LU2 - ASSIGNMENT

Instructions:

Step1: Create a Java project

1. Create a java project and name it with your registration number and class.
2. Suggested project name *(format: [24rp00000_{b/c}]*

Step 2: Create a Package

1. Create a new package for organization.
2. Suggested package name*(format: [regno.itlevel6y2{b/c}.nestedloop].* Use lowercase letters for package names to follow Java conventions.

Step 3: Create a Java Class

1. Inside the package, create a new class.
2. Suggested class name: *[StarPatterns]*

Step 4: Submit the project (project zipped folder)
- This folder consists of only 2 files including Java file (*StarPatterns.java*) and java class file(*StarPatterns.class)*

Task:

Refer to the following exhibit of star patterns and write a Java program to generate each pattern.

Patterns to generate:

1. Solid rectangle
```
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

2. Right-aligned hollow triangle
```
    *
   * *
  *   *
 *    *
*     *
```

3. Inverted left-aligned triangle
```
* * * * *
* * * *
* * *
* *
*
```

4. Left-aligned triangle
```
*
**
***
****
*****
```

5. Inverted right-aligned triangle
```
*****
 ****
  ***
   **
    *
```

6. Right-aligned triangle
```
    *
   **
  ***
 ****
*****
```

Requirements:

1. The program should accept the number of rows from the user.
2. Display a menu with 6 options (corresponding to the patterns above).
3. Print the selected star pattern.

Good Luck!