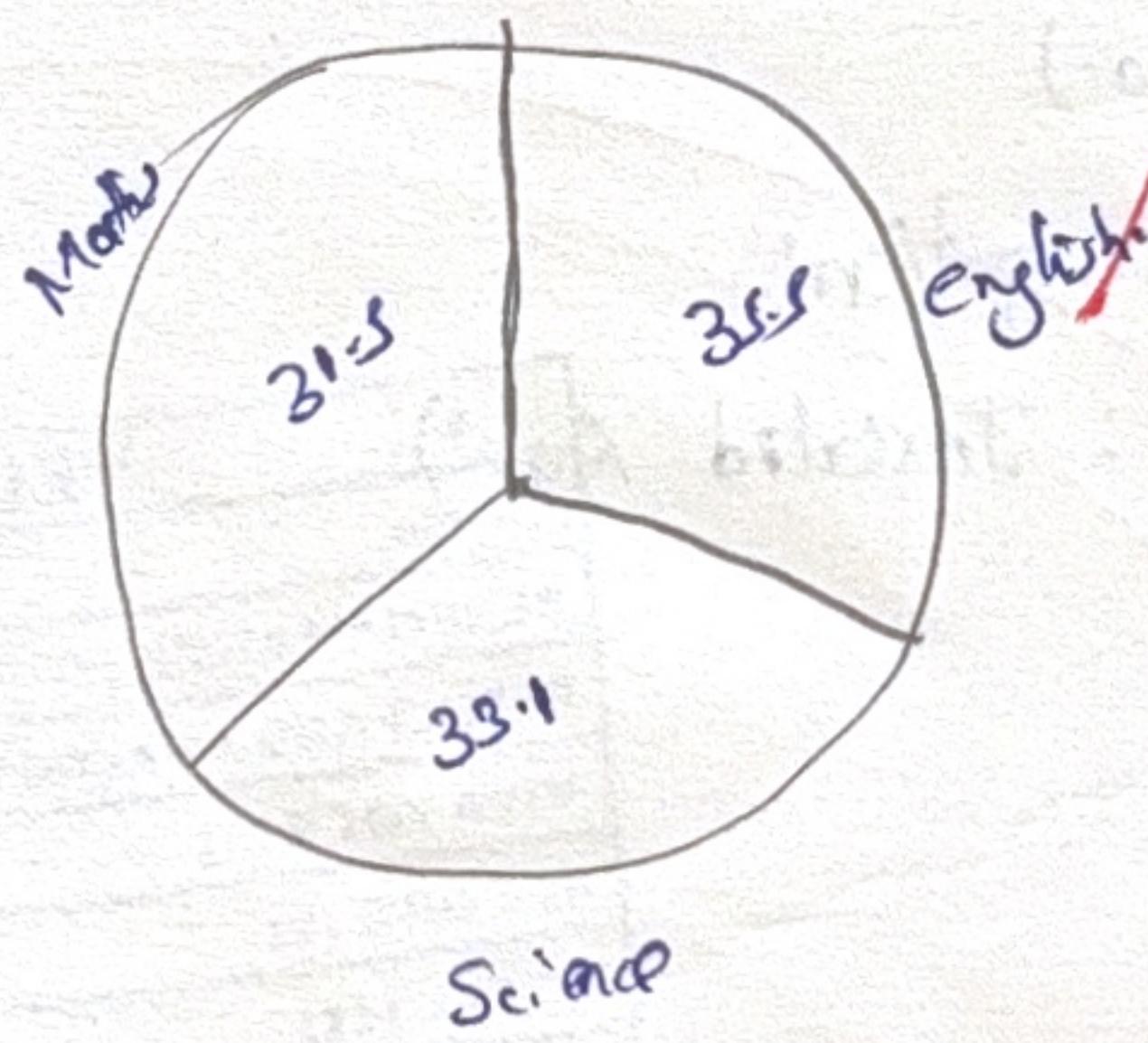
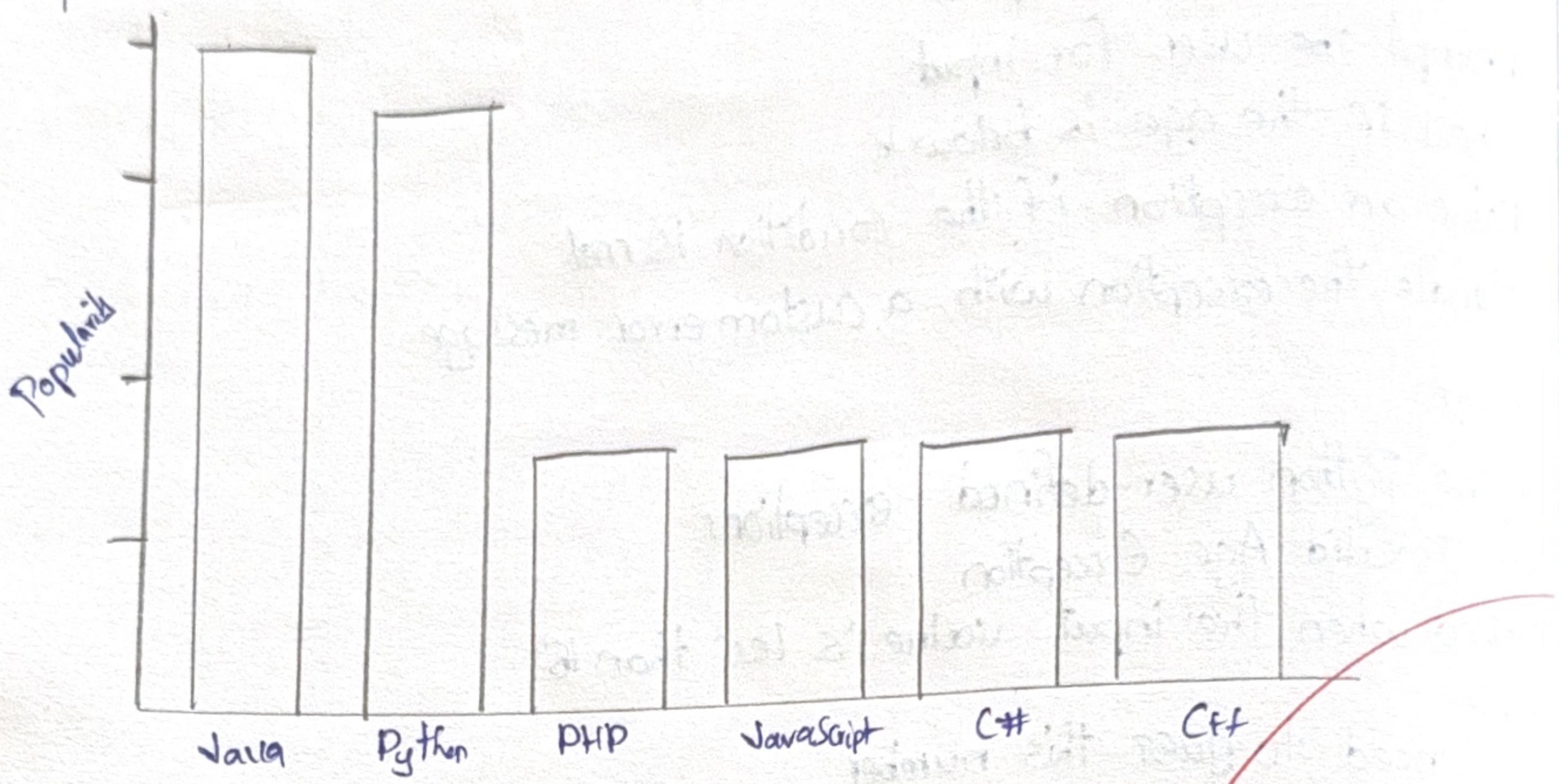


## ~~Rank~~ popularity of programming languages

Output:-



29/18/25

Task 10: Use Matplotlib module for plotting in python.

Aim:- To use Matplotlib module for plotting in python.

Problem 10.1

Algorithm:-

1. Define 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 heights within a certain limit.
4. For each language and popularity pair, calculate the bar height as the popularity value scaled by the scaling factor.

Program:

import matplotlib.pyplot as plt

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

Popularity = [82.2, 17.6, 8.8, 8, 7.7, 6.7]

plt.bar(Languages, Popularity, color = 'b')

plt.title('Popularity of programming languages')

plt.xlabel('Programming Languages')

plt.ylabel('Popularity')

plt.show()

## Problem 10.8

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.
```

#Step 1:-

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

```
Popularity = [22.2, 17.6, 8.6, 8.7, 7.1, 6.1]
```

#Step 2

```
plt.pie(popularity, labels=Languages, autopct = "%1.f%%")
```

#Step 3

```
plt.title ("Popularity of programming Languages")
```

```
plt.legend (Languages, loc = "best")
```

#Step 4

```
plt.show
```

VEL TECH	
EX NO.	10
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	3
RECORD (5)	3
TOTAL (20)	16
SIGN WITH DATE	25

Result:- Thus the python program use Matplotlib module for plotting is executed and verified successful.