

Example I: Smiley face

```
//face color: yellow
fill(255, 255, 0);
//face
ellipse(200, 200, 200, 200);

//stroke color: black
stroke(0, 0, 0);
//thickness
strokeWeight(2);
//smiley mouth as an arc
arc(200, 200, 150, 100, 0, 180);

//eyes color: black
fill(0, 0, 0);
//two eyes
ellipse(250, 180, 10, 10);
ellipse(150, 180, 10, 10);
```

Example II: for loop and images

```
// background color
background(88, 160, 209);

// grass color
fill(53, 171, 57);
noStroke();
rect(0,295,400,400);

// Draw the image at its default size
// The full address:
//image(getImage("avatars/mr-pants-with-hat"), 85, 15);

// Draw a smaller image
//image(getImage("avatars/mr-pants-with-hat"), 20, 211, 59, 96);

for (var i=0; i<7; i++) {
  image(getImage("avatars/mr-pants-with-hat"), 20+i*50, 211, 59, 96);
}
```

Example III: Animation with linear function

```
var x=20;

draw = function() {
  // background color
  background(88, 160, 209);

  // grass color
  fill(53, 171, 57);
  noStroke();
  rect(0,295,400,400);

  image(getImage("avatars/mr-pants-with-hat"), x, 211, 59, 96);
  x=x+5;
  if (x>400) {
    x=0;
  }
};
```

Example IV: Animation with Sin functions

```
var x0=165;
var y0=166;
var t=0;
var r=100;
var x=x0+r*sin(t);
var y=y0-r*cos(t);

draw = function() {
  // background color
  background(88, 160, 209);

  // grass color
  fill(53, 171, 57);
  noStroke();
  rect(0,295,400,400);

  image(getImage("avatars/mr-pants-with-hat"), x, y, 59, 96);
  t=t+1;
  //r=r+0.5;
  x=x0+r*sin(t);
  y=y0-r*cos(t);
  if (x>400 | y>400 | x<1 | y<1) {
```

```

    t=0;
    r=100;
  }
};

```

Example V: bouncing ball with only 6 frames

```

var x=20;
var frame=3;
// speed = 6 play normally, speed = 50 will show the slow-mo of 6 frames
var speed=6;
var fr=floor(frame/speed);
var h=0;

```

```

draw = function() {
  // background color
  background(255, 255, 255);

  // draw a thicker, green line from (50, 300) to (350, 300);
  stroke(0, 173, 0);
  strokeWeight(4);
  line(50, 300, 350, 300);

  // draw a circle
  noStroke();
  fill(245, 65, 41);
  fr=floor(frame/speed);
  if (fr>0){
    if (fr===1 | fr===5) {h=0;}
    if (fr===2 | fr===4) {h=-5;}
    if (fr===3) {h=-10;}
    ellipse(200, 273+h, 50, 50);
    if (frame<6*speed) {frame=frame+1;}
    if (frame===6*speed) {frame=0;}
  }
  if (fr===0) {
    ellipse(200, 279, 60, 40);
    frame=frame+1;
  }
};

```

Example VI: balloon in the sky with cloud

```

// background color

```

```

background(0, 174, 255);
// clouds
fill(174, 236, 252);
noStroke();
ellipse(293,112,115,77);
ellipse(276,90,87,94);
ellipse(222,83,87,84);
ellipse(187,114,87,53);
ellipse(231,119,87,84);

// balloon
fill(255, 150, 38);
noStroke();
ellipse(181,254,61,77);
triangle(167, 300, 180, 282, 189, 300);

// draw the arc with green fill
noFill();
stroke(71, 46, 9);
strokeWeight(2);
line(177,302,166,368);

```

Example VII: flying balloon

```

var y=400;
var step=5;

draw = function() {
  // background color
  background(0, 174, 255);
  // clouds
  fill(174, 236, 252);
  noStroke();
  ellipse(293,112,115,77);
  ellipse(276,90,87,94);
  ellipse(222,83,87,84);
  ellipse(187,114,87,53);
  ellipse(231,119,87,84);

  // balloon
  fill(255, 150, 38);
  noStroke();
  ellipse(181,254+y,61,77);
  triangle(167, 300+y, 180, 282+y, 189, 300+y);

```

```
// draw the arc with green fill
noFill();
stroke(71, 46, 9);
strokeWeight(2);
line(177,302+y,166,368+y);
y=y-step;
if (y<-300) { y=400;}
};
```