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 : 9

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

```java
import java.util.*;

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n = Integer.parseInt(sc.nextLine());
        String[] seatInput = sc.nextLine().split(" ");
        TreeSet<Integer> seats = new TreeSet<>();
        for (String seat : seatInput) {
            seats.add(Integer.parseInt(seat));
        }
        int m = Integer.parseInt(sc.nextLine());
        Iterator<Integer> itr = seats.iterator();
        boolean present = false;
        while (itr.hasNext()) {
            if (itr.next() == m) {
                present = true;
                break;
            }
        }
        if (present) {
            System.out.println(m + " is present!");
        } else {
```

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

Status : Partially correct   **Marks : 9/10**