# Sub-Totals and Grand Totals

Reports can be used to provide totals of part of the data. These are called SUB-TOTALS. For example, Joe might like to know how much each café costs him in wages. Reports can also provide overall totals called GRAND TOTALS. In this Exercise you will duplicate one of the layouts you have produced and modify it to provide SUB-TOTALS and GRAND TOTALS on the NUMBER fields.
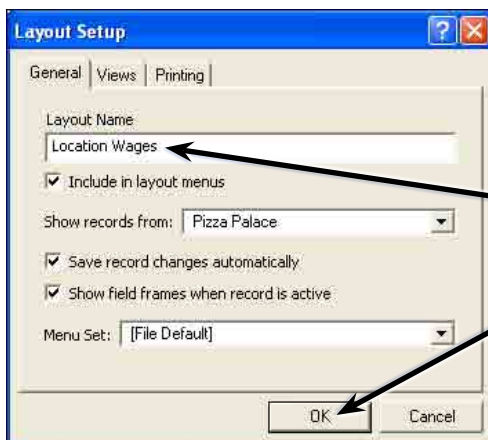
Duplicating a Layout

1 Your PIZZA PALACE database should be open.
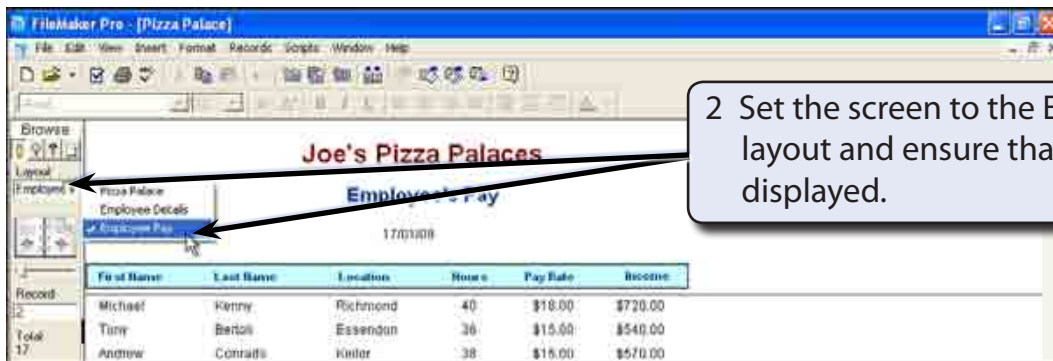
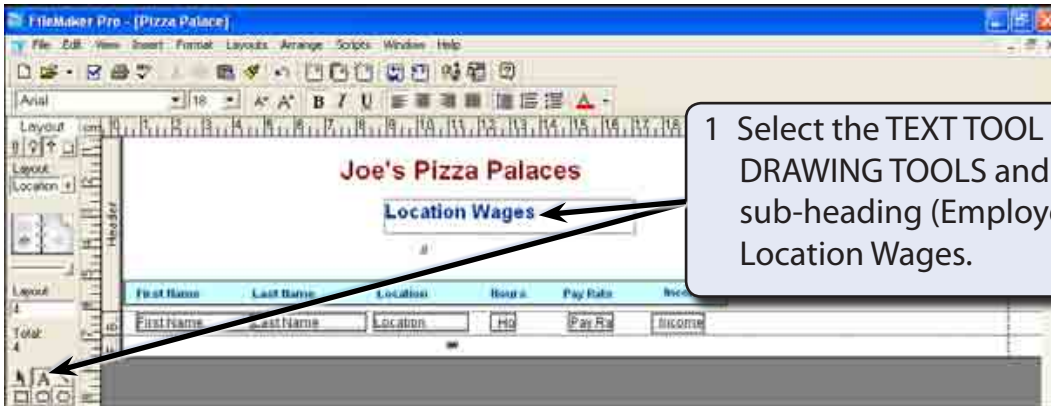2 Set the screen to the EMPLOYEE PAY layout and ensure that all records are displayed.

3 Set the screen to LAYOUT MODE then display the LAYOUTS menu and select DUPLICATE LAYOUT.

4 Display the LAYOUTS menu again and select LAYOUT SETUP.

5 Rename the layout:

Location Wages

and click on OK.
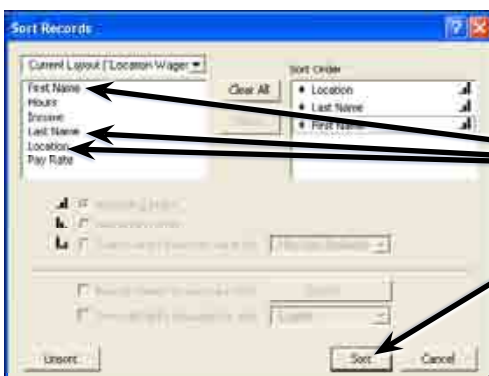
Adjusting the Layout

The sub-heading for the layout needs to be altered.

