

Advanced Revision Exercises

6. This is too selective. Amend the filter criteria to also include anyone born before 1964. How many staff are now selected?
7. Print the list, including the selection criteria.
8. Save the workbook as **Employees2** and close it.

Pivot Tables

These exercises include topics taken from the following list: understanding pivot tables, creating a pivot table, updating a pivot table, grouping data in a pivot table.

Exercise 21

1. Open the workbook **Analysis**.
2. Amend the heading in column **G** to **Service**.
3. Create a pivot table based on the entire list, using the following specification:

Location	New sheet
Row Field	Department
Column Field	Service
Data Items	Count of Surname
4. Change the name of the worksheet containing the pivot table to **Pivot**.
5. According to the pivot table, how many staff have exactly 4 years service?
6. There has been a reorganisation; the **Finance** department has been absorbed into administration. On the original data spreadsheet (**Sheet1**) change the employees of the **Finance** department to **Administration**.
7. Refresh the data in the pivot table
8. According to the pivot table, how many staff are now in the **Administration** department?
9. The **Marketing** department is not to be included in this analysis. Amend the pivot table so that data for that department is not shown on the table.

10. Change the layout of the pivot table so that **Department** is the column field and **Service** is the row field.
11. Apply any of the **Table** style **AutoFormats**.
12. Save the workbook as **Analysis2** and close it.

Exercise 22

1. Open the workbook **Goods**.
2. Create a pivot table based on the entire list, using the following specification:

Location	New sheet
Row Field	Type
Column Field	none
Data Items	Sum of Weekly Turnover
3. Print a copy of the pivot table.
4. Delete the sheet containing the pivot table.
5. Create another pivot table based on the entire list, using the following specification:

Location	New sheet
Row Field	Type
Column Field	Weekly Turnover
Data Items	Count of Items
6. Switch the Row and Column fields.
7. Remove the **Miscellaneous** type records from the table.
8. Group the **Weekly Turnover** values in column **A** into the following groupings:
 - 1 - 10**
 - 11- 50**
 - 51 - 100**
 - Over 100**

Advanced Revision Exercises

- Use the range definitions above as the group names.
- Hide all detail.
- Apply any of the **Table** style **AutoFormats**.
- Print the pivot table.
- Save the workbook as **Goods2** and close it.

Functions

These exercises include topics taken from the following list: using logical functions, using date and time functions, using lookup functions, using maths and financial functions, using text functions, using database functions, using nested functions.

Exercise 23

- Open the workbook **Holidays**.
- Total all the salaries in cell **E27**.
- Enter **Higher Salaries** in **D29** and **Lower Salaries** in **D30**.
- Without making any other changes to the worksheet, add a function in **E29** to sum all salaries in the range **E4:E26** that are greater than **17000**, and add a function in **F29** to count all the salaries that make up that total.
- Similarly, add a function in **E30** to sum all salaries in the range **E4:E26** that are less than or equal to **17000**, and add a function in **F30** to count all the salaries that make up that total.
- Add **E29** and **E30** and check that the sum is the same as the grand total in **E27**.
- Enter the following table of holiday entitlements starting in **D34**:

Service	0	5	10
Holidays	20	25	30

8. In **H3** add the heading **Holidays** and make sure it has the same format as the other titles.
9. In **H4** add a function to lookup the holiday entitlement for this employee from the data in **E34:G35**.
10. Copy the function to the range **H5:H26**.
11. In **I3** add the heading **Increase** and make sure it has the same format as the other titles.
12. In **I4** add a function to calculate the salary increase. This is based on an increase of **4%** (0.04) for salaries over **£17000**, and **5%** (0.05) for all others.
13. Copy the function to the range **I5:I26** and format the range as currency.
14. What is the holiday entitlement and salary increase for **Anna Li**?
15. Save the workbook as **Holidays2** and close it.

Exercise 24

1. Open the workbook **Debts**. This is a list of a company's outstanding debts which needs analysis.
2. Enter a date of **01/09/03** in **E1**.
3. Enter a heading of **OVERDUE** in **H4**.
4. Enter a calculation in **H5** to show the number of days between the date in **E1**, and the invoice due date in **B5**.
5. Make the reference to **E1** an absolute address then copy the formula to **H6:H49**.
6. Use a database function in **C51** to count the number of invoices which are not scheduled (represented by a value of **FALSE** in the **Scheduled** column) and are more than **30** days overdue. Use rows 2 and 3 for the selection criteria. Format **C51** as **Numeric** with no decimal places. What is the answer and the formula?
7. Use a database function in **C52** to sum the values of the invoices which are not scheduled and are more than **30** days overdue.

Advanced Revision Exercises

8. Format the cell **C52** as **Currency** with no decimal places.
9. The company cannot afford to pay that much. Change the selection criteria for the two calculations to include only invoices which are not scheduled and are more than **45** days overdue. What are the new totals?
10. The invoices to pay must be marked. Enter the label **TO PAY** in cell **I4**. Add a nested logical function in **I5** to display the text **PAY** if Scheduled is **FALSE** and Overdue is greater than **45** days, otherwise display a blank cell.
11. Copy the formula to **I6:I49**.
12. Enter the label **CONTACT** in cell **J4**. Format the two new labels the same as the other labels in the row.
13. In the cell **J5** add a function to display the **First Name** and **Surname** (separated by a space) for the Tip Top Travel contact (Yvonne Dawson).
14. Copy the formula to **J6:J49**.
15. What function would you need to enter in **E1** if you wanted the date used in the calculations to be automatically the current date (with no time display)?
16. Save the workbook as **Debts2** and close it.

Charts

These exercises include topics taken from the following list: formatting charts, modifying charts, inserting images in 2D charts.

Exercise 25

1. Open the workbook **Tokyo**. This shows the Rainfall and Temperature data in Tokyo for one year. A chart of the data is shown in the worksheet **Chart**.
2. On the **Chart** sheet, move the title down so that it is in the top left of the plot area, and increase the font size of the title to **14pt**. Move the **Legend** into the **Plot Area**.
3. Format the **Plot Area** to have a gradient colour effect using the two colours **Light Turquoise** and **Aqua**.