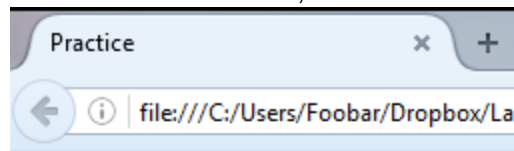


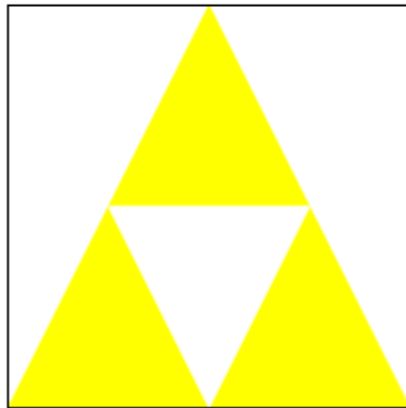
CPSC 1045: In Lab Exercise 4 [10 marks]

Complete these exercises individually. Please follow the instructions **carefully** and complete all of the steps. Demonstrate to the instructor that you have completed the exercises prior to leaving the lab today.

1. Create a new HTML file called ex4.html. Add the usual tags to make a complete HTML file. In the head of this file add the following line of code:
`<script src = "ex4.js" type="text/javascript" defer></script>`
2. In the HTML file, create a canvas element that is 200 by 200, with a border.
3. In the same directory as the HTML file, create a new JavaScript file called ex4.js
4. Inside ex4.js complete the following exercises:
 - a. In the canvas element, draw the following shape:



Practice Drawing



- b. Write the JavaScript to ask the user to continuously enter numbers until they enter 0. When the user enters 0 you should print to the console the largest and smallest numbers (excluding 0) entered by the user.
Sample output:
If the user enters 10, 20, 5, 7, 2, 19, 0 your program should print to the console "The largest number entered was 20 and the smallest number was 2"
If the user enters 7, 3, -5, 16, 0 your program should print to the console "The largest number entered was 16 and the smallest number was -5"
5. Test that your JavaScript correctly executes for all of the problems by opening ex4.html in the browser and checking the output and the console.

6. When you have completed the exercises, call over the instructor or the lab assistant and demonstrate your program works. Be prepared to explain how you came up with solutions to these exercises.

Bonus [+3 marks]

Write the JavaScript to simulate the computer playing Rock, Paper, Scissors with a user. Your JavaScript should generate the computer's selection of either rock, paper, or scissors. Then you should read in the user's choice of the three options. You should print to the screen what the user's and the computer's selections were, and who won, before asking if the user wants to play again. The user should be able to play the game as many times as they choose.

Grading

- 5 marks A
- 5 marks B
- +3 bonus marks