**Purpose:** To use if statements and variables in a program to vary the output on the screen.

**Description**: You will create a window on the screen that is no smaller than 800 x 600 and no larger than 1024 x 768. Your window will be divided into four equal rectangles by two black lines with a final 5th rectangle ( 50 x 50) centered in the middle to display the current color. Each rectangle represents a different RGB color or the “lack” of color (red, green, blue, or “black”). If the mouse is in upper left rectangle, the red, green, and blue values of the background will all decrease, but not go lower than 0. However, if the mouse is in the upper right rectangle, the red value of the background will increase, but not go higher than 255. The green value of the background will increase when the mouse is in the bottom left rectangle, however it will not go higher than 255. Finally, the blue value will increase but not go higher than 255 when the mouse is in the lower right hand corner. Each of the 4 boxes should be filled with the color that it increases (or black if it decreases the color). See screen shots below:



