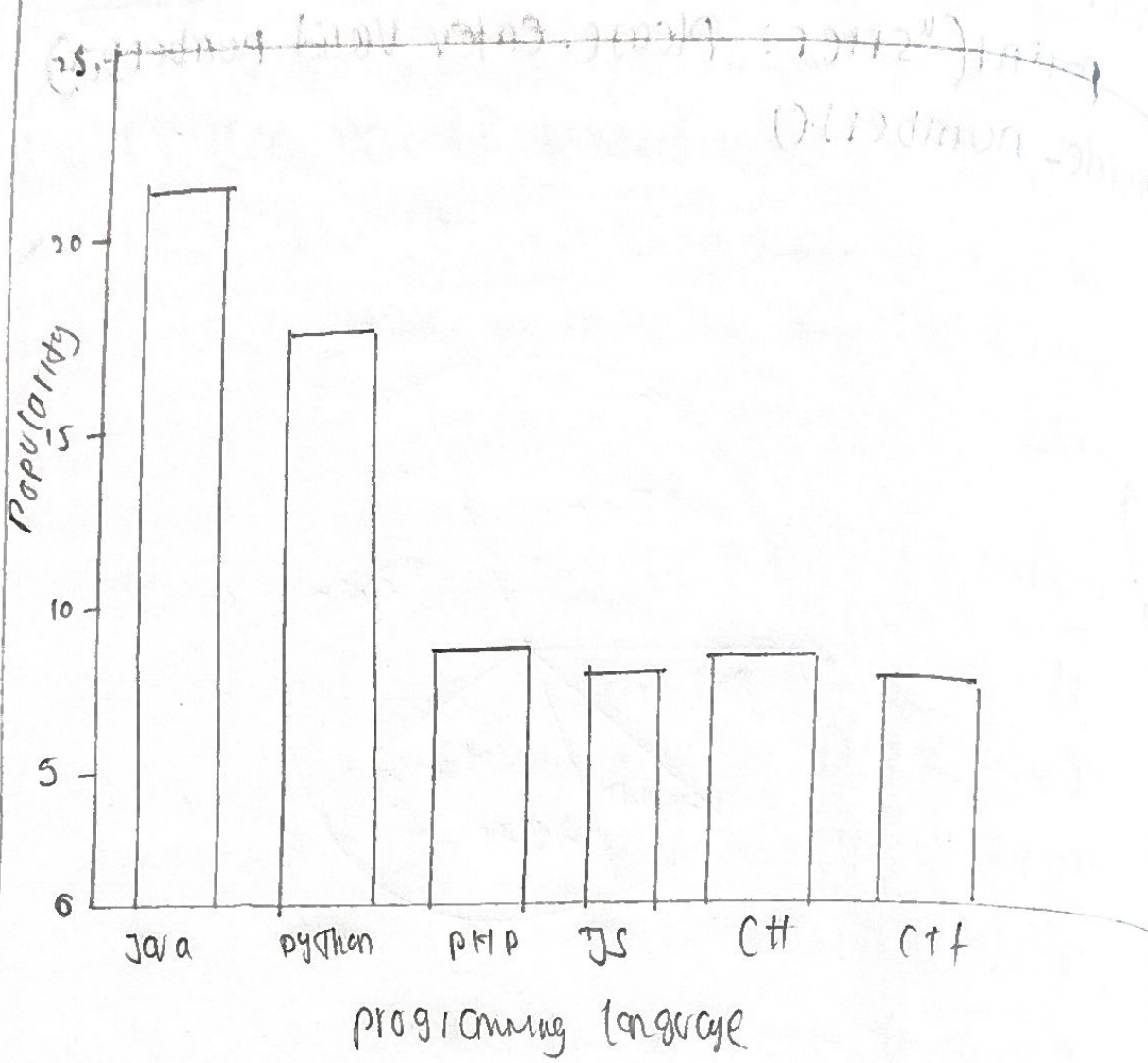


Output



Aim: To use matplotlib module for plotting in python

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

Algorithm:

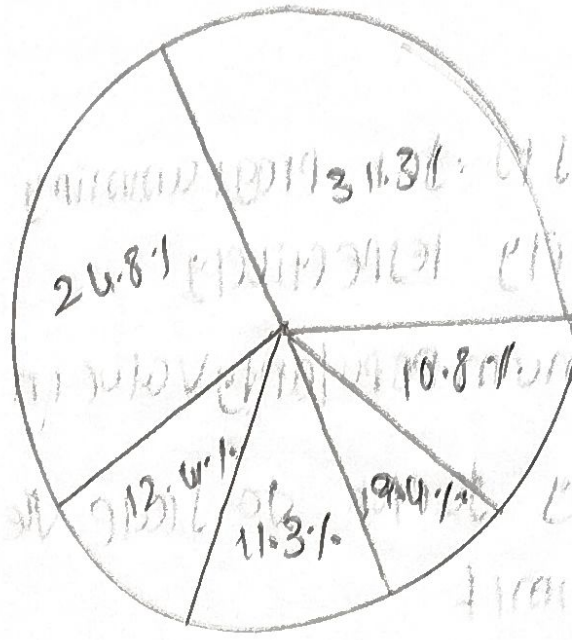
1. Defines two lists for programming languages and their popularity respectively.
2. Find the maximum popularity value in the list
3. Define a scaling factor to scale the bar height with a certain limit
4. For each language and popularity pair, calculate the bar height as popularity value scaled by scaling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

Program:

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



~~Answer~~



~~Answer~~

## Aim: Task 10.2

Write a python program to create a pie chart of the popularity of programming language.

### Algorithm:

1. Create a list of programming languages and popularity
2. Create a pie chart using the matplotlib lib library
3. Set the title and legend for the pie chart & show the pie chart

### Program:

```
import matplotlib.pyplot as plt
```

```
# Step
```

```
languages = ['Java', 'Python', 'PHP', 'JavaScript', 'C++', 'C#']
```

```
popularity = [22.2, 17.6, 8.8, 7.7, 6.7]
```

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

```
plt.title('Popularity of Programming Language')
```

```
plt.legend(languages, loc='best')
```

```
plt.show()
```

VEL TECH - COE	
EX NO.	10
PERFORMANCE (5)	5
RESULT AND ANALYSIS (3)	3
VIVA VOCE (3)	3
RECORD (4)	4
TOTAL (15)	15
SIGN WITH DATE	

### Result:

Thus the python program use matplotlib lib module for plotting is executed and verifies successfully