

# 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.*;  
  
public class Main{  
    public static void main(String[] args) {  
        Scanner sc = new Scanner(System.in);  
  
        // Read the size of the array  
        int N = sc.nextInt();  
        int[] arr = new int[N];  
  
        // Read the array elements  
        for (int i = 0; i < N; i++) {  
            arr[i] = sc.nextInt();  
        }  
  
        // Sort the array  
        Arrays.sort(arr);  
  
        // Get second-smallest and third-largest  
        int secondSmallest = arr[1];  
        int thirdLargest = arr[N - 3];  
  
        // Output the result  
        System.out.println(secondSmallest + thirdLargest);  
    }  
}
```

**Status : Correct**

**Marks : 10/10**