom         Currency formats are used for general monetary values. Use Accounting for align decimal points in a column. | rmats to |
| ОК   | Cancel   |

- ► Click ok,
  - Done.

The usual Excel abilities such as highlighting a number of columns and expanding or shrinking at once to suit are available.

We made a mistake – there are only 3 steps not 4 – how easy was that!!

So you do not feel cheated, the next page will show you how to add a nice finish!

# 4. Nice Touches

Create a pivot table as follows:

| Pivot I able Field List          | ▼ ×           |
|----------------------------------|---------------|
|                                  |               |
| Choose fields to add to report:  |               |
| dof                              | ^             |
| Job Name                         |               |
| Employee Number                  |               |
| Surname                          |               |
| First Name                       |               |
| Date                             |               |
| ▼ Type                           |               |
| ✓ Description                    |               |
| ∠ Hours                          |               |
| Units                            |               |
| Rate                             |               |
|                                  |               |
|                                  |               |
| GL Account Number                |               |
| GL SUB Account                   |               |
| Description2                     |               |
| Creation Date                    |               |
| Branch2                          | Y             |
| Property Address                 |               |
| Branches                         | ×             |
|                                  |               |
| Drag fields between areas below: |               |
| Y Report Filter                  | Column Labels |
|                                  | ∑ Values ▼    |
|                                  |               |
|                                  |               |
|                                  |               |
|                                  |               |
|                                  |               |
|                                  |               |
|                                  |               |
| Row Labels                       | Σ Values      |
| Branch2                          | Hours 🔻       |
| Туре 🔻                           | Gross         |
| Description 🔻                    |               |
|                                  |               |
|                                  |               |
|                                  |               |
|                                  |               |
|                                  |               |
| Search Deskton                   |               |
|                                  |               |

#### The following is a sample result:

|          |            |   | Values |             |
|----------|------------|---|--------|-------------|
| Branch2  | Туре       | Description                                 | Hours  | Gross       |
| IS       | CAN        | Casual Night Rate                           | 2      | \$89.76     |
|          | CAR        | Car Allowance<br>FULL TIME - Day Rate -     |        | \$90.00     |
|          | FTD        | Grade 1                                     | 5      | \$609.15    |
|          | GAR        | RUBBISH ALLOWANCE                           |        | \$16.68     |
|          | LAU        | Laundry Allowance<br>LEADING HAND           |        | \$110.00    |
|          | LHA        | ALLOWANCE                                   |        | \$189.99    |
|          | PTD        | PART TIME                                   | 163    | \$7,747.71  |
|          | PTN        | PART TIME - Night Rate                      | 710    | \$31,207.63 |
|          | SAP        | PART TIME - Saturday Rate                   | 8      | \$489.35    |
|          | SUP        | PART TIME - Sunday Rate                     | 3      | \$387.68    |
|          | <b>TO1</b> | TOILET ALLOWANCE                            |        | \$142.40    |
| IS Total |            |   | 891    | \$41,080.35 |
| SS       | CAN        | Casual Night Rate<br>FULL TIME - Day Rate - | 7      | \$145.86    |
|          | FTD        | Grade 1                                     | 5      | \$609.15    |
|          | GAR        | RUBBISH ALLOWANCE                           |        | \$55.60     |
|          | LAU        | Laundry Allowance<br>LEADING HAND           |        | \$15.00     |
|          | LHA        | ALLOWANCE                                   |        | \$75.00     |
|          | PTD        | PART TIME                                   | 67     | \$3,285.31  |
|          | PTN        | PART TIME - Night Rate                      | 259    | \$13,177.16 |
|          | SAP        | PART TIME - Saturday Rate                   | 8      | \$707.56    |
|          | SUP        | PART TIME - Sunday Rate                     | 1      | \$137.84    |
|          | TO1        | TOIL FT ALLOWANCE                           |        | \$65.70     |
|          | 101        | TOILLT ALLOWARDL                            |        | 1.1.1.1.1   |
| SS Total | 101        | TOILLT ALLOWANCE                            | 347    | \$18,274.18 |

## 4.1 Formulas

Sometimes you may wish to calculate formulas with the results of pivot tables. In this example we will calculate the average rate per hour (Av Rate per Hour=Gross/Hours).

