Rajalakshmi Engineering College

Name: DINESH K V
Email: 241501048@rajalakshmi.edu.in
Roll no: 241501048
Phone: 7708632555
Branch: REC
Department: AI & ML - Section 1
Batch: 2028
Degree: B.E - AI & ML

2024_28_III_OOPS Using Java Lab

2028_REC_OOPS using Java_Week 2_Q6

Attempt : 1
Total Mark : 10
Marks Obtained : 10

Section 1 : Coding

1. Problem Statement

Maya, a student in an arts and crafts class, wants to create a pattern using stars (*) in a specific format. She plans to use a program to help her construct the pattern.

Write a program that takes an integer as input and constructs the following pattern using nested for loops.

Input: 5

Output:

*

**

```
* * *
* * * *
* * * * *
* * * *
* * *
* *
*
```

Input Format

The input consists of a number (integer) representing the number of rows.

Output Format

The output displays the required pattern.

Refer to the sample output for the formatting specifications.

Sample Test Case

```
Input: 5
Output: *
* *
* * *
* * * *
* * * * *
* * * *
* * *
* *
*
```

Answer

```java
// You are using Java
import java.util.*;
public class Main{
    public static void main(String[] args){
        Scanner s = new Scanner(System.in);
```

```
    int N=s.nextInt();
    for(int i=1;i<=N;i++){
        for(int j=1;j<=i;j++){
            System.out.print("*");
            if(j!=i){
                System.out.print(" ");
            }
        }
        System.out.println();
    }
    for(int i=N-1;i>=1;i--){
        for(int j=1;j<=i;j++){
            System.out.print("*");
            if(j!=i){
                System.out.print(" ");
            }
        }
        System.out.println();
    }
    }
}
```

Status : Correct   *Marks : 10/10*