

Introduzione a p5*js

<https://editor.p5js.org>

Disegnare forme

```
function setup() {
  createCanvas(400, 400);
}

function draw() {
  background("lightgreen");
  //strokeWeight(1);
  //stroke("black");
  //fill("white");
  circle(100, 200, 200);

  //strokeWeight(4);
  //stroke("blue");
  //fill("red");
  //circle(300, 80, 60);

  //rect(100, 200, 200, 40);

  //noFill();
  //triangle(100, 390, 300, 390, 300, 350);

  //noStroke();
  //fill("gray");
  //quad(200, 300, 350, 300, 370, 200, 220, 330);
}
```

Mostrare la posizione del mouse

```
function setup() {
  createCanvas(400, 400);
}

function draw() {
  background("pink");
  // textSize(20);
  text("Ciao", 0, 20);

  // text(`X: ${mouseX}`, 0, 40);
  // text(`Y: ${mouseY}`, 0, 60);
}
```

Selezionare forme

```
function setup() {
  createCanvas(400, 400);
}

function draw() {
  const circleCenterX = 200;
  const circleCenterY = 100;
  const circleDiameter = 160;
  background("yellow");
  const inCircle = pow(mouseX - circleCenterX, 2) +
    pow(mouseY - circleCenterY, 2) <=
    pow(circleDiameter / 2, 2);
  if (inCircle) fill("red"); else fill("green");
  circle(circleCenterX, circleCenterY, circleDiameter);

  const rectLeft = 100;
  const rectTop = 240;
  const rectWidth = 250;
```

```
const rectHeight = 80;
const inRect = rectLeft <= mouseX && mouseX <= rectLeft + rectWidth &&
    rectTop <= mouseY && mouseY <= rectTop + rectHeight;
if (inRect) fill("orange"); else fill("blue");
rect(rectLeft, rectTop, rectWidth, rectHeight) ;
}
```

Disegnare con il mouse

```
function setup() {
  createCanvas(400, 400);
  background("lightgray")
  stroke("blue")
  strokeWeight(3);
}

let mouseWasPressed = false;
let previousMouseX = 0;
let previousMouseY = 0;

function draw() {
  if (mouseIsPressed) {
    if (mouseWasPressed) {
      line(previousMouseX, previousMouseY, mouseX, mouseY);
      //circle(mouseX, mouseY, 4);
    }
    previousMouseX = mouseX;
    previousMouseY = mouseY;
    mouseWasPressed = true;
  }
  else {
    mouseWasPressed = false;
  }
}
```