Module 6: Data Visualization
Case Study 1

Problem Statement:

Consider yourself to be Sam who is a data scientist. He has been approached by a telecom company to build some aesthetic graphs to make better sense of the customer data.

Tasks To Be Performed:

1. Sam has to build a bar-plot for the 'Contract' column:
   a. Set the x-axis label to be 'Contract Type of customer'
   b. Set the y-axis label to be 'Count'
   c. Set the title of the plot to be 'Distribution of Contract'
   d. Assign 'orange' color to all the bars

2. Sam has to build a histogram for the 'MonthlyCharges' column:
   a. Set the x-axis label to be 'Monthly Charges Incurred'
   b. Set the y-axis label to be 'Count'
   c. Set the title of the plot to be 'Distribution of Monthly Charges'
   d. Assign 'forestgreen' color to the bins

3. Sam has to build a scatter-plot between 'TotalCharges' and 'tenure'. 'TotalCharges' should be on the y-axis and 'tenure' should be on the x-axis.
   a. Set the x-axis label to be 'Tenure of the customer'
   b. Set the y-axis label to be 'Total chargesIncurred'
   c. Set the title of the plot to be 'Total Charges vs Tenure'
   d. Assign 'indigo' color to the points

4. Sam has to build a box-plot between 'MonthlyCharges' and 'PaymentMethod'. 'MonthlyCharges' should be on the y-axis and 'PaymentMethod' should be on the x-axis.
   a. Set the x-axis label to be 'Payment Method of customer'
   b. Set the y-axis label to be 'Monthly ChargesIncurred'
   c. Set the title of plot to be 'Monthly Charges vs. Payment Method'
   d. Assign 'olive' color to the box-plots