

LAB 10 Tasks

Computer Organization and Assembly Language

Fall 2016

Question No. 1

- Construct a **structure** which contains the **coordinates of a pixel**.
- Define a **macro** to **draw a pixel**.
- Call the macro in loop to draw a vertical line on the output screen.

Question No. 2

- Construct a **structure** which contains **the coordinates of a pixel and color**.
- Define a **macro** that draw a hollow rectangle of 50*50 pixels at the **position of coordinates** given in the object of structure **and of the color** also given in that object.
- Change the values of object 4 times & draw rectangles at different positions of different colors.

Question No. 3

Call the macro of Question No. 2 in the loop to draw the rectangle at different positions of horizontal axis to **make the effect of moving a rectangle**.

Question No. 4

Add different checks to previous task to make the rectangle move to and fro horizontally.

When the rectangle hit the wall, make it bounce back towards the other end and so on. Your rectangle should not cross the boundary of screen. Make Proper boundary checks.