Instructions: Ask the user to enter values for three geometric shapes and then calculate and print the area of each shape.

1. Open the program you created last week.

2. Enter a block comment at the beginning of your file giving details on your program, your contact information, and the date that the program was modified.

3. **Square:**
   1. Add a line comment to tell what shape is being created
   2. Prompt the user to enter one side of the square using `JOptionPane`
   3. Calculate the area of the square using the information entered
   4. Calculate and print the area of the square along with a message using the message dialog of `JOptionPane`, such as:

   The area of the square with side $X$ is $Y$

   Where $X$ is the value the user entered. Note that the printed message must contain the value the user originally entered.

4. **Isosceles triangle:**
   1. Add a line comment to tell what shape is being created
   2. Prompt the user to enter the height of the triangle using `JOptionPane`
   3. Prompt the user to enter the base of the triangle using `JOptionPane`
   4. Calculate and print the area of the triangle along with a message using `JOptionPane`'s message dialog, such as:
The area of the triangle with base X and height Y is Z

Where X and Y are the values the user entered. Note that the printed message must contain the values the user originally entered.

5. Circle:

1. Add a line comment to tell what shape is being created

2. Java provides a constant to get the value of PI called Math.PI. Use it in the calculation below

3. Prompt the user to enter the circle's Diameter using JOptionPane

4. Calculate the radius and the area of the circle and print the following message using JOptionPane's message dialog:

   The radius of the circle with diameter X is Y
   The area of the circle with diameter X is Z

   Where X is the value the user entered. Note that the printed message must contain the value the user originally entered

4. Have your TA check and grade your work.