

## **ALGORITHMS LABORATORY OUTPUTS -N.VIJAY(cse-2)**

## ex 1:

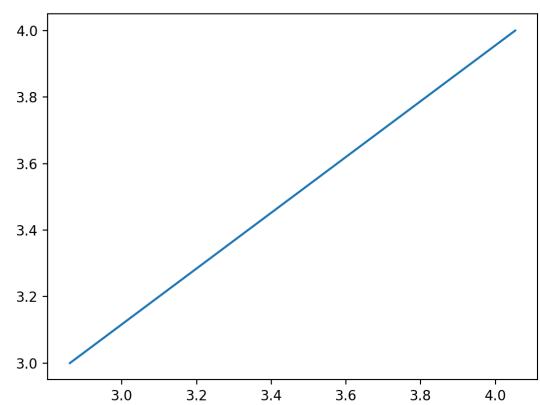
```
*IDLE Shell 3.11.3*
Python 3.11.3 (v3.11.3:f3909b8bc8, Apr  4 2023, 20:12:10) [Clang 13.0.0 (clang-1300.0.29.30)] on darwin
Type "help", "copyright", "credits" or "license()" for more information.
>>> ====== RESTART: /Users/vijayn/Desktop/Algorithm lab outputs/pgm/1.py ======
===== RESTART: /Users/vijayn/Desktop/Algorithm lab outputs/pgm/1.py =====
Enter no of Execution:2
Enter n:4
Enter Element:57
Enter Element:98
Enter Element:85
Enter Element:59
Enter key:59
The list is [57, 98, 85, 59]
Element found at index 3
Enter n:3
Enter Element:50
Enter Element:87
Enter Element:20
Enter key:25
The list is [50, 87, 20]
Element not found!
Execution Time [3.0994415283203125e-06, 5.9604644775390625e-06]

Figure 1
```

x (1e-6)	y
3.0	4.0
6.0	3.0

## ex 2:

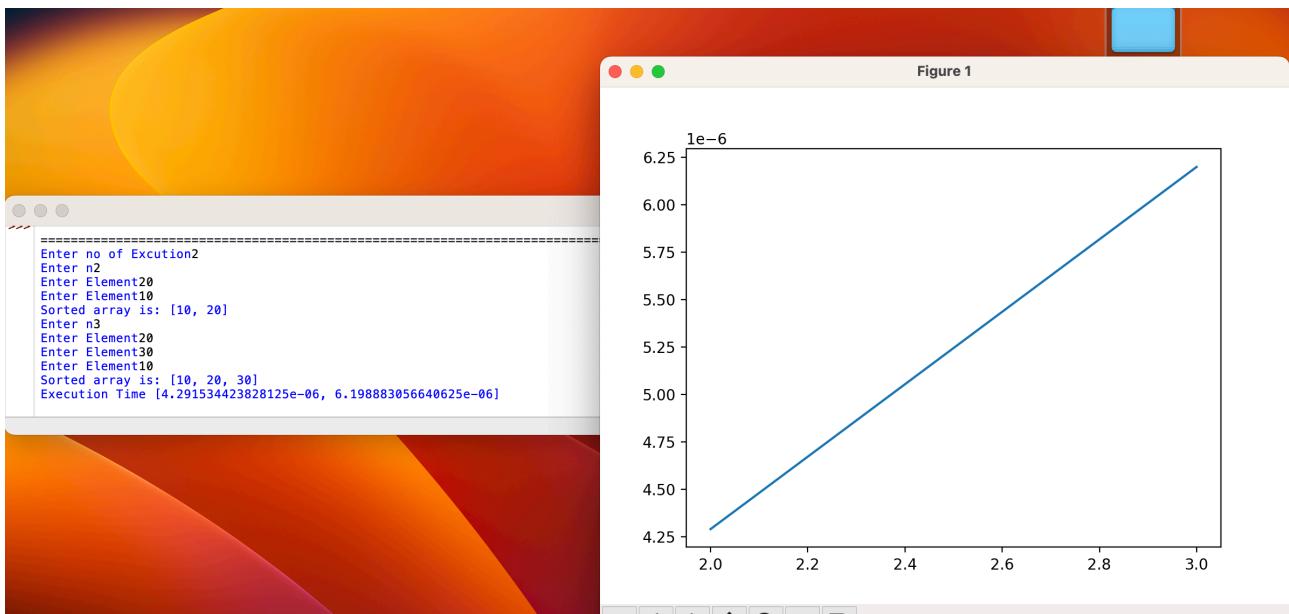
```
>>> ===== RESTART: =====
Enter m of Execution2
Enter m4
Enter Element57
Enter Element98
Enter Element85
Enter Element59
Enter key59
The list is
57
98
85
59
Element not found!
Enter m3
Enter Element50
Enter Element87
Enter Element20
Enter key25
The list is
50
87
20
Element not found!
Execution time [4.0531158447265625e-06, 2.86102294921875e-06]
```



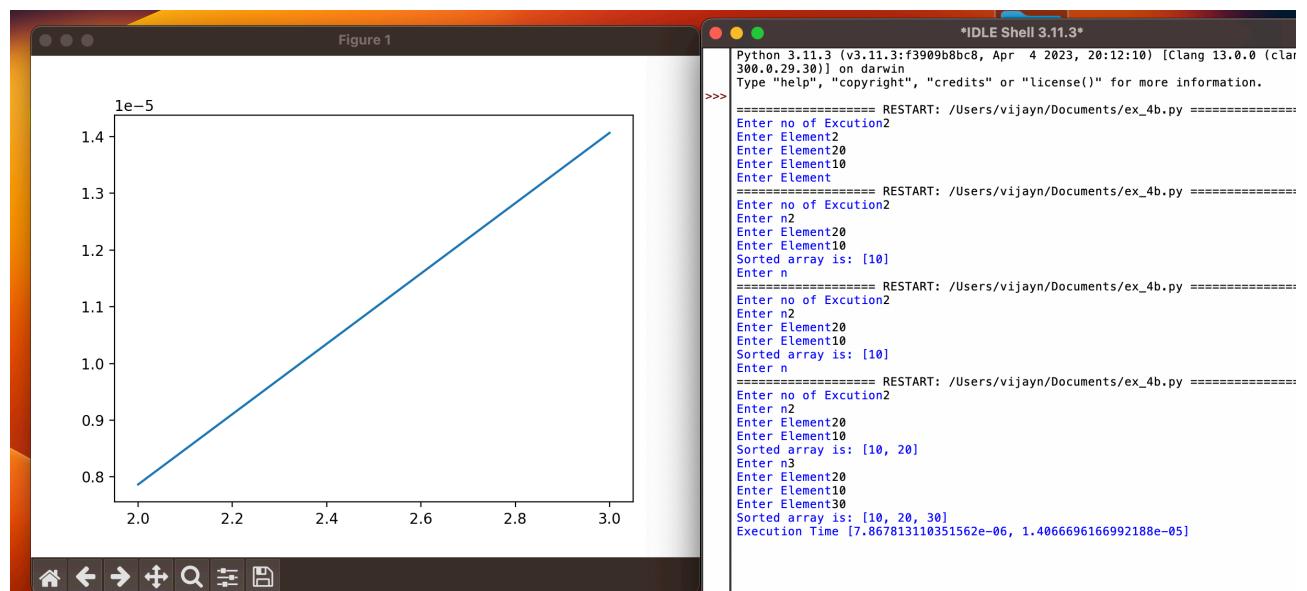
### ex 3:

```
=====
Enter no. of text5
Enter Text Elementsh
Enter Text Elementse
Enter Text Elementsl
Enter Text Elementsl
Enter Text Elementso
Enter no. of pattern3
Enter pattern Elementsh
Enter pattern Elementse
Enter pattern Elementsl
Pattern found at index  0
>>>
```

## ex 4 a:



## ex 4 b:



## ex 5:

```
===== RESTART: /users/vijayn/Desktop/Algorithm la
Following is the Breadth-First Search
5 3 7 2 4 8
>> |
```

## ex 6:

```
----- START / USES/ VIZGUY/ DESEARCH/ ALGORITHM
```

Following is the Depth-First Search

5  
3  
2  
4  
8  
7

>>

## ex 7:

```
Edge : Weight  
0-2:5  
2-4:6  
4-3:1  
4-1:2  
>> |
```

## ex 8:

```
| Distance of a from source vertex: 0  
| Distance of b from source vertex: 3  
| Distance of c from source vertex: 1  
| Distance of d from source vertex: 2  
| Distance of e from source vertex: 4  
| Distance of f from source vertex: 4  
| Distance of g from source vertex: 3  
>
```

## ex 9:

```
>>> ===== RESTART: /Users/vijayn/Desktop/Algorithm lab outputs/pgr  
      Floyd's algorithm for the All-Pairs- Shortest-Paths problem :  
      [[0, 3, 7, 5], [2, 0, 6, 4], [3, 1, 0, 5], [5, 3, 2, 0]]
```

## ex 10:

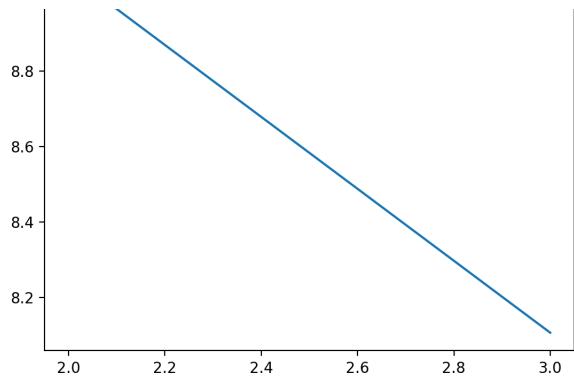
```
> ===== RESTART: /users/vtjdyn/documents/ex_10.py
[[1, 1, 1, 1], [1, 1, 1, 1], [1, 1, 1, 1], [1, 1, 1, 1]]
```

## ex 11:

```
>> ===== RESTART: /Users/vijayu1/Desktop.  
      (1, 9)
```

## ex 12 a:

```
===== RESTART: /Users/vijayn/Documents/ex_12a.py =====
Enter no of Execution2
Enter n3
Enter Element20
Enter Element30
Enter Element10
The list is [20, 30, 10]
Sorted array is
10 20 30
Execution Time [8.106231689453125e-06]
Enter n2
Enter Element20
Enter Element10
The list is [20, 10]
Sorted array is
10 20
Execution Time [8.106231689453125e-06, 9.059906005859375e-06]
```



## ex 12 b:

