257 / 757 **Programming in the Arts with Processing** **In Class Exercise #9**	**Day:** **Tue 2.1814** **Due:** **In Class** **Goal:** **Different Type of Control**

Course Web Site:

> http://www.andrew.cmu.edu/course/60-257/

Reading:

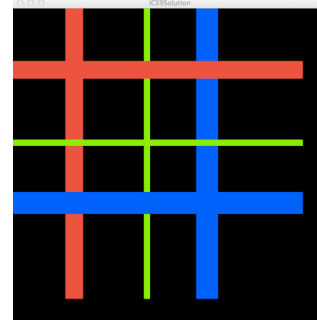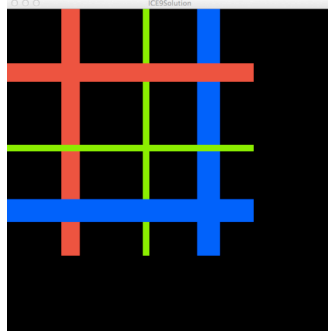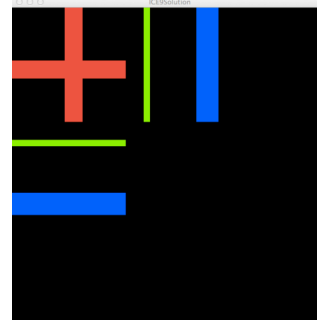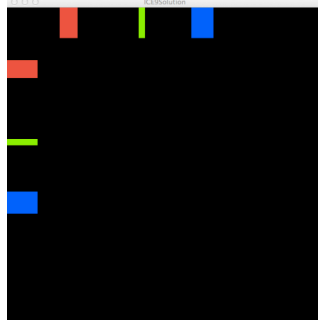Posted on the calendar web page available from the link shown above.

Assignment:

The code below is in the zip file you just downloaded. Use it as your starting code.
Here are the details:

- The code in the definition of two functions is missing. One draws horizontal columns growing from left to right. The other draws vertical columns growing from top to bottom. When the columns reach the other side, they immediately shrink to zero and begin to grow again.
- The arguments for the functions are their location, width or height, and color.
- Fill in the missing code.
- **OH – no if or if/else or if/else if control is allowed.**
- **10% BONUS for the first person to do it** – grow the columns in the opposite directions:
    - right to left
    - bottom to top

Non-Bonus Examples – four screen shots in sequence:

Starting Code:

```
// ICE 9

/*
   growing bars
   NO if-ing allowed!
*/


color r = color( 255, 0, 0 );
color b = color( 0, 0, 255 );
color g = color( 0, 255, 0 );

void setup ( )
{
  size( 600, 600  );
  fill( 0 );
  noStroke( );
}

void draw ( )
{
  background( 0 );

  drawVerticalColumn( 100, 34, r );
  drawVerticalColumn( 250, 12, g );
  drawVerticalColumn( 350, 42, b );

  drawHorizontalColumn( 100, 34, r );
  drawHorizontalColumn( 250, 12, g );
  drawHorizontalColumn( 350, 42, b );
}

void drawVerticalColumn( float x, float wd, color c)
{

}

void drawHorizontalColumn( float y, float ht, color c)
{

}
```