Data Visualisation: Empowering Business with Effective Insights

Data cleanup

Before you can begin the analysis, make sure that the data is cleaned properly. You have noticed that the data contains some returns to the store which are provided in negative quantities and there are unit prices which were input in error. You will need to perform the following steps to clean this data.

- Create a check that the quantity should not be below 1 unit

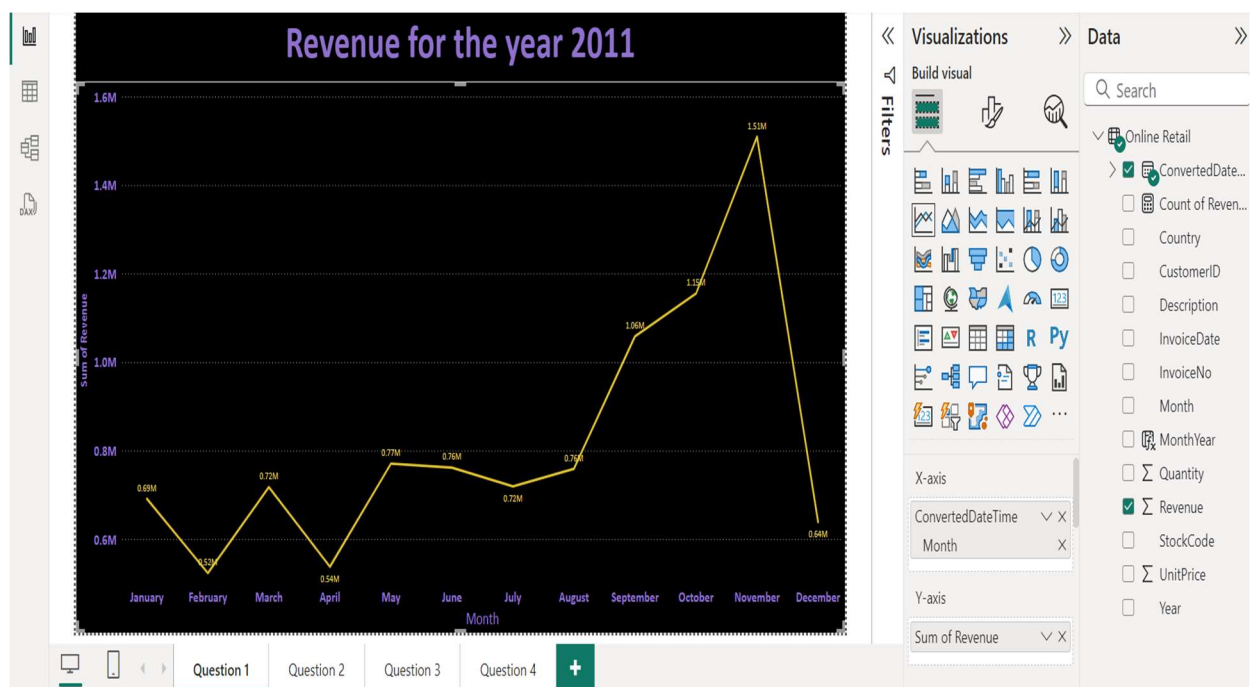- Create a check that the Unit price should not be below $0

Create each visual on a separate tab with the name of the tab displaying the question number. Once the visuals are created, save the files and upload them below.

Use the hints given in the Tasks page of Forage that helps to construct your visualisations.
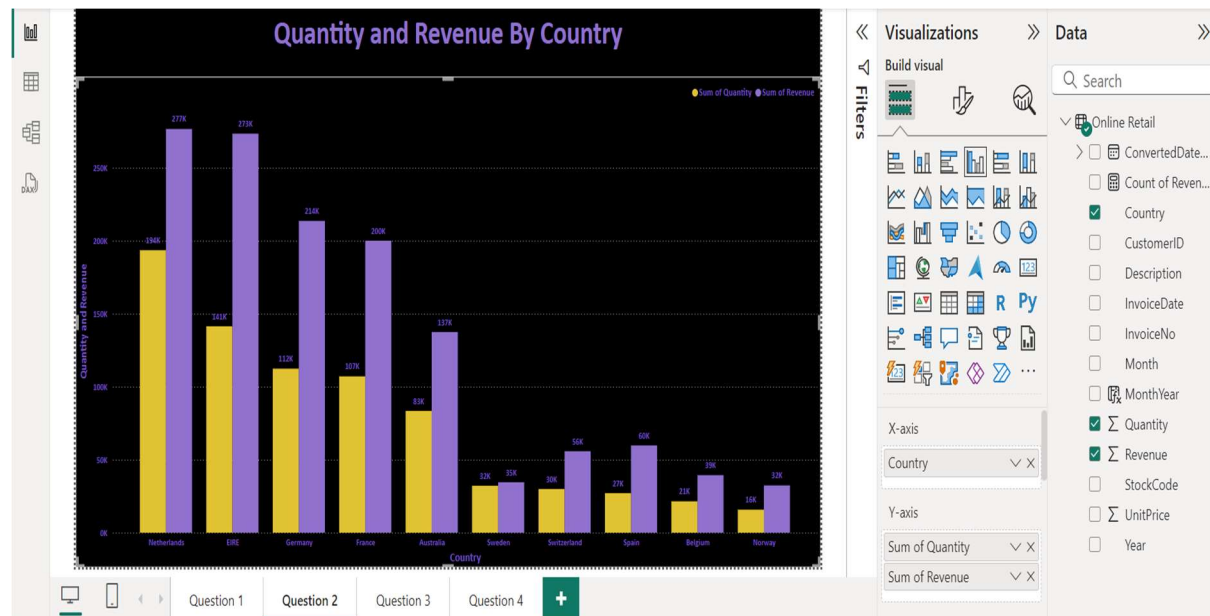
Question 1

