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

```java
// You are using Java
import java.util.*;
public class Main{
    public static void main(String[] args)
    {
        Scanner in=new Scanner(System.in);
        int n=in.nextInt();
        TreeSet<Integer>tree=new TreeSet<>();
        int found=0;
        for(int i=0;i<n;i++)
        {
            tree.add(in.nextInt());
        }
        int search=in.nextInt();
        for(int t:tree)//can use tree.contains(search) also
        {
            if(t==search)
            {
                found=1;
            }
        }
        if(found==1)
        {
```

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

Status : Correct   *Marks : 10/10*