National Vocational & Technical Training Commission
Institute of Electrical, Electronics and Computer Engineering
University of the Punjab

Artificial Intelligence C1 & C2

Date: 14-June-2023

Task 1

1.How does the distribution of profit vary across different regions?
2.Can you create a bar chart to compare the sales performance of different sub-categories of products?
3.Is there a correlation between the quantity of products ordered and the discount given? Visualize it using a scatter plot.
4.Create a line chart to show the trend of sales over time.
5.Can you visualize the distribution of shipping modes using a pie chart?
6.Plot a histogram to analyze the distribution of product prices.
7.Create a stacked bar chart to compare the sales performance of different segments in each region.

Task 2

1. What is the total number of rows in the dataset?
2. How many columns are there in the dataset?
3. What is the earliest order date in the dataset?
4. What is the latest ship date in the dataset?
5. Which ship mode is the most commonly used?
6. How many unique customers are there in the dataset?
7. Which country has the highest number of orders?
8. What is the average quantity of products ordered?
9. Which segment of customers generates the highest profit?
10. Which sub-category of products has the highest average discount?
11. wrtie a code to remove outliers and then make a prefect Heatmap.