To do this:

- Click on any cell in the pivot table (so you are in active pivot table area)
- Select Options (from top task bar)
- Select Formulas
- Select Calculated Field (See image below)

- Enter the description for the new variable in the name field; then in the formula box choose the fields from the dictionary by clicking on the "insert field" option if any operations required (in this example: division).
- > Select OK when finished.

| Insert Ca         | Iculated Field        | ? 🚺    |
|-------------------|-----------------------|--------|
|                   |                       |        |
| <u>N</u> ame:     | Av Rate Per Hour      | Add    |
| For <u>m</u> ula: | = Gross/ Hours        | Delete |
|                   |                       |        |
| <u>F</u> ields:   |                       |        |
| Type              |                       | $\sim$ |
| Hours             |                       |        |
| Units             |                       |        |
| Rate              |                       |        |
| Gross             | at Number             |        |
| GL Sub Ac         |                       |        |
|                   | Insert Fi <u>e</u> ld |        |
|                   | ОК                    | Close  |

|             |      |                                   | Values |             |                            |
|-------------|------|-----------------------------------|--------|-------------|----------------------------|
| Branch2     | Туре | Description                       | Hours  | Gross       | Sum of Av Rate Per<br>Hour |
| IS          | PTN  | PART TIME - Night<br>Rate         | 710    | \$31,207.63 | 20.81202401                |
|             | PTD  | PART TIME<br>PART TIME - Saturday | 163    | \$7,747.71  | 18.43056048                |
|             | SAP  | Rate                              | 8      | \$489.35    | 26.45135135                |
| IS Total    |      |                                   | 881    | \$39,444.69 | 20.34938064                |
| SS          | PTN  | PART TIME - Night<br>Rate         | 259    | \$13,177.16 | 20.84004428                |
|             | PTD  | PART TIME<br>PART TIME - Saturday | 67     | \$3,285.31  | 18.43091164                |
|             | SAP  | Rate                              | 8      | \$707.56    | 26.45084112                |
| SS Total    |      |                                   | 334    | \$17,170.03 | 20.50642542                |
| Grand Total |      |                                   | 1215   | \$56,614.72 | 20.39675423                |

The Pivot Table will be displayed as follows:

You can treat calculated fields just like any other field in the data dictionary. If you:

- Right click on pivot table
- Select Field List

Then you can rename the 'Sum of Av Rate Per Hour' field result on pivot table to 'Av Rate Per Hour'; select format then select the desired number of decimal places and move its position on the pivot table if desired.

## 4.2 Errors on Pivot Table

A **#DIV/0!** (Divide by Zero) appears against some codes that do not have any hours – highlighted in yellow in the following. This looks untidy.

|         |      |   | Values |             |                            |
|---------|------|---|--------|-------------|----------------------------|
| Branch2 | Туре | Description                             | Hours  | Gross       | Sum of Av Rate Per<br>Hour |
| IS      | PTN  | PART TIME - Night Rate                  | 710    | \$31,207.63 | 20.81202401                |
|         | PTD  | PART TIME<br>FULL TIME - Day Rate -     | 163    | \$7,747.71  | 18.43056048                |
|         | FTD  | Grade 1                                 | 5      | \$609.15    | 16.03026316                |
|         | SAP  | PART TIME - Saturday Rate               | 8      | \$489.35    | 26.45135135                |
|         | SUP  | PART TIME - Sunday Rate<br>LEADING HAND | 3      | \$387.68    | 34.46044444                |
|         | LHA  | ALLOWANCE                               |        | \$189.99    | #DIV/0!                    |
|         | TO1  | TOILET ALLOWANCE                        |        | \$142.40    | <b>#DIV/0!</b>             |
|         | LAU  | Laundry Allowance                       |        | \$110.00    | <mark>#DIV/0</mark> !      |
|         | CAR  | Car Allowance                           |        | \$90.00     | <mark>#DIV/0!</mark>       |
|         | CAN  | Casual Night Rate                       | 2      | \$89.76     | 22.44                      |
|         | GAR  | RUBBISH ALLOWANCE                       |        | \$16.68     | <mark>#DIV/0!</mark>       |

You could go back and change the calculated field definition by using IF formula commands. However the simplest option is to use Excel's error handling option (See image below).

