Application of Power BI in Big Data Analytics Assessment

Instructions

- Answer **ALL** questions.

- Put a reasonable number of visualizations on each page.

- Rename each page using the question number(s).

- Save the Power BI file using your **FULL NAME** and advise when you are done for your file to be collected in the USB.

- Switch your laptop to **Airplane mode** for the duration of the assessment.

- **No Phones allowed**

- No other window/application should be open on your computer except the Power BI Desktop application and the file with the assessment questions.

- Time allocated in **2 hours**.

- Work quietly and independently.

Connect to the '**Business Sales**' dataset and perform the following in Power BI.

1. Transform and clean the dataset as necessary, filling in all empty cells with the average of the column for numeric columns.   [5]

2. Remove the 'Row ID', 'Country' and 'Postal Code' columns.   [3]

3. Load the data sheet into the Power BI report view.   [2]

4. In the report view, create comprehensive reports to show the following insights from the dataset:

   - The total number of orders per segment.   [2]

- Average number of products sold per region. [2]
- Average sales per region. [2]
- Overall sales per state using the Card visualization. Add a Slicer for this report only. [3]
- The year and quarter in which the business sold the most products? [2]
- The contribution of each segment to the sales. [2]
- The category with the most units sold in 2015, 2016, 2017 and 2018. [2]
- The mostly used shipping mode per year, indicating the number of products shipped using the available shipping modes. [2]
- The state with the most customers. [2]
- Average units sold per state. [2]
- Number of Products that the business deals in. [2]
- Total number of customers that the business has. [2]

5. Given the following targets per state per year, create reports that indicate the position of the business against its targets:
- Sales: Minimum $10,000 and target $30,000 [5]
- Units Sold: Minimum 500 and target 30,000 if maximum units for sale is 40000. [5]
- Orders: Minimum 10,000 and target 30,000 [5]