

TASK-10: USE MATPLOTLIB MODULE FOR PLOTTING IN PYTHON

Aim: To use matplotlib module for plotting in python.

Problem: 10

Write a python programming to display a bar chart of the popularity of programming languages.

Sample Data:

Programming languages: Java, Python, PHP, JavaScript, C#, C++
Popularity: 22.2, 17.6, 8.8, 8, 7.7, 6.7

ALGORITHM:

1. Define two lists for programming languages & their popularity respectively.
2. Find the max popularity value in list.
3. Define a scaling factor to scale the bar heights with a certain limit.
4. For each language & popularity pair, calculate the bar height as popularity value scaled by the scaling factor.
5. Print the chart

A PROGRAM:

```
# pip install matplotlib
import matplotlib.pyplot as plt

languages = ['Java', 'python', 'PHP', 'JavaScript', 'C#', 'C++']
Popularity = [22.2, 17.6, 8.8, 8, 7.7, 6.7]

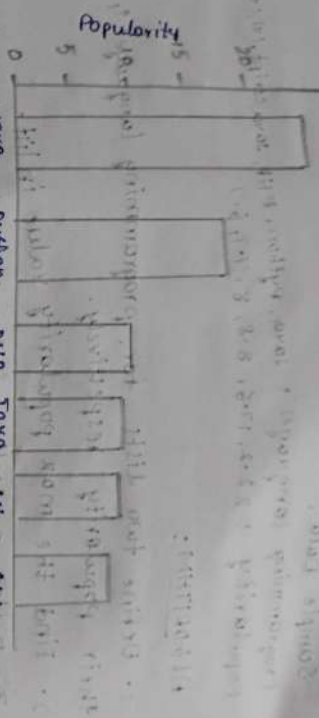
plt.bar(languages, Popularity, color='b')
```

Popularity of different programming languages

Bar chart

Output :- popularity of different languages

Popularity of different programming languages



Popularity of different programming languages

Bar chart

Popularity of different programming languages

Bar chart

Bar chart

Bar chart

Bar chart

Bar chart

Popularity of different programming languages

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```
plt.title('Popularity of programming language')  
plt.xlabel('Programming language')  
plt.ylabel('Popularity')  
plt.show()
```

RESULT: Thus the python program use matplotlib module for plotting is executed & verified successfully.

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