- Select Options from top task bar
- Then select Options (again!)
- Select "For Error Values Show" checkbox and enter the desired value. In this example "Not Appl." has been entered.

| PivotTable Options  | ? 🗙    |
|---|--------|
| Name: PivotTable1   |        |
| Layout & Format Totals & Filters Display Printing Data  |        |
| Layout  |        |
| When in <u>compact</u> form indent row labels: 1 (character(s)                                  |        |
| Display fields in report filter area: Down, Then Over 💉<br>Report filter fields per column: 0 😭 |        |
| Format  |        |
| For error values show: Not Appl.     For empty cells show:                                      |        |
| <ul> <li>Autofit column widths on update</li> <li>Preserve cell formatting on update</li> </ul> |        |
|   |        |
|   |        |
| ОК  | Cancel |

#### This looks better!

|         |      |   | Values |             |           |                 |
|---------|------|---|--------|-------------|-----------|-----------------|
| Branch2 | Туре | Description                             | Hours  | Hours Gross |           | <b>Rate Per</b> |
| IS      | PTN  | PART TIME - Night Rate                  | 710    | \$31,207.63 |           | 20.81202401     |
|         | PTD  | PART TIME<br>FULL TIME - Day Rate -     | 163    | \$7,747.71  |           | 18.43056048     |
|         | FTD  | Grade 1                                 | 5      | \$609.15    |           | 16.03026316     |
|         | SAP  | PART TIME - Saturday Rate               | 8      | \$489.35    |           | 26.45135135     |
|         | SUP  | PART TIME - Sunday Rate<br>LEADING HAND | 3      | \$387.68    |           | 34.46044444     |
|         | LHA  | ALLOWANCE                               |        | \$189.99    | Not Appl. |                 |
|         | TO1  | TOILET ALLOWANCE                        |        | \$142.40    | Not Appl. |                 |
|         | LAU  | Laundry Allowance                       |        | \$110.00    | Not Appl. |                 |
|         | CAR  | Car Allowance                           |        | \$90.00     | Not Appl. |                 |
|         | CAN  | Casual Night Rate                       | 2      | \$89.76     |           | 22.44           |
|         | GAR  | <b>RUBBISH ALLOWANCE</b>                |        | \$16.68     | Not Appl. |                 |

It will look even better if the rate (number) and text "Not Appl." are aligned.

To do this:

- Highlight the sum of Av Rate per hour column (e.g. click on column F (or as applicable) so whole column is highlighted)
- Select Format Cells
- Select Alignment
- Change Horizontal value to Right (indent) as follows:

| Format Cells   | ? 🔀         |
|--|-------------|
| Number Alignment Font Border Fill Pr   | rotection   |
| Number       Alignment       Font       Border       Fill       Prince         Text alignment       Horizontal:       Indent:       Indent:       Indent:         Wertical:       Indent:       Indent:       Indent:       Indent:         Bottom       Indent:       Indent:       Indent:       Indent:         Justify distributed       Indent:       Indent:       Indent:         Justify distributed       Indent:       Indent:       Indent:         Justify distributed       Indent:       Indent:       Indent:         Shrink to fit       Merge cells       Indent:       Indent:         Right-to-left       Indent:       Indent:       Indent:         Context       Indent:       Indent:       Indent: | Orientation |
|  | OK Cancel   |

