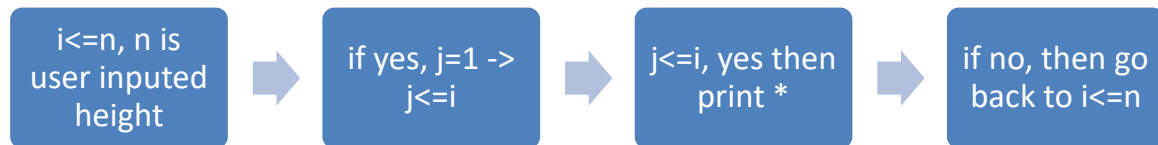# Lab Report 04

Problem

Create a java program that takes the user entered height and prints a triangle using asterisk.

Proposed Solution

Use a for loop using i and j to create a triangle until the triangle is complete.

i<=n, n is user inputed height	➡	if yes, j=1 -> j<=i	➡	j<=i, yes then print *	➡	if no, then go back to i<=n

Tests and Results

```
<terminated> Lab04 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (Oct 4, 2022, 9:06:22 PM – 9:06:24 PM)
Enter Height of Triangle: -1
Invalid value for height.
```

```
<terminated> Lab04 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (Oct 4, 2022, 9:06:51 PM – 9:06:53 PM)
Enter Height of Triangle: 3
*
**
***
**
*
```

```
<terminated> Lab04 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (Oct 4, 2022, 9:07:08 PM – 9:07:12 PM)
Enter Height of Triangle: 7
*
**
***
****
*****
******
*******
******
*****
****
***
**
*
```

Problems Encountered

The main issue I faced were errors in the for statements, I forgot a lot of the code but at the end I figured it out and corrected it all.

Conclusions and Discussion

The lab introduced and solidified the concept of for statements and allowing for shapes to be created using i and j. i stands for the height and j stands for the width.

Additional Questions

1. In the proposed solution section, draw a flowchart to represent your solution.

Did it!

2. What is the output of the code snippet below:

```
for(int n = 1; n <= 5; n++) {

        if(n == 3) {

                System.exit(0);

        } System.out.println("Hello");

} System.out.println("After the loop");
```

```
<terminated> Lab04Question [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (Oct 4, 2022, 10:04:01 PM – 10:04:02 PM) [pid: 19864]
Hello
Hello
```