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Elementary concepts

1.0: The Canvas

The canvas is an html5 tag introduced by  (no it's not a typo) in 2004 and then *quickly* adopted and available in every browser as standard core feature (2008).

It provides a bitmap-based area on the browser allowing to draw programmatically shapes, graphics and more. This was the demise of macromedia Flash.

But let's stop boring thing and let's dive in as quick as possible:

```
<canvas id="myCanvas"></canvas>
```

hint: clearly we could have created and appended the canvas element programmatically

```
class Counter {  
  
  constructor (init) {  
    this.data = init;  
    this.sliced = { A3: 0, A4: 0};  
  }  
  
  slice(color, format, mode){  
    if(!(color in this.data)) return;  
    var trg = this.data[color];  
    switch(format) {  
      case 'A3':  
        trg.B += [4, 5][mode];  
        trg.b += [4.4/8, 2/8][mode];  
        trg.l += [4, 0][mode];  
        break;  
      case 'A4':
```

```

    trg.B += [2, 1][mode];
    trg.b += [5/8, 1.8/8][mode];
    trg.l += [0, 8][mode];
    break;
}
this.sliced[format]++;
}

sliceAll(els){
  for (var color in els)
    for (var format in els[color])
      els[color][format].forEach(
        (count, index) => {
          while (count--)
            this.slice(color, format, index);
        }
      );
}

stats() {
  const tot = {
    Bands: 0,
    JoinedBands: 0,
    Inner: 0
  };
  for(var k in this.data){
    const B = Math.floor(this.data[k].B),
      b = Math.floor(this.data[k].b),
      l = Math.floor(this.data[k].l);
    tot.Bands += B;
    tot.JoinedBands += b;
    tot.Inner += l;
    console.log(k, { Bands : B, Joinedbands : b, Inner : l });
  }
  console.log('sliced', this.sliced);
  console.log('total', tot);
}
}

```