#### This looks even better!

|             |      |   | Values |             |                     |
|-------------|------|---|--------|-------------|---------------------|
| Branch?     | Tyne | Description   | Hours  | Gross       | Av Rate Per<br>Hour |
| IS          | PTN  | PART TIME - Night Rate                              | 710    | \$31.207.63 | \$20.812            |
|             | PTD  | PART TIME<br>FULL TIME - Day Rate -                 | 163    | \$7,747.71  | \$18.431            |
|             | FTD  | Grade 1   | 5      | \$609.15    | \$16.030            |
|             | SAP  | PART TIME - Saturday Rate                           | 8      | \$489.35    | \$26.451            |
|             | SUP  | PART TIME - Sunday Rate<br>LEADING HAND             | 3      | \$387.68    | \$34.460            |
|             | LHA  | ALLOWANCE   |        | \$189.99    | Not Appl.           |
|             | TO1  | TOILET ALLOWANCE                                    |        | \$142.40    | Not Appl.           |
|             | LAU  | Laundry Allowance                                   |        | \$110.00    | Not Appl.           |
|             | CAR  | Car Allowance                                       |        | \$90.00     | Not Appl.           |
|             | CAN  | Casual Night Rate                                   | 2      | \$89.76     | \$22.440            |
|             | GAR  | RUBBISH ALLOWANCE                                   |        | \$16.68     | Not Appl.           |
| IS Total    |      |   | 891    | \$41,080.35 | \$20.627            |
| SS          | PTN  | PART TIME - Night Rate                              | 259    | \$13,177.16 | \$20.840            |
|             | PTD  | PART TIME   | 67     | \$3,285.31  | \$18.431            |
|             | SAP  | PART TIME - Saturday Rate<br>FULL TIME - Day Rate - | 8      | \$707.56    | \$26.451            |
|             | FTD  | Grade 1   | 5      | \$609.15    | \$16.030            |
|             | CAN  | Casual Night Rate                                   | 7      | \$145.86    | \$22.440            |
|             | SUP  | PART TIME - Sunday Rate<br>LEADING HAND             | 1      | \$137.84    | \$34.460            |
|             | LHA  | ALLOWANCE   |        | \$75.00     | Not Appl.           |
|             | TO1  | TOILET ALLOWANCE                                    |        | \$65.70     | Not Appl.           |
|             | GAR  | RUBBISH ALLOWANCE                                   |        | \$55.60     | Not Appl.           |
|             | LAU  | Laundry Allowance                                   |        | \$15.00     | Not Appl.           |
| SS Total    |      |   | 347    | \$18,274.18 | \$20.630            |
| Grand Total |      |   | 1238   | \$59,354.53 | \$20.628            |

## 4.4 Sorting

Rather than having rows sorted alphanumerically you may wish to sort in a more helpful order. In this example we may wish to sort within Branch then by the Average Hourly Rate field that we just calculated!

To do this, go to the **Pivot Table**.

It is critical to right click on the column header that you wish to sort by. In following example it is desired to change the sort of the Type column, so **right click** on the Type column heading:

|         |            |                           |       |             | Av Rate Per |
|---------|------------|---------------------------|-------|-------------|-------------|
| Branch2 | _ Туре     | Description               | Hours | Gross       | Hour        |
| IS      | PTN        | PART TIME - Night Rate    | 710   | \$31,207.63 | \$20.812    |
|         | PTD        | PARTTIME                  | 163   | \$7,747.71  | \$18.431    |
|         |            | FULL TIME - Day Rate -    |       |             |             |
|         | FTD        | Grade 1                   | 5     | \$609.15    | \$16.030    |
|         | SAP        | PART TIME - Saturday Rate | 8     | \$489.35    | \$26.451    |
|         | SUP        | PART TIME - Sunday Rate   | 3     | \$387.68    | \$34.460    |
|         |            | LEADING HAND              |       |             |             |
|         | LHA        | ALLOWANCE                 |       | \$189.99    | Not Appl.   |
|         | <b>TO1</b> | TOILET ALLOWANCE          |       | \$142.40    | Not Appl.   |

