Rajalakshmi Engineering College

Name: Elamvazhuthi MS
Email: 240701133@rajalakshmi.edu.in
Roll no: 240701133
Phone: 7010282287
Branch: REC
Department: CSE - Section 4
Batch: 2028
Degree: B.E - CSE

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

```java
// You are using Java
import java.util.*;

interface consumer{
    public void dd();
}
class main{
    public static void main(String[] args){
        Scanner s=new Scanner(System.in);
        int a=s.nextInt();
        int[] arr=new int[a];
        for(int i=0;i<a;i++){
            arr[i]=s.nextInt();
        }
        consumer c=()->{
            for(int i=0;i<a;i++){
                arr[i]=arr[i]*arr[i];
            }
            for(int i=0;i<a;i++){
                System.out.printf("%d",arr[i]);
            }
        };
        c.dd();
    }
}
```

Status : Correct   *Marks : 10/10*