

TASK 10 - USE Matplotlib module for plotting

8/10/21

In Python

Aim:- TO USE Matplotlib module for plotting in python.

Algorithm:-

- 1) Define two lists for programming language
- 2) Find the maximum popularity value in list
- 3) Define a scaling factor to scale
- 4) For each language and popularity pair
- 5) Print the chart using a loop to iterate over the programming language

Program:-

```

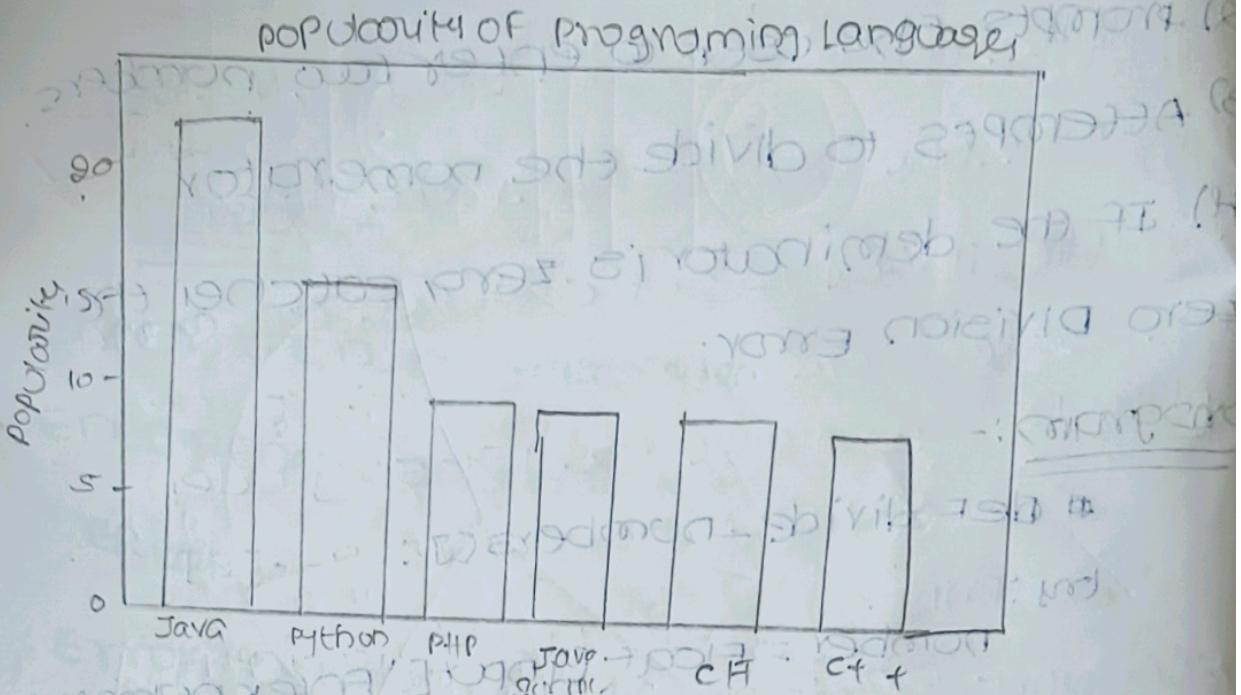
import matplotlib.pyplot as plt
language = ['Java', 'Python', 'PHP', 'JavaScript', 'C++', 'C#']
popularity = [22.2, 17.6, 8.8, 7.7, 6.7]
plt.bar(language, popularity, color='b')
plt.xlabel('Programming Language')
plt.ylabel('Popularity')
plt.show()

```

Result:- Thus, the program has been verified

and executed successfully.

Output :-

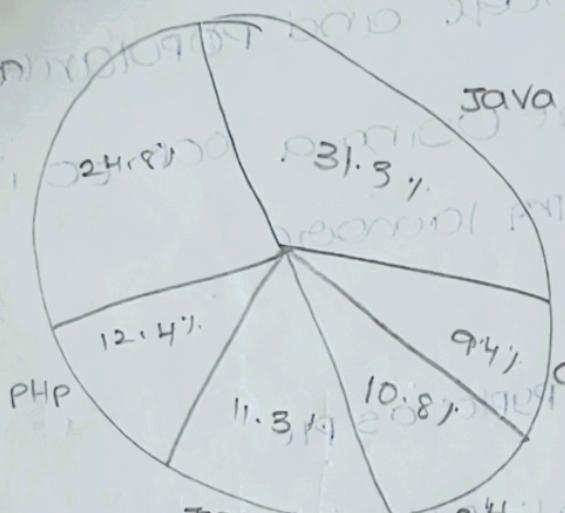


Sampled data:-

Programming languages : Java, Python, PHP, Javascript, C#, C++, Delphi

Popularity : 22.2, 17.6, 8.8, 8.7, 7.7, 6.7

Output:-



10.2 write a python programming to create piechart

Aim: write a python programming to create a pie chart of the popularity of programming languages

Algorithm:-

- 1) Create a list of programming languages and popularity
- 2) Create a pie chart using the matplotlib library
- 3) Set the title and legend for pie chart

Program :-

```
import matplotlib.pyplot as plt  
languages = ['Java', 'Python', 'PHP', 'JavaScript', 'C#', 'C++']  
popularity = [22.2, 17.6, 8.8, 7.7, 6.7]  
#Step 2
```

```
plt.pie(popularity, labels=languages)  
plt.legend(loc='best')  
plt.show()
```

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RESULT AND ANALYSIS (5)	5
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Result:- Thus, the program has been verified and verified successfully.