Select Sort

More Sort Options

| 1  |             | _            |                              | -     |                      |          |             |    |
|----|-------------|--------------|------------------------------|-------|----------------------|----------|-------------|----|
| 2  |             | Aria         | Nar - 11 - 🗛 🛪 💲 - % , 刘     |       |                      |          |             |    |
| 3  |             | в            | I 🚍 🗄 • 🖄 • <u>A</u> • 號 🐝 🔤 |       |                      | Values   |             |    |
| 4  | Branch      | 2            | Type Description             |       | <b>7</b>             | Hours    | Gross       | Av |
| 5  | ⊟IS         | Ð            | <u>С</u> ору                 | ght F | Rate                 | 710      | \$31,207.63 |    |
| 6  | ]           |              | <u>F</u> ormat Cells         |       |                      | 163      | \$7,747.71  |    |
| 7  | 1           |              | <u>R</u> efresh              | y Ra  | te - Grade 1         | 5        | \$609.15    |    |
| 8  | 1           |              | <u>S</u> ort →               | ₽↓    | <u>S</u> ort A to Z  |          | \$489.35    |    |
| 9  | ]           |              | Fil <u>t</u> er >            | Z↓    | S <u>o</u> rt Z to A |          | \$387.68    |    |
| 10 |             | $\checkmark$ | Su <u>b</u> total "Branch2"  |       | More Sort C          | \$189.99 |             |    |
| 11 |             | <u> </u>     | Expand/Collapse              | ANC   | E                    |          | \$142.40    |    |
| 12 |             | 4            | Group                        | ce    |                      |          | \$110.00    |    |
| 13 |             | 4            | Unaroup                      |       |                      |          | \$90.00     |    |
| 14 |             |              | Move                         | :e    |                      | 2        | \$89.76     |    |
| 15 |             | ×            | Pemove "Branch?"             | VAN   | CE                   |          | \$16.68     |    |
| 16 | IS Tota     |              | Field Cetting                | -     |                      | 891      | \$41,080.35 |    |
| 17 | <b>B</b> SS |              | PiertTable Ontions           | ght F | Rate                 | 259      | \$13,177.16 |    |
| 18 |             |              | Pivotiable Options           |       |                      | 67       | \$3,285.31  |    |
| 40 | 1           |              | Show Field List              | turch | ou Doto              | 0        | ¢707 56     |    |

|          | A4        | <del>-</del> (* | <i>f</i> ∗ E | ranch2                             |               |             |               |
|----------|-----------|-----------------|--------------|------------------------------------|---------------|-------------|---------------|
|          | А         | В               |              | С                                  | D             | E           | F             |
| 1        |           |                 |              |                                    |               |             |               |
| 2        |           |                 |              |                                    |               |             |               |
| 3        |           |                 |              | Sort (Branch2)                     |               | ?           | $\mathbf{X}$  |
| 4        | Branch2 🛛 |                 | Desc         | Sort options                       |               |             | Rate Per Hour |
| 5        | ⊟IS       | ■PTN            | PART         | ○ <u>M</u> anual (you can drag ite | ms to rearran | nge them)   | \$20.812      |
| 6        |           | ■ PTD           | PART         | Ascending (A to Z) by:             |               |             | \$18.431      |
| 7        |           | ■ FTD           | FUL          | Branch2                            |               |             | \$16.030      |
| 8        |           | ■ SAP           | PART         | • O Descending (Z to A) by:        |               |             | \$26.451      |
| 9        |           | SUP             | PART         | Branch2                            |               |             | ✓ \$34.460    |
| 10       |           | ■LHA            | LEAD         | Summ Branch2<br>Hours              |               |             | Not Appl.     |
| 11       |           | <b>⊟TO1</b>     | TOIL         | E Sort Gross                       |               |             | Not Appl.     |
| 12       | •         | ■LAU            | Laun         | d                                  |               |             | Not Appl.     |
| 13       |           | ■CAR            | Car A        | 1                                  |               |             | Not Appl.     |
| 14       |           | <b>■CAN</b>     | Casu         | a                                  |               |             | \$22.440      |
| 15       |           | ■GAR            | RUBE         | 3 Mo <u>r</u> i                    |               |             | Not Appl.     |
| 16       | IS Total  |                 |              |                                    |               | •+1,000.00  | \$20.627      |
| 17       | ■SS       | ■ PTN           | PART         | TIME - Night Rate                  | 259           | \$13,177.16 | \$20.840      |
| 18       |           | ■ PTD           | PART         | TIME                               | 67            | \$3,285.31  | \$18.431      |
| 19       |           | SAP             | PART         | TIME - Saturday Rate               | 8             | \$707.56    | \$26.451      |
| 20       |           | ■ FTD           | FULL         | TIME - Day Rate - Grade 1          | 5             | \$609.15    | \$16.030      |
| 21       |           | <b>■CAN</b>     | Casu         | al Night Rate                      | 7             | \$145.86    | \$22.440      |
| <b>1</b> | Roster S  | Summary Shee    | ti //        | i4query_excel_plugin_11929         | 9(1) 🦯 🖏      |             | A             |

