INDIAN SCHOOL MUSCAT
SENIOR SECTION
INFORMATICS PRACTICES
CLASS XII (2020-2021)
Topic : Data Visualisation - pyplot
Lab Work Sheet : 9

1.	Write a Python Program to create a data frame S with the Sales of five Salesmen for the years 2017 and 2019. Find the total, highest and least sales for the year 2019. Draw a bar chart based on the Sales of each Salesman for both the years. Include appropriate title and axis labels.
2.	Write a Python Program to create a data frame MARKS using the following data: **Science** **English** **1** 62 89 **2** 55 87 **3** 63 67 **4** 85 55 **5** 47 47 Add 5 to Science and English marks. Calculate average of each student and each subject. Draw a bar chart for the modified dataframe. Include suitable title and labels for x and y axis.
3.	Write a Python Program to plot a simple line chart for the following series X with proper titles and labels. 1 100 2 250 3 435 4 478
4.	Write a Python Program to create the following data frame Student and plot a line chart for the roll number of each student against Term1 average and Term 2 average. Term1 Term2 1 75.6 87.5 2 45.6 47.8 3 87.9 90.1 4 64.5 73.2
5.	Create a pandas data frame Exam that stores the data of 10 students of Class 10 with their names and average marks in Final Exam. Write a Python Program to plot a bar chart horizontally and vertically for the percentage of toppers (first three positions) of class 10. Include suitable title, axis labels and legend.
6.	Write a Python Program to plot the elements of two lists x=[2,4,6,8,10] and y=[6,7,8,2,4] using a bar chart with suitable titles.

7.	Write a Python Program to plot a histogram for displaying the number of values within the range of 0 to 90 in steps of 10 for the given list s= [5, 20, 30, 10, 15, 55, 20, 20, 55, 42, 38, 70,65,30, 89].
8.	Extract the 2011 state wise population data from data.gov.in for Assam, Karnataka, Kerala, Maharashtra, Manipur, Punjab, Telangana and Tripura as a csv file and store it in a data frame census. Plot a bar graph for the population of each state. Include suitable title for the chart and the axes.