**Triangle Project Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Your triangle project must have two files, a Triangle class and a TriangleMain class. The goal is to be able to create a triangle object that stores a specific size and character. Then you will be able to display that triangle with various orientations and either hollow or solid using only the assigned character and blank spaces.

Requirements:

1. Your file must run the EXACT main file found on the back of this page.
2. You must have a default character of ‘\*’ and a default size of 10 so that you can create a triangle by assigning both constraints, either constraint or no constraints.
3. In addition to your constructors, you must have the following methods: displaySolidLL(), displaySolidLR(), displaySolidUL(), displaySolidUR(), displayHollowLL(), displayHollowLR(), displayHollowUL(), displayHollowUR(), setChar(char c), setSize(int s)

\*\*You may create additional private methods if you wish.

1. Restrictions: Your program must only allow the triangle size to be [1,50] and the character may not be a blank space. If anything else is attempted, change to the default value
2. Coding restriction: you may not use any arrays (other than Strings) Your triangle should be “built” by concatenating Strings and each triangle should be printed at once by a SINGLE System.out.println() command.
3. Note: By including “\n” in a String, it creates a new line.

String s1=”Hello\nWorld”;

public class Main{

public static void main (String[] args){

Triangle t1 = new Triangle(5,'s');  
 t1.displaySolidLL();  
 t1.setSize(100); // Try to set size to 100.  
 t1.displaySolidLR();  
 t1.setSize(0); // Try to set size to 0.  
 t1.displaySolidUR();  
 t1.setSize(5);  
 t1.displaySolidUL();  
 t1.setSize(-10); // Try to set size to -10.  
   
 Triangle t2 = new Triangle(4);

t2.setChar('$');

t2.displayHollowLL();

t2.setChar(' '); //Try to set char to a blank space t2.displayHollowLR();  
t2.setChar('%');  
t2.displayHollowUR();  
t2.displayHollowUL();  
   
   
Triangle t3 = new Triangle();  
t3.displaySolidLL();  
t3.displayHollowUR();  
   
Triangle t4 = new Triangle('#');  
t4.displaySolidLR();  
t4.displayHollowUL();  
t4.setSize(1);  
t4.displaySolidLL();  
t4.displayHollowUR();

}

}