# Select Descending (Z to A) by: (which means highest rate will come first) ▶ And in this example select Av Rate Per Hour in the drop down box.

|             |            |                                      | Values     |                      |             |
|-------------|------------|--------------------------------------|------------|----------------------|-------------|
| Drough 2    | True       | Description                          | Hanna      | Cross                | Av Rate Per |
| Branch2     | SUD        | Description<br>DAPT TIME Sunday Pata | Hours<br>2 | \$297.69             | _Hour       |
| 15          | SUP        | PART TIME - Sunday Rate              | 5          | \$387.08<br>\$490.25 | \$34.400    |
|             | SAP        | PART TIME - Saturday Rate            | 8          | \$489.33<br>#00.76   | \$20.451    |
|             | CAN        | Casual Night Rate                    | 2          | \$89.76              | \$22.440    |
|             | PTN        | PART TIME - Night Rate               | 710        | \$31,207.63          | \$20.812    |
|             | PTD        | PART TIME<br>FULL TIME - Day Rate -  | 163        | \$7,747.71           | \$18.431    |
|             | FTD        | Grade 1                              | 5          | \$609.15             | \$16.030    |
|             | CAR        | Car Allowance                        |            | \$90.00              | Not Appl.   |
|             | GAR        | RUBBISH ALLOWANCE                    |            | \$16.68              | Not Appl.   |
|             | <b>TO1</b> | TOILET ALLOWANCE                     |            | \$142.40             | Not Appl.   |
|             | LAU        | Laundry Allowance<br>LEADING HAND    |            | \$110.00             | Not Appl.   |
|             | LHA        | ALLOWANCE                            |            | \$189.99             | Not Appl.   |
| IS Total    |            |                                      | 891        | \$41,080.35          | \$20.627    |
| SS          | SUP        | PART TIME - Sunday Rate              | 1          | \$137.84             | \$34.460    |
|             | SAP        | PART TIME - Saturday Rate            | 8          | \$707.56             | \$26.451    |
|             | CAN        | Casual Night Rate                    | 7          | \$145.86             | \$22.440    |
|             | PTN        | PART TIME - Night Rate               | 259        | \$13,177.16          | \$20.840    |
|             | PTD        | PART TIME<br>FULL TIME - Day Rate -  | 67         | \$3,285.31           | \$18.431    |
|             | FTD        | Grade 1                              | 5          | \$609.15             | \$16.030    |
|             | GAR        | RUBBISH ALLOWANCE                    |            | \$55.60              | Not Appl.   |
|             | LAU        | Laundry Allowance                    |            | \$15.00              | Not Appl.   |
|             | TO1        | TOILET ALLOWANCE<br>LEADING HAND     |            | \$65.70              | Not Appl.   |
|             | LHA        | ALLOWANCE                            |            | \$75.00              | Not Appl.   |
| SS Total    |            |                                      | 347        | \$18,274.18          | \$20.630    |
| Grand Total |            |                                      | 1238       | \$59,354.53          | \$20.628    |

# Following is the result:

## 4.5 Percentages on a Pivot Table

Lets add a % of the grand total for each allowance. To do this:

- Right click and select Field List
- > Drag the Gross field to the Total Values Section

