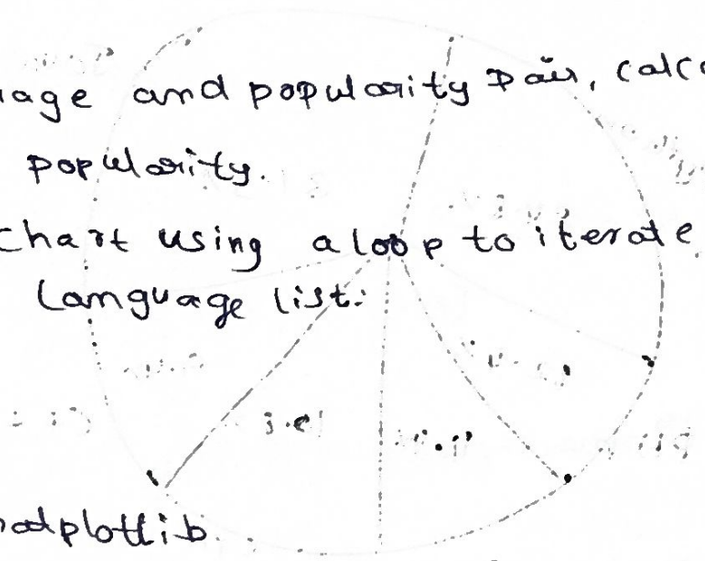
Task 10

Aim: write a python programming to display a bar charts of the popularity

Algorithm:

1) Defind 2 list for programming langues: Java, Python, PHP, Javascript, C#, C++
2) Find the maximum popularity value in the list
3) Define a scaling factor tos cale the bar heights within a certain limit
4) For each Language and popularity pair, calculate the bar height as the popularity.
5) paint the chart using a loop to iterate over the programming Language list.

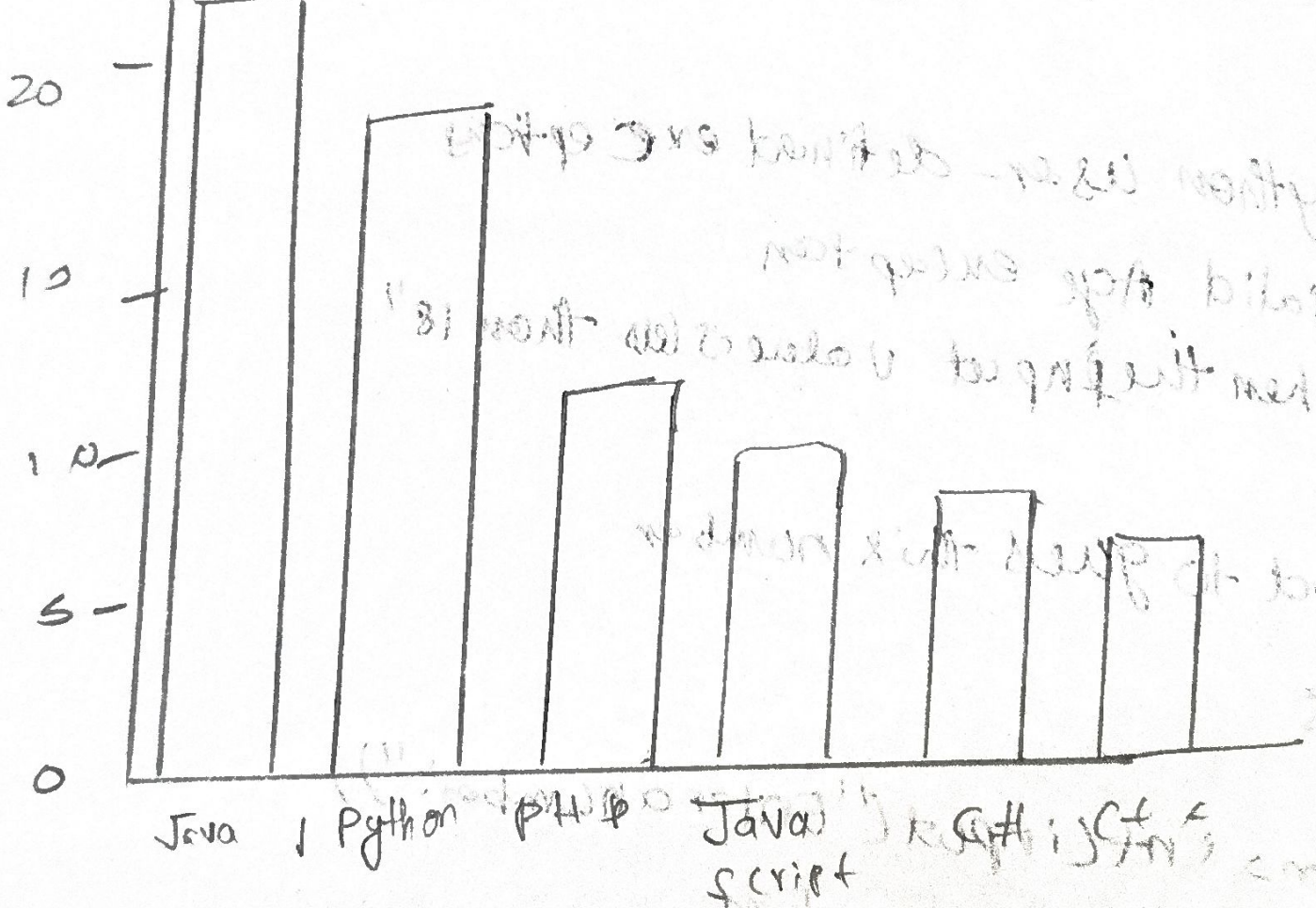


Program:

```
#pip install matplotlib
import matplotlib.pyplot as plt
language = ['Java', 'Python', 'PHP', 'Javascript', 'C#', 'C++']
popularity = [22.2, 17.6, 8.8, 8, 7.7, 6.7]

plt.bar [language, popularity, color = 'b']
plt.title ['popularity of programming Languages']
plt.xlabel ('Programming Languages')
plt.ylabel ('popularity')
plt.show()
```

output

Popularity of Programming Languages



programming languages

Task10.2 Write a python programming to create a pie chart of the popularity of programming Languages

Aim: write a python programming to create a pie chart

Algorithm

1) Create a list of programming Languages & popularity
2) Create a pie chart using the matplotlib library
3) set the title and legened for the pie chart
4) show the pie chart

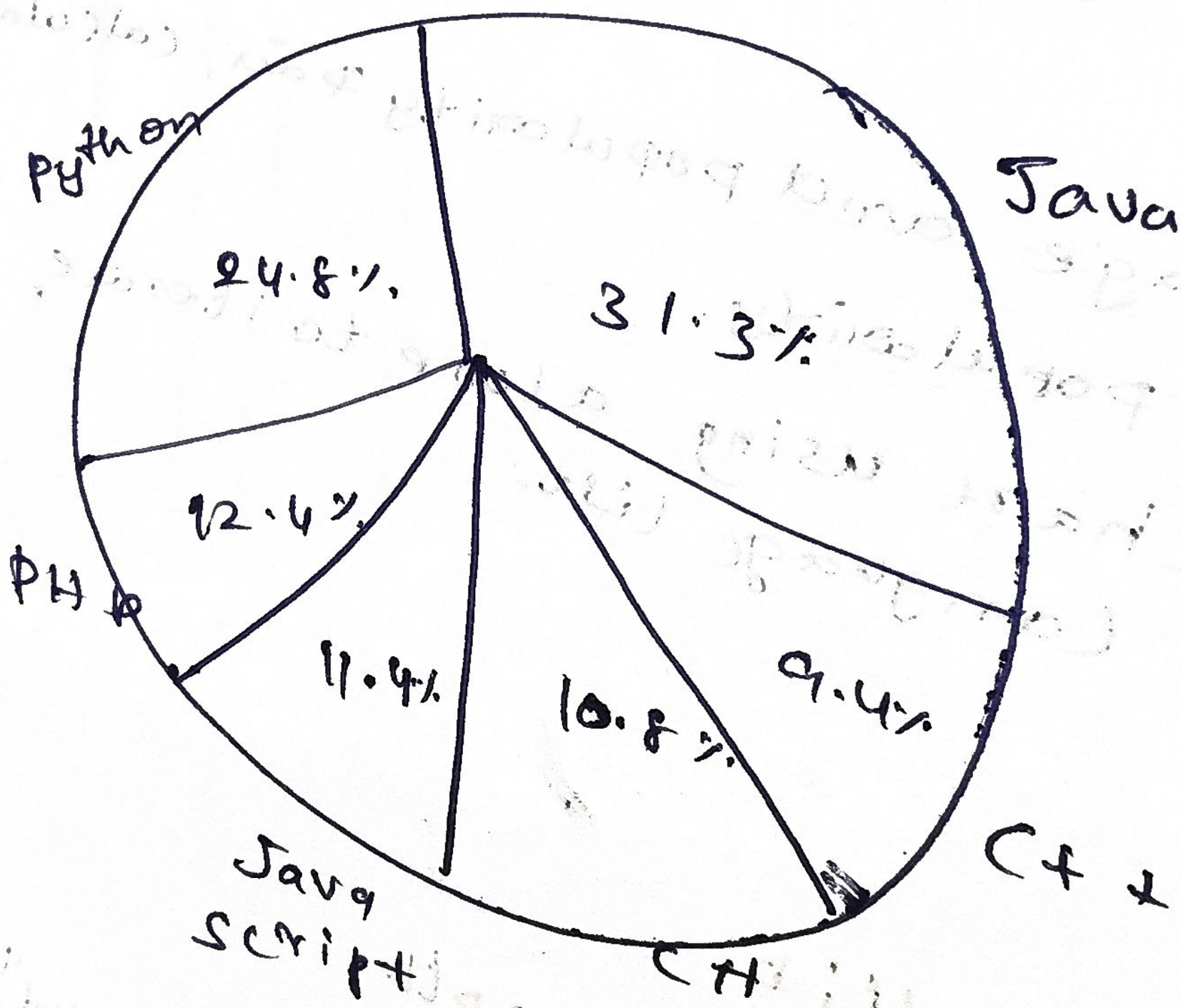
Program

```
import matplotlib.pyplot as plt

#step 1
languages = ['Java', 'python', 'PHP', 'Java Script', 'C#', 'C++']
popularity = [22.2, 17.6, 8.8, 7.7, 6.7]

#step2
plt.pie(popularity, labels = languages, autopct='%1.1f%%')

#step 3
plt.title('popularity of programming Languages')
plt.Legened(Languages, loc="best")
#step 4
plt.show()
```

VELTECH	
EX No.	10
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	
SIGN WITH DATE	

Result:

Thus the python programs use matplotlib module for plotting is executed & verified successful.


Python
24.8%
Java
31.3%
12.4%
PHP
11.4%
10.8%
9.4%
JavaScript
C#
C++