Use the **"Dataset.xlsx"** Excel file to complete the following tasks in Power BI

Task – 01

Load the 2 tables in this dataset; ***"Sales"*** and ***"Return"***; in Power BI.

Task – 02

Create the following Dimension Tables from ***"Sales"*** :

- **Date** (Reference Primary Key from *"Sales [Order Date]"*)
- **Region** (Reference Primary Key from *"Sales [City]"*)
- **Product** (Reference Primary Key from *"Sales [Product ID]"*)
- **Product Sub-Category** (Reference Primary Key from *"Sales [Sub-Category]"*)
- **Product Category** (Reference Primary Key from *"Sales [Category]"*)

Task – 03

Create a data model in Power BI Model View via following Rules:

- Create a "Star Schema" model using tables ***"Date"***, ***"Region"***, & ***"Return"*** with the fact table ***"Sales".***
- Create a "Snowflake Schema" model using tables ***"Product"***, ***"Product Sub-Category"***, & ***"Product Category"*** with the fact table ***"Sales".***

Task – 04

Create the following calculated tables in ***"Sales"*** table:

- Cost (Total Product & Shipping Cost)
- Revenue (Product price without the discounted price)
- Profit (Difference between Cost & Revenue)

Task – 05

Create a Power BI report with 4 report pages.

Page-1: Homepage

1. Create a text/shape visual to highlight the title of this report. The title should be **"E-commerce Sales Analysis"**.

2. Create 3 different page navigation button visuals, so that user can navigate the other 3 pages from this page.

Page-2: Executive Page

1. Use card visuals to show the following KPIs:
    a. Total Orders
    b. Total Order Quantities
    c. Total Products
    d. Total Revenues
    e. Total Profits

2. Create the following 2 Donut Charts & make sure data labels (values & percentages) are visible in both charts:
    a. Different shipping mode based on total revenues
    b. Different customer segment based on total orders

3. Create a column chart for different continents based on total profits. Use tooltips to show the total number of countries and cities in each continent column.

4. Create a summary table of *total products*, *total orders*, *total order quantities*, *total costs*, *total revenues*, and *total profits* for each product sub-category.

5. Create a date slicer containing all the available order dates, keep the slicer style "Between", and make sure that all other visuals on this page should only be filterable by this slicer.

Page-3: Regional Order Page

1. Create a Donut chart for different order priorities based on total orders.

2. Create a map visual by following rules:
    a. The bubble size of the map should be varied by the amount of order quantities.
    b. Set up the map location in such a way that user can drill down to following orders: *country -> state -> city*.
    c. Put total revenues in the tooltips.

3. Create a bar chart that displays the top 5 cities with the highest order quantities. Include tooltips for each bar to show the percentage of order quantities for that city in relation to the overall order quantities.

4. Create a slicer containing all the continents in this dataset. Make sure that all other visuals on this page should only be filterable by this slicer.

Page-4: Sales Page

1. Use card visuals to show the following KPIs:
    a. Total Costs
    b. Total Costs Returned
    c. Total Revenues
    d. Total Revenues Returned
    e. Total Profits
    f. Total Profits Returned
    g. Profit Margin %

    (**Hint:** Use *"Return"* table to calculate all returned transactions)

2. Create a summary table using these KPIs for each start of month. Use Data bars in each KPI column.

3. Create an area chart representing total revenues for all the available dates in the dataset. Make sure that user can drill down the visual or any point in the chart to following orders: *Start of Month -> Start of Week -> Date*.

4. Create a slicer containing all the product names in this dataset. Make sure that all other visuals on this page should only be filterable by this slicer.

Task – 06

Add two buttons in each of the last 3 pages (*Executive Page*, *Regional Order Page*, *Sales Page*):

- First button is for returning to the Homepage (Page-1)
- Second button is for returning to the default view of that page (when user click on this button, he/she should see the default view of that page without any slicer filtering).