

p5.js

a cheat sheet
for beginners!

program structure

```
//runs once when program starts
function setup() {
  createCanvas(800,600);
}

//run continuously after setup
function draw() {
  //rendering loop
}
```

system variables

windowWidth / windowHeight
width / height of window

width / height
width / height of canvas

mouseX / mouseY
current horizontal / vertical
mouse position

non-visual feedback

print()
report data to the output console

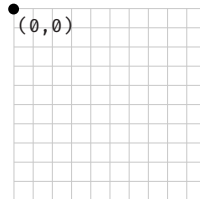
color

fill(120) gray: 0-255
fill(100,125,255) r, g, b: 0-255
fill(255, 0, 0, 50) r, g, b, alpha
fill('red') color string
fill('#ccc') 3-digit hex
fill('#222222') 6-digit hex fill
color(0, 0, 255) p5.Color object

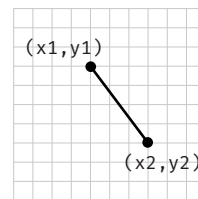
2d primitives

line(x1, y1, x2, y2)
ellipse(x1, y1, width, height)
rect(x1, y1, width, height)
arc(x1, y1, width, height, start, stop)
beginShape();
 vertex(x1, y1);
 vertex(x2, y2);
 vertex(x3, y3);
 //add more vertex
endShape(CLOSE);
text("string", x, y, boxwidth, boxheight)

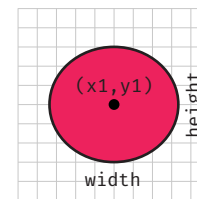
grid system



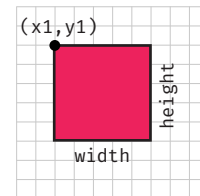
line()



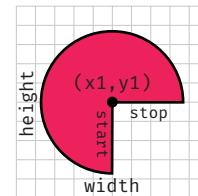
ellipse()



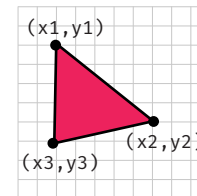
rect()



arc()



vertex()



math

+ - / *

random(low, high)

map(value, in1, in2, out1, out2)
map a value from input to output range

attributes

background(color)
set the background color

fill(color)
set the fill color

noFill()
disables fill

stroke(color)
set the stroke color

strokeWeight(weight)
set the stroke's width

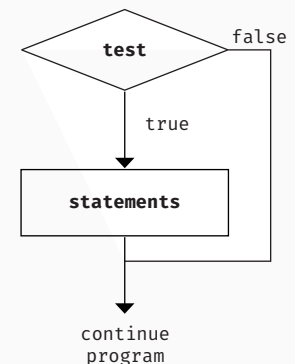
noStroke()
disables stroke

ellipseMode(MODE)
rectMode(MODE)
CENTER, CORNER

textSize(pixels)

if/then logic

```
if(test){  
  statements  
}
```



== equal to
!= not equal
> greater than
< less than
>= greater than or equal
<= less than or equal