Rajalakshmi Engineering College

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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

```java
// You are using Java
import java.util.*;
interface Square{
    void square();
}
class main{
    public static void main(String [] args){
        Scanner scan=new Scanner(System.in);
        int size=scan.nextInt();
        int arr[]=new int [size];
        for(int i=0;i<size;i++){
            arr[i]=scan.nextInt();
        }
        Square sq=()->{
            for(int i=0;i<size;i++){
                System.out.print(arr[i]*arr[i]+" ");
            }
        };
        sq.square();
    }
}
```

Status : Correct   *Marks : 10/10*