| A      A  A     A | -           | Piyot Lable Field List            |                  | • X      |         |             |   |         |   | . o x |
|---|-------------|-----------------------------------|------------------|----------|---------|-------------|---|---------|---|-------|
|   |             | Chasses fields to add to connects | ſ                | <b>•</b> |         |             |   |         | 0 | - ×   |
| Home I  | nsert Pag   | Choose helds to add to report:    | t.               |          |         |             |   |         | U | - 0 X |
| Aa Colors *   |             | Job Name                          |                  | ^        |         | Fi CA       |   |         |   |       |
| A Fonts *   | <b>H</b>    | Sirpane                           |                  |          | P .     |             |   |         |   |       |
| Themes<br>• O Effects *   | Margins Ori | First Name                        |                  |          | Align G | roup Rotate |   |         |   |       |
| Themes  |             | Date                              |                  |          | ge      |             |   |         |   |       |
|   |             | ▼ Type                            |                  |          |         |             | _ |         |   | ~     |
| Security Warning  | Data connec | Description                       |                  | Y        |         |             |   |         |   | ^     |
| C11   | - (3        | VHours                            |                  |          |         |             |   |         |   | ×     |
| CII   | • •         | Units                             |                  |          |         |             |   |         |   |       |
| A   | В           | Rate                              |                  |          | J       | K           | L | М       | N | - P - |
| 4 Branch2   | Туре        |                                   |                  | ] _      |         |             |   |         |   |       |
| 5 🗉 IS  | ⊟PTN        |                                   |                  |          |         |             |   |         |   |       |
| 6   | ⊜PTD        | Description2                      |                  |          |         |             |   |         |   |       |
| 7   | ⊜FTD        | Creation Date                     |                  |          |         |             |   |         |   |       |
| 8   | BSAP        | Branch2                           |                  | Y        |         |             |   |         |   |       |
| 9   | = SUP       | Property Address                  |                  |          |         |             |   |         |   |       |
| 10  |             | Branches                          |                  |          |         |             |   |         |   |       |
| 10  |             | ▼ Av Rate Per Hour                |                  | ~        |         |             |   |         |   |       |
| 11  | B101        |                                   |                  |          |         |             |   |         |   | _     |
| 12  | BLAU        | Drag fields between areas below:  | Column Labels    |          |         |             |   |         |   |       |
| 13  | BCAR        | y Report Filter                   |                  |          |         |             |   |         |   |       |
| 14  | BCAN        |                                   | Σ values         | <u> </u> |         |             |   |         |   |       |
| 15  | ⊟GAR        |                                   |                  |          |         |             |   |         |   |       |
| 16 IS Total   |             |                                   |                  |          |         |             |   |         |   |       |
| 17 BSS  | ⊟PTN        |                                   |                  |          |         |             |   |         |   |       |
| 18  | ⊜PTD        |                                   |                  |          |         |             |   |         |   |       |
| 19  | ■ SAP       |                                   |                  |          |         |             |   |         |   |       |
| 20  | = ETD       | Row Labels                        | Σ Values         |          |         |             |   |         |   |       |
| 20  | RCAN        | Branch2                           | Hours            | •        |         |             |   |         |   |       |
| 22  |             | Type 🔻                            | Gross            | •        |         |             |   |         |   |       |
| 22  |             | Description 🔻                     | Av Rate Per Hour | 7        |         |             |   |         |   | _     |
| 23  |             |                                   | Count of Gross   |          |         |             |   |         |   |       |
| 24  | BT01        |                                   |                  |          |         |             |   |         |   |       |
| Roster 9  | Summary S   |                                   |                  |          |         |             |   |         |   | • I   |
| Ready   |             |                                   | L                |          |         |             |   | 100% (- | ) |       |

- Click on "Count of Gross" field
- > Change "Summarize value field by" from Count to Sum
- Click "Value Field Settings"
- Select "Show Values As" tab
- Select "% of Total" from the drop down list
- Rename "Custom Name" field to "% of Gross" so more meaningful

| Value Field Settings           Source Name:       Gross         Custom Name:       % of Gross  |  |
|--|--|
| Summarize by Show values as Show values as % of total  |  |
| Base field: Base it and Base i |  |
| Employee Number       Number Format       OK       Cancel  |  |

