Objective:
The purpose of this lab is to practice using single while-loops to draw shapes composed of vertical, horizontal, and diagonal lines.

Assignment:
For this lab, you will be drawing the outlines of two houses in a Raster image using vertical, horizontal, and diagonal lines.

- This assignment should be completed individually.
- Your program should contain useful comments
  - The program should begin with comments identifying the lab title (lab1), author’s name, TA name, and lab section.
  - Each section of your program should be commented sufficiently that it is easy for the TA to understand.
- The file should be in your lab directory and named lab1.py.

1. Each house should be drawn with a rectangular base, with a triangular shape on top representing a peaked roof. Other features are optional. Rectangular shapes should be drawn first, with the roofs added last.

First house rectangle:
2. Draw four lines of different colors to form the rectangle of the first house, using a separate while loop for each line. Suggestion: Perhaps your comments should identify parts of the house (for example, floor or right wall).

3. Using your code for #2 as a reference, add the necessary statements to your program to redraw the first house in the same location, with the following differences:
   a. Use yellow for all of the redrawn lines.
   b. Use only two while-loops to redraw the four lines.

Second house rectangle:
4. Using your code from #3 as a reference, add the statements to draw a second house as follows:
   a. Draw the second house below and to the right of the first house. The two houses should not share any walls.
   b. Use one color for the second house (other than yellow), and make the lines dotted instead of solid.
   c. Again, use only two while loops to draw the four lines.

Add the roofs for the houses:
5. Add peaked roofs to both houses, using your choice of colors. The roof of the first house should rise at a 45 degree angle; the roof of the second house should rise at a steeper angle than that. What is the slope of each roof line?
   a. 1st house left roof line slope: ______________
   b. 1st house right roof line slope: ______________
   c. 2nd house left roof line slope: ______________
   d. 2nd house right roof line slope: ______________

For extra credit:
Write your code as required in the instructions above. Then, add statements to draw two more houses in your Raster image, positioned below the first two houses. Use a total of only two while-loops to draw both new house rectangles. Add peaked roofs with your choice of slope, and include appropriate comments.