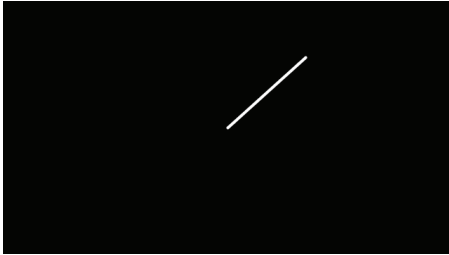


RotateLine

CODE



```
void setup() {
  size(640,360);
  smooth();
}

void draw() {
  background(0);

  // A vector that points to the mouse location
  PVector mouse = new PVector(mouseX,mouseY);
  // A vector that points to the center of the window
  PVector center = new PVector(width/2,height/2);
  // Subtract center from mouse which results in a vector that points
  from center to mouse
  mouse.sub(center);

  // Normalize the vector
  mouse.normalize();

  // Multiply its length by 150 (Scaling its length)
  mouse.mult(150);

  translate(width/2,height/2);
  // Draw the resulting vector
  stroke(255);
  strokeWeight(4);
  line(0,0,mouse.x,mouse.y);
}
```

```
/**
 * Vector
 * by Daniel Shiffman.
 *
 * Demonstration some basic vector
 math: subtraction, normalization,
 scaling
 * Normalizing a vector sets its length
 to 1.
 */
```