

# Rajalakshmi Engineering College

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## 2024\_28\_III\_OOPS Using Java Lab

### 2028\_REC\_OOPS using Java\_Week 10\_Q4

Attempt : 1  
Total Mark : 10  
Marks Obtained : 10

#### Section 1 : COD

##### 1. Problem Statement

In a ticket reservation system, you store the available seat numbers in a TreeSet. Users input their desired seat number, and the program checks whether the chosen seat is available.

Using a TreeSet ensures quick and efficient verification of seat availability, ensuring a smooth and organized ticket booking process.

##### ***Input Format***

The first line of input contains a single integer  $n$ , representing the number of available seats.

The second line contains  $n$  space-separated integers, representing the available seat numbers.

The third line contains an integer  $m$ , representing the seat number that needs to be searched.

### **Output Format**

The output displays "[ $m$ ] is present!" if the given seat is available. Otherwise, it displays "[ $m$ ] is not present!"

Refer to the sample output for the formatting specifications.

### **Sample Test Case**

Input: 4

2 4 5 6

5

Output: 5 is present!

### **Answer**

// You are using Java

```
import java.util.Scanner;
```

```
import java.util.Set;
```

```
import java.util.TreeSet;
```

```
class TicketReservation {
```

```
    public static void main(String[] args) {
```

```
        Scanner sc = new Scanner(System.in);
```

```
        int n = Integer.parseInt(sc.nextLine().trim());
```

```
        Set<Integer> seats = new TreeSet<>();
```

```
        String[] parts = sc.nextLine().trim().split("\\s+");
```

```
        for (int i = 0; i < n && i < parts.length; i++) {
```

```
            seats.add(Integer.parseInt(parts[i]));
```

```
        }
```

```
        int m = Integer.parseInt(sc.nextLine().trim());
```

```
        if (seats.contains(m)) {
```

```
            System.out.println(m + " is present!");
```

```
        } else {
```

```
            System.out.println(m + " is not present!");
```

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}  
}  
}

**Status :** Correct

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**Marks :** 10/10

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