Task-10

use matplotlib module for Plotting in Python.

10.1

Aim: To use matplotlib module for Plotting in Python

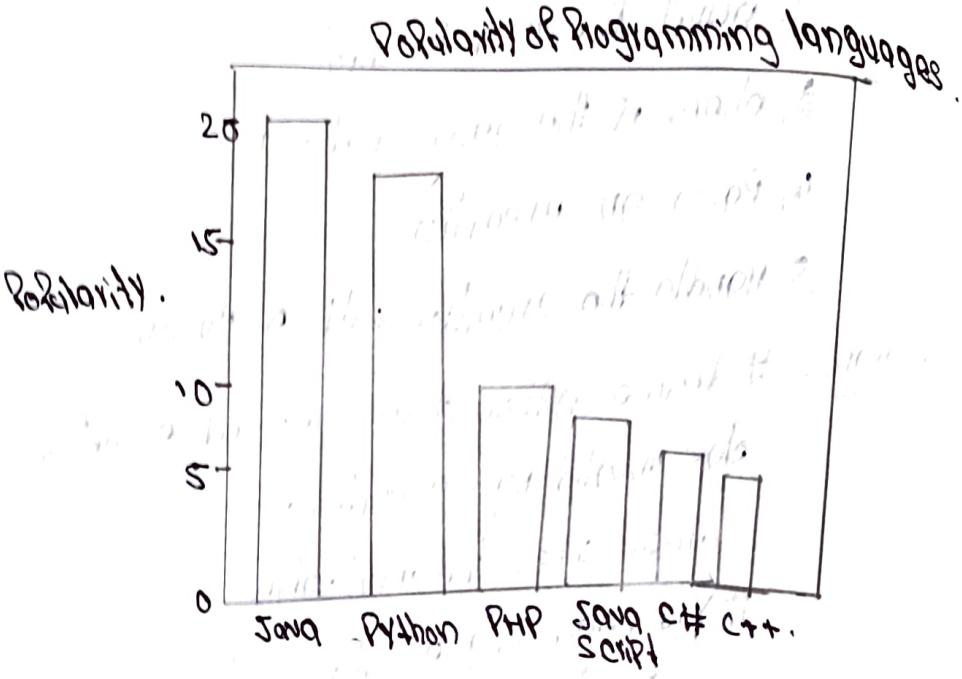
Algorithm:

1. Define two lists for Programming languages and their Popularity respectively.
2. Find the maximum Popularity value in list.
3. Define a scaling factor to scale the bar heights with in a certain limit.
4. For each language and Popularity pair, calculate the bar height as the Popularity.

Program:

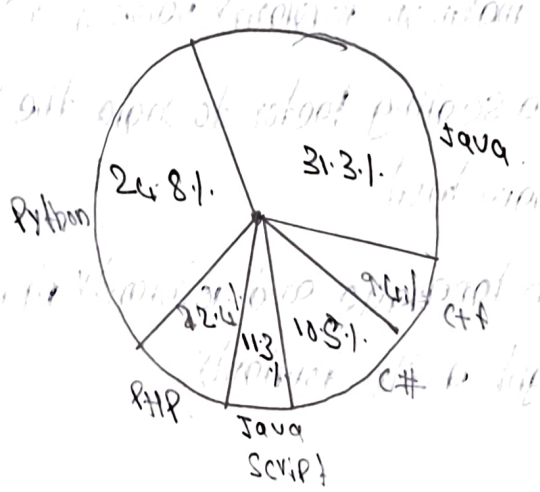
```
#Pip instal matplotlib.
import matplotlib.Pyplot as plt.
languages=['Java','Python','PHP','Javascript','C++']
Popularity = [22.2,17.6,8.8,8,7.7,6.7].
plt.bar (languages, Popularity, color='b')
plt.title('Popularity of Programming languages')
plt. label('Programming languages')
plt.ylabel ('Popularity')
plt.show ().
```

Output


Popularity of Programming language.
Popularity.
20
15
10
5
0
Java
Python
PHP
Java Script
C#
C++.

output.

Popularity of Programming languages.



Task-102

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 the Pie chart.
4. Show the Pie chart.

Program:-

```
import matplotlib.pyplot as plt.
#step1:-
languages: ['Java','Python','PHP','Javascript',
            'C#','C++']
Popularity = [22.2,17.6,8.8,8,7.7,6.7].
# step2:-
Plt.Pie(Popularity,labels=languages,autopct='%1.1f%%').
#step3:-
Plt.title('Popularity of Programming languages').
Plt.legend(languages,loc="best").
#step4:-
Plt.show()
```

VEL TECH	
EX NO.	
PERFORMANCE (5)	10
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
ECORD (5)	5
L (20)	
DATE	15

Result:-

Thus the Python Program use matplotlib module for plotting is executed and verified successfully.