Institute of Computer Technology

B. Tech. Computer Science and Engineering

Sub: DS (2CSE302)

Practical -24

Objective: Implement searching methods on sorted elements.

1. Jigar is working in survey department of COVID-19. He has been received everyday number of cases from all the cities of Gujarat. Initially, He used to set data in ascending order, afterwards he wants to search number of cases from the data elements with relevant position. Kindly refer given scenario for searching and implement it in C:

```
Enter number of elements
Enter 8 elements:
34
22
56
13
89
5
67
45
List of searching methods:
1.Linear Search
2.Binary Search
3.Interpolation Search
4.Jump Search
5.Exit
Which searching method would you like to apply?
The elements of the array are - 5 13 22 34 45 56 67 89
Which value do you want search?
Element 13 found at position 2
List of searching methods:
1.Linear Search
2.Binary Search
3.Interpolation Search
4.Jump Search
5.Exit
Which searching method would you like to apply?
The elements of the array are - 5 13 22 34 45 56 67 89
Which value do you want search?
```

100

Element 100 not found

List of searching methods:

- 1.Linear Search
- 2.Binary Search
- 3.Interpolation Search
- 4.Jump Search
- 5.Exit

Which searching method would you like to apply?

2

The elements of the array are - 5 13 22 34 45 56 67 89

Which value do you want search?

34

Element 34 found at position 4

List of searching methods:

- 1.Linear Search
- 2.Binary Search
- 3.Interpolation Search
- 4.Jump Search
- 5.Exit

Which searching method would you like to apply?

2

The elements of the array are - 5 13 22 34 45 56 67 89

Which value do you want search?

35

Element 35 not found

List of searching methods:

- 1.Linear Search
- 2.Binary Search
- 3.Interpolation Search
- 4.Jump Search
- 5.Exit

Which searching method would you like to apply?

3

The elements of the array are - 5 13 22 34 45 56 67 89

Which value do you want search?

45

Element 45 found at position 5

List of searching methods:

- 1.Linear Search
- 2.Binary Search
- 3.Interpolation Search
- 4.Jump Search
- 5.Exit

Which searching method would you like to apply?

3

The elements of the array are - 5 13 22 34 45 56 67 89

Which value do you want search?

55

Element 55 not found

List of searching methods:

- 1.Linear Search
- 2.Binary Search
- 3.Interpolation Search
- 4.Jump Search
- 5.Exit

Which searching method would you like to apply?

4

The elements of the array are - 5 13 22 34 45 56 67 89

Which value do you want search?

67

Element 67 found at position 7

List of searching methods:

- 1.Linear Search
- 2.Binary Search
- 3.Interpolation Search
- 4.Jump Search
- 5.Exit

Which searching method would you like to apply?

4

The elements of the array are - 5 13 22 34 45 56 67 89

Which value do you want search?

88

Element 88 not found

List of searching methods:

- 1.Linear Search
- 2.Binary Search
- 3.Interpolation Search
- 4.Jump Search
- 5.Exit

Which searching method would you like to apply?

6

Enter valid choice!