# Drawing lines in immediate mode

Sometimes it might be useful to draw just one line without being in another path.

It's interesting to see how we can write a single "draw line" function that takes the start and end coordinates, the color, the line width, etc.

Here is the code:

```
function drawLine(x1, y1, x2, y2, color,width) {
    ctx.save();
    // set color and lineWidth, if these parameters
    // are not defined, do nothing (default values)
    if(color)
        ctx.strokeStyle = color;
    if(width)
        ctx.lineWidth = width;
    // start a new path
    ctx.beginPath();
    ctx.moveTo(x1, y1);
    ctx.lineTo(x2, y2);
    ctx.stroke();
    ctx.restore();
}
```

Notice the save/restore of the context at the beginning/end of the function. This is a REALLY good practice to avoid affecting other functions' context.

- *Line 13* starts a new path so that the function will only draw what it is meant to draw: a single line.

- *Lines 15-17* move the "pen" at (x1, y1) then draw a line to (x2, y2), and the stroke at line 17 makes it appear on the screen.

Here is an example (see online example):

```
    drawLine(0, 0, 100, 100);
    drawLine(0, 50, 150, 200, 'red');
    drawLine(10, 100, 100, 10, 'green', 10);
```

Result: