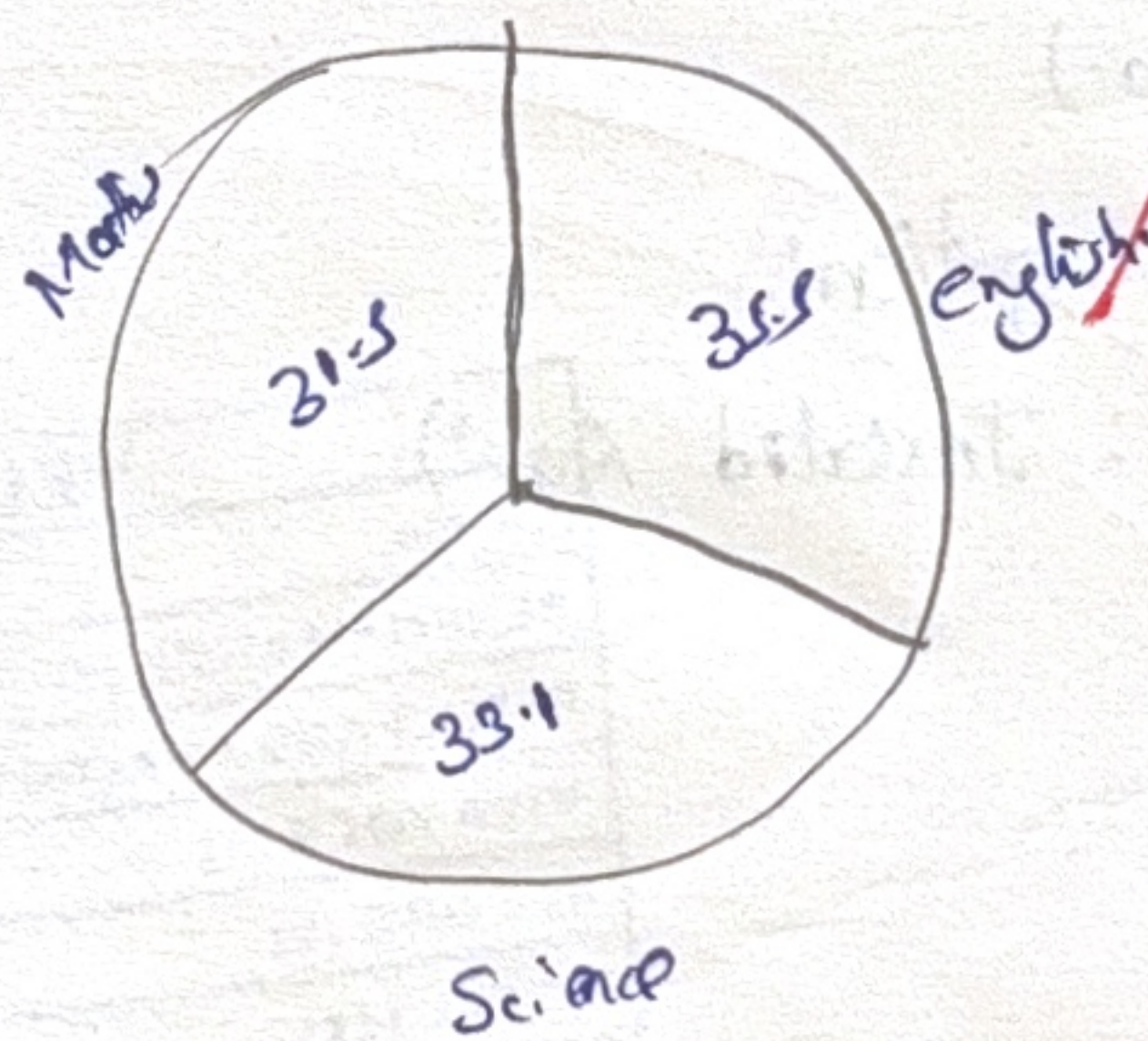
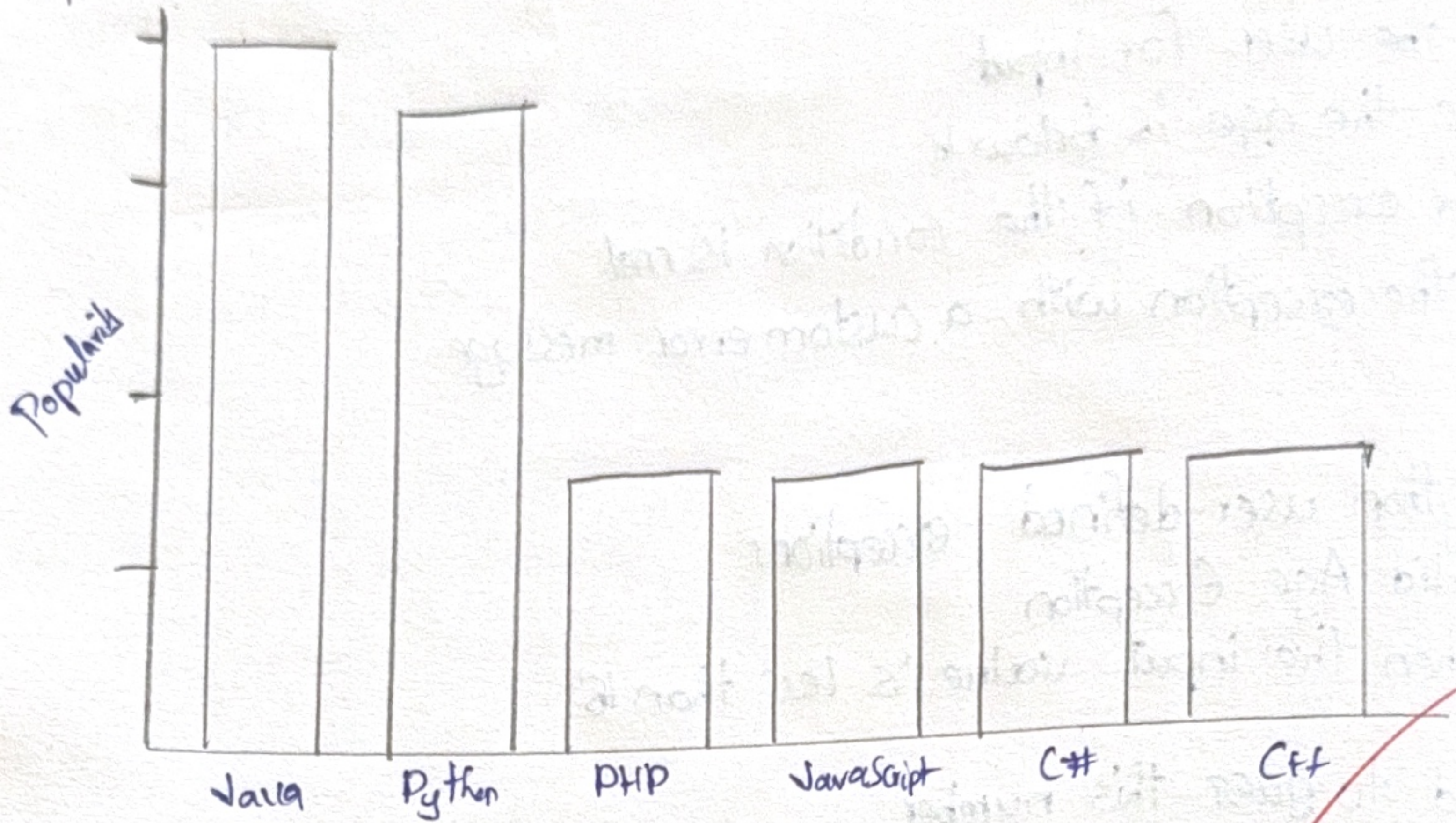


Popularity of programming languages

Output:-



24/8/25

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 = [22.2, 17.6, 8.8, 8.7, 6.7]
```

```
plt.bar(Languages, popularity, color = 'b')
```

```
plt.title('Popularity of programming languages')
```

```
plt.xlabel('Programming Languages')
```

```
plt.ylabel('Popularity')
```

```
plt.show()
```


Problem 10.0

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, 6.1]
```

#Step 2

```
plt.pie(popularity, labels = Languages, autopct = "%1.1f%%")
```

#Step 3

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

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

#Step 4

```
plt.show
```

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

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

16/6/25