

# Rajalakshmi Engineering College

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Branch: REC

Department: CSE - Section 5

Batch: 2028

Degree: B.E - CSE

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

### 2028\_REC\_OOPS using Java\_Week 12\_Q2

Attempt : 1

Total Mark : 10

Marks Obtained : 10

#### **Section 1 : Coding**

##### **1. Problem Statement**

Alex is learning about Java's functional interfaces and lambda expressions.

He wants to write a simple program that prints the square of each number in an array using a predefined functional interface.

Help Alex complete this task using the Consumer functional interface.

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

- The first line contains an integer N, the number of elements in the array.
- The second line contains N space-separated integers.

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

- Print the squares of all elements in the array, separated by a space.

Refer to the sample output for formatting specifications.

**Sample Test Case**

Input: 4

1 2 3 4

Output: 1 4 9 16

**Answer**

```
// You are using Java
import java.util.*;
import java.util.function.*;
public class Main {
    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();
        IntConsumer square = x -> System.out.print((x * x) + " ");
        Arrays.stream(arr).forEach(square);
    }
}
```

Status : Correct

Marks : 10/10