**Exercise 1: Import and Prepare Data**

1. Start a new Excel Workbook.
2. Get data from a folder and navigate to the *Subscribers* folder.
3. There are two .csv files in this folder (new and renewals). Load these two files into the editor.
4. Combine and append the two .csv files into one big list/query. Check the box to skip files with errors.
5. In the first column, replace the **.csv** values. This will leave the column contents as **new** and **renewal**.
6. Change the case for the values in the first column to capitalise each word.
7. Change the data type of the date column to date (not date/time).
8. Close and load as a Connection Only and to the Data Model.
9. This list loads 942,079 rows. Check the number of rows loaded in the Queries pane.
10. Get data from the Excel file named *Packages*.
11. Load the data from the dProduct table.
12. No changes should be necessary.
13. Get data from the text file *Countries*.
14. There is an issue with the header. Edit the query and choose to use the first row as headers.
15. Rename the query *dCountries*.
16. Close and apply.
17. Save the workbook as subscribers-report.

**Exercise 2: Modelling**

1. Open the subscribers-report workbook.
2. Switch to the Diagram view and arrange the three tables how you wish.
3. Create a relationship between the **Country Code** field of *subscribers*and the **Country** field of *dCountries*.
4. Create a relationship between the **Product** field of *subscribers*and the **Package** field of *dProduct*.
5. Import the **Calendar** table from the Calendar workbook.
6. Add a column for the month number.
7. Add a column for the name of the month i.e. January, February.
8. Sort the *Month Name* column by the *Month* column.
9. Add a column for the day number in the month.
10. Add a column for the name of the day of the week.
11. Sort the *Day Name* column by the *Day of Week* column.
12. Mark the table as a date table.
13. Switch to the Diagram view and create a relationship between the **Date** field in *dDate* and the **Date** field in the *subscribers* table.

**Exercise 3: DAX Formulas**

1. Create a measure named **TotalSubscribers** that **counts** how many subscribers we received.
2. Create a measure named **TotalFree** that **counts** how many **Free** subscribers we received.
3. Create a measure (or copy) named **TotalPremium** to **count** how many **Premium** subscribers we received.
4. Create a measure named **TotalRevenue** that **multiplies** the **TotalPremium** measure by the **price** in the dProduct table to calculate the total revenue.
5. Create a measure named **% Premium** that uses DIVIDE to find the percentage of subscribers that were premium. Display 0 as the alternate response. Apply the percentage formatting to the measure.

**Exercise 4: Creating PivotTables**

1. Create a PivotTable from the data model. Country names in rows and the total subscribers, total free and total premium measures in the values area.
2. Sort the list descending by total subscribers
3. Filter the list to show only the top 10 countries
4. Copy this PivotTable and remove the country names from rows.
5. Include all five measures in the values area.
6. Position it above the previous PivotTable on the worksheet.
7. Convert the PivotTables to formulas.