1. A Program to create a line graph to show the profits of a company in various years. The data is as mentioned: x axis as years and y axis as profits (in Millions). X=[2012,2013,2014,2015,2016,2017] and y = [9,10,10.5,8.8,10.9,9.75]. Plot a line chart with x axis as "Years" and y axis as "Profits (in Millions)" and title of the line chart as "XYZ Company". Also the linestyle should be dashed one.
2. There is an array of scores of 5 Batsmen in 4 T20 Matches. Which is given below.
   Scores= [[31, 12, 19, 53],
   [67, 48, 95, 83],
   [59, 67, 13, 59],
   [62, 29, 99, 88],
   [87, 91, 69, 76]]

MATCH/PLAYER	T_20-1	T_20-2	T_20-3	T_20-4
SACHIN	31	12	19	53
DHONI	67	48	95	83
YUVRAJ	59	67	13	59
GANGULY	62	29	99	88
KOHLI	87	91	69	76

   1. Find the maximum score in T_20-3 and print it (use only the numpy module)
   2. Find the minimum score of YUVRAJ and print it (use only the numpy module)
   3. Add an extra column with the sum of all 4 T20 Matches' scores of each batsman in the array created and print it. (use only the numpy module)
   4. Create a line plot showing batsman vs scores,
      Line Style dotted and Line-color should be different for all.
      - Show legend at the lower right location.
      - X label name = Batsman
      - Y label name = Scores
      - Add a circle marker
      - Line marker color as blue
      - Line marker size as 5
      - Line width should be 3
3. Write a Python program to draw a scatter plot comparing two subject marks of Mathematics and Science. Use marks of 10 students.
   Test Data:
   math_marks = [88, 92, 80, 89, 100, 80, 60, 100, 80, 34]
   science_marks = [35, 79, 79, 48, 100, 88, 32, 45, 20, 30]
   marks_range = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]
   Add appropriate labels, title and legend.
4. Laurell had visited a zoo recently and had collected the following data. How can Laurell use a scatter plot to represent this data? .Take Type of Animal as X-axis and no. in Y axis. The data is as follows: Zebra-25, Lions- 5, Monkeys- 50, Elephants -10, Ostriches – 20
5. Write a program to build two bar graphs using subplot function for given two dictionaries in which one graph is in 1st row and another in second row which is horizontal representation of bar graph.
   D1={"aryan":66,"bob":70,"jack":66,"seema":34}
   D2={"joy":45,"sid":85,"hina":90}

And also make a title of graph at top as “BAR PLOT”.

6. A Bar Chart to display employee id numbers on X-axis and their salaries as Y-axis in the form of a bar graph for two departments of a company. There are two departments like sales department and purchase department. For sales department their id's and salaries are mentioned as : x= [1001,1003,1006,1007,1009,1011] and y= [10000, 23000.50,18000.33,16500.5,12000.75, 9999.99] and for purchase department their id's and salaries are mentioned as: x=[1002,1004,1010,1008,1014,1015] and y=[5000,6000,4500.5,12000,9000,10000]. Make the chart title as "Microsoft Inc.", x-axis as employee id and Y axis as Salary. Use different colors for sales and purchase department.
7. A program to display a histogram showing the number of employees in specific age groups. The data is shown: emp_ages = [22,45,30,59,58,56,57,45,43,43,50,40,34,33,25,19] and their bins are [0,10,20,30,40,50,60]. Create a histogram with x-axis label as "employee ages" and y axis label as " no. of employees". Create a title of the plot as "Oracle Corp". Also the color of histogram created should be cyan.
8. Uncle Bruno owns a garden with 30 black cherry trees. Each tree is of a different height. The height of the trees (in inches): 61, 63, 64, 66, 68, 69, 71, 71.5, 72, 72.5, 73, 73.5, 74, 74.5, 76, 76.2, 76.5, 77, 77.5, 78, 78.5, 79, 79.2, 80, 81, 82, 83, 84, 85, 87. Plot a histogram with color green, title of the chart should be height of trees along with it’s fontsize as 20.
9. Imagine you survey your friends to find the kind of movie they like best: Comedy- 4, Action -5, Romance - 6, Drama -1, SciFi - 4. Plot a pie chart for the above survey and use different color for each analysis and create a wedge for action movies. Also put as chart title as "Survey analysis of movie"
10. Create a Pie Chart using Python Program for the popularity data of different programming languages and displayed it as a pie chart using the Matplotlib Python library. For Python- 29, Java – 19, Javascript – 8, C# - 7, PHP – 6, C,C++ - 5, R – 3. Create an exploded view of python and show the % of each programming language in Pie Chart.
11. Draw multiple plots in one figure using subplot function. The multiple plots include below according to order:

    1. Plot a scatter plot with following data:

    x = [5,7,8,7,2,17,2,9,4,11,12,9,6]

    y = [99,86,87,88,111,86,103,87,94,78,77,85,86]

    The x axis represents the age of car while y axis represents the speed of car.

    The title of the graph should be age v/s speed of car. Also in graph there should be x and y labels. The marker used should be star. The marker color should be green. The marker size should be 60. (Entire Scatter plot 2 marks)

    2. Plot a horizontal bar with following data:

    x=["A", "B", "C", "D"]

    y=[3, 8, 1, 10]

    The x axis represents the name of car while y axis represents the selling of car.

    The title of the graph should be name v/s selling of car. Also in graph there should be x and y label. The horizontal bar chart's height should be 0.1. The color of bar should be yellow. (Entire bar plot 2 marks)

3. Plot a histogram with following data:
data=[1,3,3,3,3,9,9,5,4,4,8,8,8,6,7]
bins=4, the title of the graph should be histogram of cars. The orientation should be vertical. The color of plot should be violet (Entire histogram plot 2 marks)
4. Plot a pie with following data:
y=[35,25,25,15]
mylabels=['Apple','Bananas','Cherries','Dates']
The title of the graph should be pie chart. The exploded view should be shown with 0.2 value for 'Apple' (Entire pie chart of 2 marks)
Also need to provide a superior title to the subplot prepared i.e 'My Subplot for cars'(0.5 marks) and subplot preparation (0.5 mark)
For clear visualization can use the following syntax after importing matplotlib
plt.figure(figsize=(10,10))