

## Pattern 1D

[http://processing.org/reference/translate\\_.html](http://processing.org/reference/translate_.html)  
[http://processing.org/reference/popMatrix\\_.html](http://processing.org/reference/popMatrix_.html)  
[http://processing.org/reference/pushMatrix\\_.html](http://processing.org/reference/pushMatrix_.html)  
[http://processing.org/reference/dist\\_.html](http://processing.org/reference/dist_.html)

### DESCRIPTION

Using this sketch try to develop the following projects

#### Pattern 2D

Create a 2 dimensional pattern. Use the same window size.

#### Pattern 2D Interactive Color

Try to embed an interactivity on the rects. Mark the below the mouse rectangle changing the color. Make the same thing for the size.

#### Pattern 2D Interactive Text Color

Replace the rectangle matrix with a font matrix. Use one font as an object and apply the above behavior.

#### Pattern 2D Interactive Text Rotation

Try to rotate the character that is placed below the mouse location. Many things has to be done using different method. The translate() command is necessary.

#### Rectangle Interactive

Track a rectangle area based on mouse location

#### Interactive Area

Track a round area based on mouse location. Use dist() command to measure the distance between 2 points.

### CODE

```
int cols; // Number of columns and rows in our system
int rectSize=10; // rectsize
color c; // color of the rectangles

void setup() {
  size(640, 480);
  cols=width/rectSize;
}

void draw() {
  for(int i=0; i<cols; i++) {
    int x=i*rectSize;
    rect(x,0,rectSize, rectSize);
    println(x);
  }
}
```