

# Rajalakshmi Engineering College

Name: S Gowtham  
Email: 240701156@rajalakshmi.edu.in  
Roll no: 240701156  
Phone: 8438897045  
Branch: REC  
Department: CSE - Section 7  
Batch: 2028  
Degree: B.E - CSE

Scan to verify results



## 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**

```
import java.util.*;  
import java.util.function.*;  
import java.util.stream.*;
```

```
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 = num -> System.out.print((num * num) + " ");  
        Arrays.stream(arr).forEach(square);
```

```
}
```

```
}
```

**Status : Correct**

**Marks : 10/10**