1 Select the TEXT TOOL (A) from the DRAWING TOOLS and change the sub-heading (Employee's Pay) to Location Wages.

2   If necessary, use the SELECTION TOOL to centre the headings across the records.
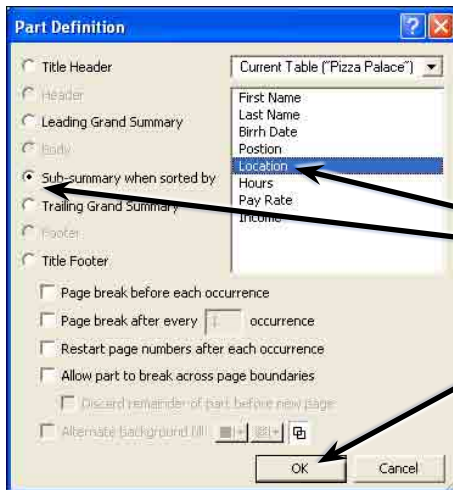
Sorting the Database

In order to create sub-totals on fields, the layout must be sorted so that the records are grouped into the field order that the totals are to be based on. In this case we will sort the database into LOCATION order so that sub-totals can be provided after each different location.

1 Set the screen to BROWSE MODE and click on the SORT button in the STANDARD Toolbar.

2 Clear any previous sorts then double click on the LOCATION field, followed by the LAST NAME field and the FIRST NAME field, then click on SORT.
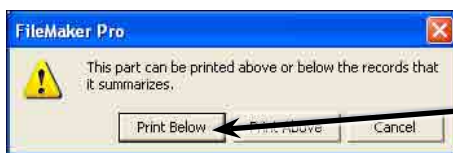
Setting the Sub-Summary Part

Sub-totals are created by placing special fields, called SUMMARY fields, in a PART of the LAYOUT called the SUB-SUMMARY PART which must be added to the layout. In this case we will set sub-totals on the HOURS and INCOME fields.

1 Return the screen to LAYOUT MODE.
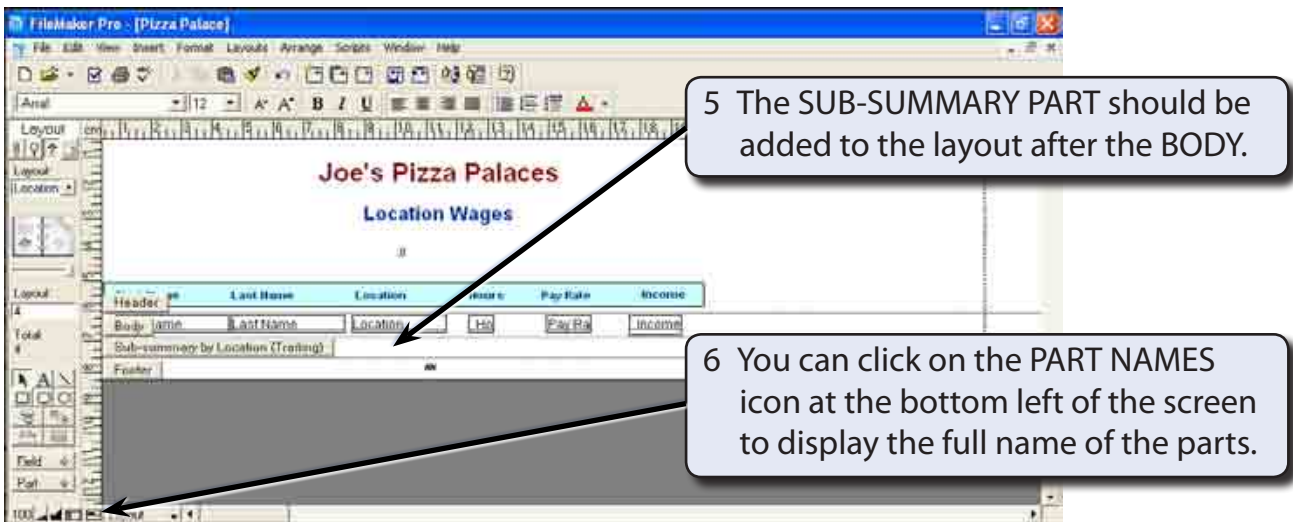
2 Display the INSERT menu and select PART.

3 In the PART DEFINITION dialogue box select SUB-SUMMARY WHEN SORTED BY, click on the LOCATION field in the field list and select OK.

NOTE: This tells the program to provide sub-totals when the database is grouped in LOCATION order.

4 You will be asked to set the position of the sub-totals, click on PRINT BELOW so that totals will be provided after each different location.

