

Rajalakshmi Engineering College

Name: Naveed Sheriff
Email: 240701348@rajalakshmi.edu.in
Roll no: 240701348
Phone: 9025573780
Branch: REC
Department: CSE - Section 10
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.*;

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();
        }

        Consumer<Integer> printSquare = x -> System.out.print((x * x) + " ");

        for (int num : arr) {
            printSquare.accept(num);
        }

        /*for(int i=0;i<n;i++)
        {
            arr[i] = arr[i]* arr[i];
        }
        for(int i=0;i<n;i++)
        {
            System.out.print(arr[i] + " ");
        }
        */
    }
}
```

Status : Correct

Marks : 10/10