Rajalakshmi Engineering College

Name: Nandhini Velmurugan
Email: 241901063@rajalakshmi.edu.in
Roll no: 241901063
Phone: 9043367699
Branch: REC
Department: CSE (CS) - Section 1
Batch: 2028
Degree: B.E - CSE (CS)

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

```java
import java.util.*;

class Main {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        int n = scan.nextInt();

        Set<Integer> set = new TreeSet<>();
        for (int i = 0; i < n; i++) {
            set.add(scan.nextInt());
        }

        int x = scan.nextInt();
        boolean t = set.contains(x);

        if (t) {
            System.out.println(x + " is present!");
        } else {
            System.out.println(x + " is not present!");
        }
    }
}
```