5 The SUB-SUMMARY PART should be added to the layout after the BODY.

6 You can click on the PART NAMES icon at the bottom left of the screen to display the full name of the parts.
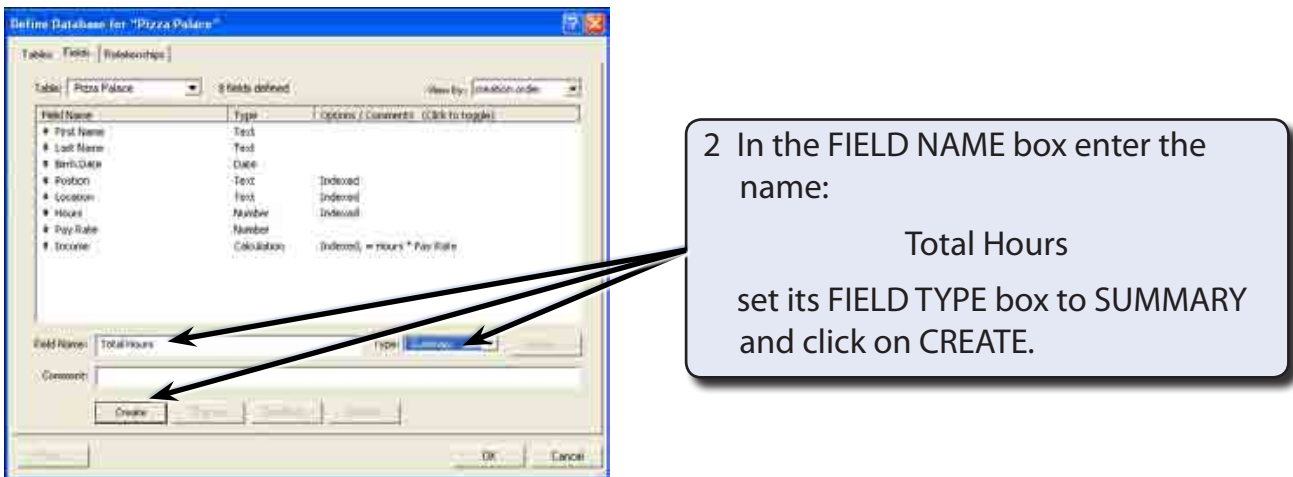
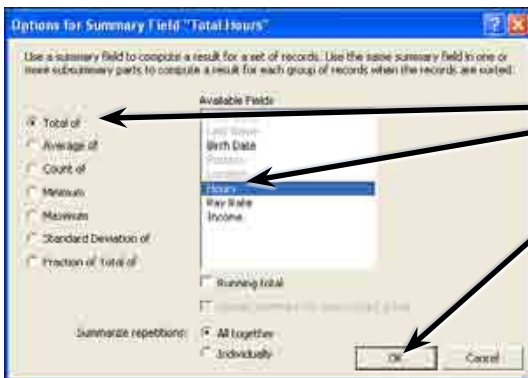7   Click on the PART NAMES icon again to return the part names to abbreviations.

Creating the Sub-Summary Fields

Special fields called SUMMARY FIELDS need to be created to calculate the subtotals.
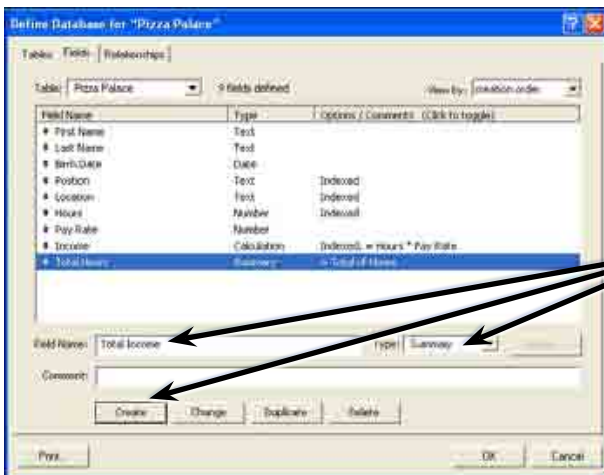
1   Display the FILE menu , highlight DEFINE and select DATABASE.

2 In the FIELD NAME box enter the name:

Total Hours

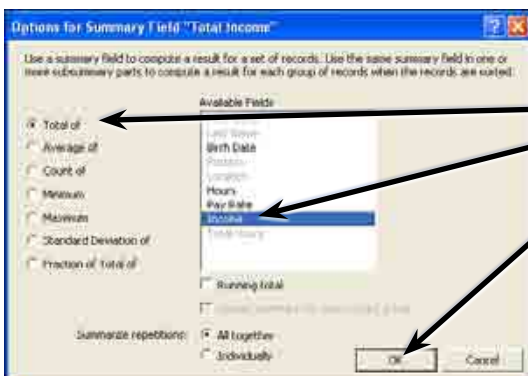set its FIELD TYPE box to SUMMARY and click on CREATE.

3   You will be asked to enter the settings for the summary field.

4 Leave TOTAL OF selected, select the HOURS field in the AVAILABLE FIELDS frame and select OK

5 In the DEFINE DATABASE dialogue box, enter the FIELD NAME:

Total Income

set its FIELD TYPE box to SUMMARY and click on CREATE.

6 Leave TOTAL OF selected, select the INCOME field in the AVAILABLE FIELDS frame and select OK