

MATPLOTLIB EXERCISE QUESTIONS

Note: All the plots should contain xlabel, ylabel and title.

Plot a line graph showing the population growth of a city over 10 years. Use a dashed line style for the plot. Assume the following data:

Years = [2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019]

Population = [50000, 52000, 54000, 56000, 58000, 60000, 62000, 64000, 66000, 68000]

Create a scatter plot showing the relationship between study hours and exam scores of a group of students. Use red dots for the scatter points. Assume the following data:

StudyHours = [2, 3, 5, 1, 4, 6, 2, 3, 4, 5]

ExamScores = [65, 70, 80, 60, 75, 85, 70, 75, 80, 85]

Plot a bar chart showing the sales revenue of a company's products in different quarters. Use hexadecimal color codes for the bars. Assume the following data:

Quarters = ['Q1', 'Q2', 'Q3', 'Q4']

Revenue = [500000, 450000, 600000, 550000]

Exercise:

- Task students to modify the code to plot another function (e.g., quadratic function).
- Encourage adding gridlines, changing colors, and using different markers.