# More Canvas

#### Line Width

```
let cx =
document.getElementById("canvas");
let ctx = cx.getContext("2d");
ctx.strokeStyle = "blue";
ctx.strokeRect(5 , 5 , 50 , 50);
ctx.lineWidth = 5;
ctx.strokeRect(135 , 5 , 50 , 50);
```

#### **Text**

- ▶ fillText()
  - Draws letters filled with current fillStyle color
- strokeText()
  - ▶ Draws outline of letters

# Example

```
I can draw text, too!
Fancy text is fancy
EXTRA FANCY
```

```
cx.font = "40px Georgia";
cx.fillStyle = "orange";
cx.fillText ("I can draw text , too !" , 10
50) ;
cx.strokeStyle = "purple";
cx.strokeText("Fancy text is fancy", 10, 100);
cx.fillStyle="yellow";
cx.strokeStyle="blue";
cx.fillText("EXTRA FANCY", 10, 150);
cx.strokeText("EXTRA FANCY", 10, 150);
```

## **Loops and Canvas**

- ► Have you noticed yourself writing the same code over and over again when drawing on canvas?
- ▶ Why not use loops instead!

### Example

▶ What if I want to draw 5 purple balls on the canvas, and space them 100px apart?

```
var r = 25;
var x = 100, y=100;
cx.fillStyle = "purple";
for (var i = 1; i \le 5; i++) {
  cx.beginPath();
  cx.arc(x, y, r, 0, 2*Math.PI);
  cx.fill();
  x += 100;
```

### Example

```
var r = 25;

var x = 100, y=100;

for (var i = 1; i <= 5; i++)
```

```
for(var i = 1; i <= 5; i++) {
   if(i % 2 === 0)
        cx.fillStyle = "purple";
   else cx.fillStyle = "pink";

   cx.beginPath();
   cx.arc(x, y, r, 0, 2*Math.PI);
   cx.fill();
   x += 100;</pre>
```

## More Complex Example

```
var radius = 50;
cx.beginPath();
cx.arc(200, 200, radius, 0, 2*Math.PI);
cx.stroke();
cx.save();
cx.translate(200,200);
for(var i = 0; i < 8; i++) {
    cx.beginPath();
    cx.arc(0,100, radius,0, 2*Math.PI);
    cx.stroke();
    cx.rotate(45*Math.PI/180);
cx.restore();
```

