

# Rajalakshmi Engineering College

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

### 2028\_REC\_OOPS using Java\_Week 3\_Q1

Attempt : 1  
Total Mark : 10  
Marks Obtained : 10

#### Section 1 : Coding

##### 1. Problem Statement

Rosh is intrigued by numerical patterns. Today, she stumbled upon a puzzle while working with arrays. She wants to compute the sum of the third-largest and second-smallest elements from a list of integers. She seeks your help to implement a program that solves this for her efficiently.

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

The first line of input is an integer N, representing the size of the array.

The second line of input consists of N space-separated integers, representing the elements of the array.

##### ***Output Format***

The output displays a single integer representing the sum of the third-largest and second-smallest elements in the array.

Refer to the sample output for the formatting specifications.

**Sample Test Case**

Input: 10

10 20 30 40 50 60 70 80 90 100

Output: 100

**Answer**

```
import java.util.*;
class patterns{
    public static void main(String[] args){
        Scanner sc=new Scanner(System.in);
        int N=sc.nextInt();
        int[] arr=new int[N];
        for(int i=0;i<N;i++)
        {
            arr[i]=sc.nextInt();
        }
        Arrays.sort(arr);
        int second_smallest=arr[1];
        int third_largest=arr[N-3];
        int result=second_smallest+third_largest;
        System.out.println(result);
    }
}
```

**Status :** Correct

**Marks :** 10/10