

# 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.\*;

```
class TicketReservation {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        int n = sc.nextInt();
        TreeSet<Integer> availableSeats = new TreeSet<>();

        for (int i = 0; i < n; i++) {
            int seat = sc.nextInt();
            availableSeats.add(seat);
        }

        int m = sc.nextInt();

        if (availableSeats.contains(m)) {
            System.out.println(m + " is present!");
        } else {
            System.out.println(m + " is not present!");
        }
    }
}
```

```
    sc.close();  
}
```

**Status :** Correct

**Marks :** 10/10