

Lab 2

1. Write a program that displays “Welcome to Data Mining and Knowledge Discovery” for five times. You can define a function
2. Write a program that displays the result of the following:

$$\frac{9.5 * 4.5 - 2.5 * 3}{45.5 - 3.5}$$

3. Write a program that reads a number in feet, converts it to meters and display the results. One foot is 0.305 meters.
4. Write a program that prompts the user to enter the minutes and displays the number of years and days for the minutes. For simplicity, assume a year has 365 days.
5. Compute BMI to let users enter their weight in pounds and their height in feet and inches. For example, if a person is 5 feet and 10 inches, you will enter 5 for feet and 10 for inches. Please search on the web to calculate the BMI (so you may want to define your own formula), then output whether this person’s BMI is normal.

6. Visualization:

Choose one of the visualization methods from the following.

a.

[Bar chart] Write a Python programming to display a bar chart of the trend of programming languages.

Test Data:

Programming language: Java, Python, PHP, JavaScript, C#, C++

Popularity: 19.2, 22.6, 8.8, 7.6, 7.2, 6.7

- b. [Scatter plot] 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]

- c. Writing a python program to produce a list of days and workout times.

Test Data:

Days: [1, 3, 6, 9, 10, 11, 12, 13, 14]

Times: [25, 55, 20, 42, 10, 60, 60, 60, 60]