The CEO of the retail store is interested to view the time series of the revenue data for the year 2011 only. He would like to view granular data by looking into revenue for each month. The CEO is interested in viewing the seasonal trends and wants to dig deeper into why these trends occur. This analysis will be helpful for the CEO to forecast for the next year.

1. I have calculated revenue using DAX query:
    1.1. Open the transform data and create a new column in the add column tab. Click on Custom Column. Name the column 'Revenue'.
    1.2. The DAX query is: Revenue = [Unit Price] * [Quantity]
    1.3. Click on Insert
    1.4. Then, close the Power Query Editor by selecting close and apply in the Home tab.
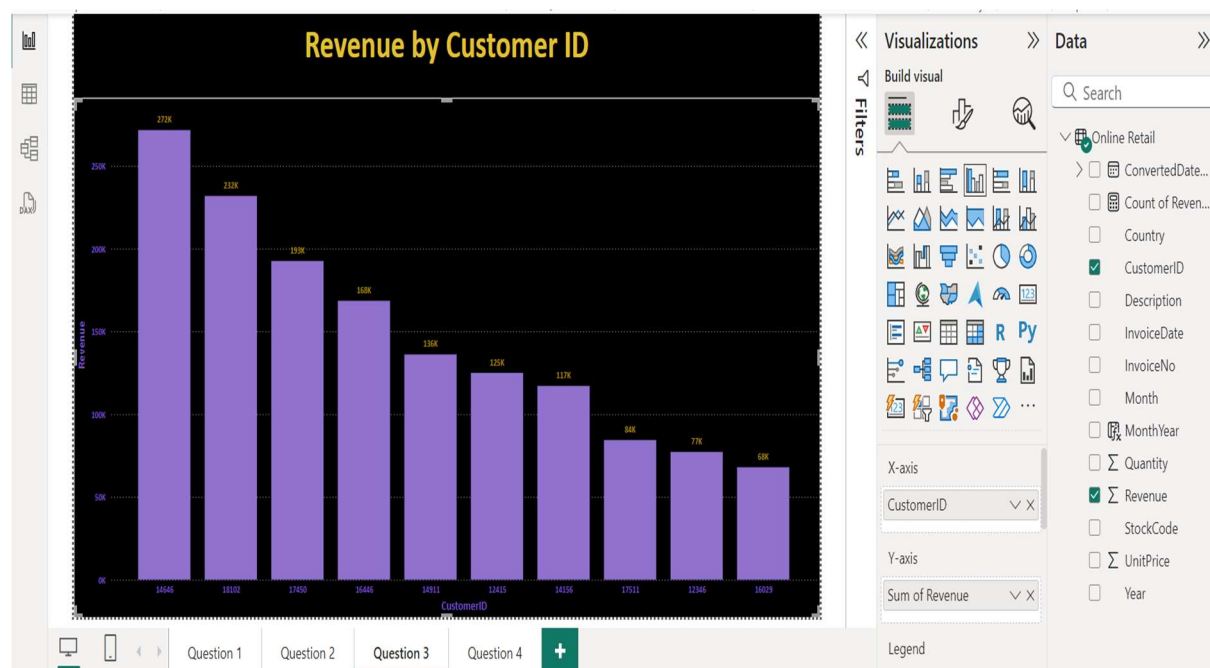
Question 2

The CMO is interested in viewing the top 10 countries which are generating the highest revenue. Additionally, the CMO is also interested in viewing the quantity sold along with the revenue generated. The CMO does not want to have the United Kingdom in this visual.

Question 3

The CMO of the online retail store wants to view the information on the top 10 customers by revenue. He is interested in a visual that shows the greatest revenue generating customer at the start and gradually declines to the lower revenue generating customers. The CMO wants to target the higher revenue generating customers and ensure that they remain satisfied with their products.

Question 4

The CEO is looking to gain insights on the demand for their products. He wants to look at all countries and see which regions have the greatest demand for their products. Once the CEO gets an idea of the regions that have high demand, he will initiate an expansion strategy which will allow the company to target these areas and generate more business from these regions. He wants to view the entire data on a single view without the need to scroll or hover over the data points to identify the demand. There is no need to show data for the United Kingdom as the CEO is more interested in viewing the countries that have expansion opportunities.

For this visualisation, few may not have access. So, to use the map and filled map visualisation, Go to File > Options and Settings > Options > Security > Enable Use ArcGIS for PowerBI and also Use Map and Filled Map Visuals > Click on OK.