#### Then an even better result!

|             |      |   | Values |             |                     |               |
|-------------|------|---|--------|-------------|---------------------|---------------|
| Branch2     | Tvne | Description   | Hours  | Gross       | Av Rate Per<br>Hour | % of<br>Gross |
| IS          | PTN  | PART TIME - Night Rate                              | 710    | \$31,207.63 | \$20.812            | 51.60%        |
|             | PTD  | PART TIME<br>FULL TIME - Day Rate -                 | 163    | \$7,747.71  | \$18.431            | 11.85%        |
|             | FTD  | Grade 1   | 5      | \$609.15    | \$16.030            | 0.36%         |
|             | SAP  | PART TIME - Saturday Rate                           | 8      | \$489.35    | \$26.451            | 0.58%         |
|             | SUP  | PART TIME - Sunday Rate<br>LEADING HAND             | 3      | \$387.68    | \$34.460            | 0.22%         |
|             | LHA  | ALLOWANCE   |        | \$189.99    | Not Appl.           | 0.51%         |
|             | TO1  | TOILET ALLOWANCE                                    |        | \$142.40    | Not Appl.           | 4.72%         |
|             | LAU  | Laundry Allowance                                   |        | \$110.00    | Not Appl.           | 0.80%         |
|             | CAR  | Car Allowance                                       |        | \$90.00     | Not Appl.           | 0.22%         |
|             | CAN  | Casual Night Rate                                   | 2      | \$89.76     | \$22.440            | 0.15%         |
|             | GAR  | RUBBISH ALLOWANCE                                   |        | \$16.68     | Not Appl.           | 0.44%         |
| IS Total    |      |   | 891    | \$41,080.35 | \$20.627            | 71.44%        |
| SS          | PTN  | PART TIME - Night Rate                              | 259    | \$13,177.16 | \$20.840            | 18.82%        |
|             | PTD  | PART TIME   | 67     | \$3,285.31  | \$18.431            | 4.87%         |
|             | SAP  | PART TIME - Saturday Rate<br>FULL TIME - Day Rate - | 8      | \$707.56    | \$26.451            | 0.58%         |
|             | FTD  | Grade 1   | 5      | \$609.15    | \$16.030            | 0.36%         |
|             | CAN  | Casual Night Rate                                   | 7      | \$145.86    | \$22.440            | 0.51%         |
|             | SUP  | PART TIME - Sunday Rate<br>LEADING HAND             | 1      | \$137.84    | \$34.460            | 0.07%         |
|             | LHA  | ALLOWANCE   |        | \$75.00     | Not Appl.           | 0.22%         |
|             | TO1  | TOILET ALLOWANCE                                    |        | \$65.70     | Not Appl.           | 1.82%         |
|             | GAR  | RUBBISH ALLOWANCE                                   |        | \$55.60     | Not Appl.           | 1.09%         |
|             | LAU  | Laundry Allowance                                   |        | \$15.00     | Not Appl.           | 0.22%         |
| SS Total    |      |   | 347    | \$18,274.18 | \$20.630            | 28.56%        |
| Grand Total |      |   | 1238   | \$59,354.53 | \$20.628            | 100.00%       |

## **4.6 Filters – Pivot Tables**

Next you may decide you only wish to see the 3 largest allowances, this time based on hours not gross.

- Right click on the column label that you wish to filter (on Type column heading in this example)
- Select Filter
- ➢ Top 10

Change the specifications as required from the drop down menus (see below image), then select ok.

| Top 10 Filter (Description) |       |          | ? 🗙    |
|-----------------------------|-------|----------|--------|
| Show 3                      | Ttems | by Hours | Cancel |

The result will be as follows:

|             |      |                                     | Values |             |                     |
|-------------|------|-------------------------------------|--------|-------------|---------------------|
| Branch2     | Туре | Description                         | Hours  | Gross       | Av Rate Per<br>Hour |
| IS          | PTN  | PART TIME - Night Rate              | 710    | \$31,207.63 | \$20.812            |
|             | PTD  | PART TIME<br>FULL TIME - Day Rate - | 163    | \$7,747.71  | \$18.431            |
|             | FTD  | Grade 1                             | 5      | \$609.15    | \$16.030            |
| IS Total    |      |                                     | 878    | \$39,564.49 | \$20.208            |
| SS          | SAP  | PART TIME - Saturday Rate           | 8      | \$707.56    | \$26.451            |
|             | PTN  | PART TIME - Night Rate              | 259    | \$13,177.16 | \$20.840            |
|             | PTD  | PART TIME                           | 67     | \$3,285.31  | \$18.431            |
| SS Total    |      |                                     | 334    | \$17,170.03 | \$20.506            |
| Grand Total |      |                                     | 1212   | \$56,734.52 | \$20.297            |

Pretty and Impressive!



--- END OF DOCUMENT ---