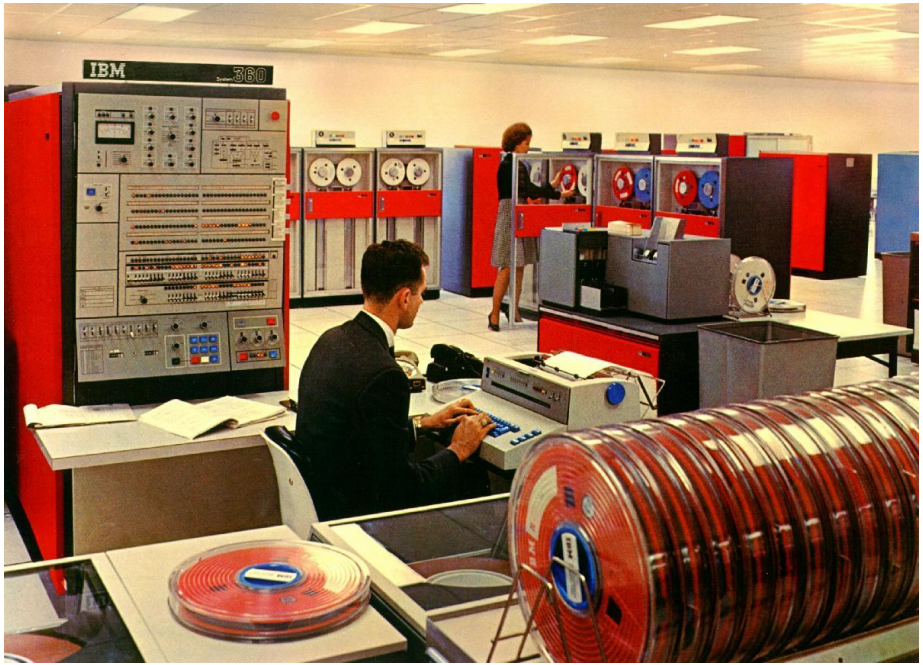
Creative Programming

Tumblr Issues?

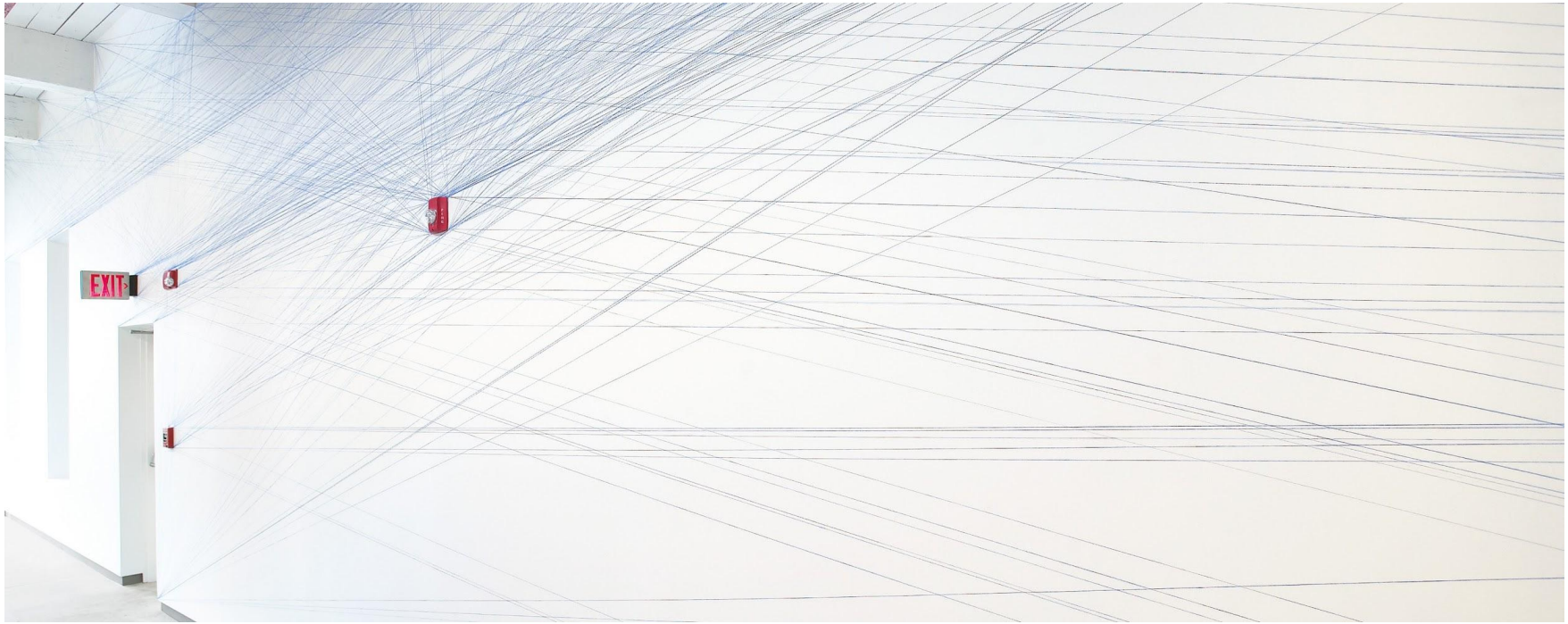
Assignments

Overview of the Last Session



From mainframe computers
-IBM 360 pictured-

Why do we code?



Sol Lewitt

Variables
Control Structures
Data Structures
Syntax
Tools

Variables

Type of Variables

int

- stores an integer (eg. 1)

float

- stores a number with a decimal point (eg. 9.31)

String

- stores text (eg. “Bootcamp 2016”)

boolean

- true/false

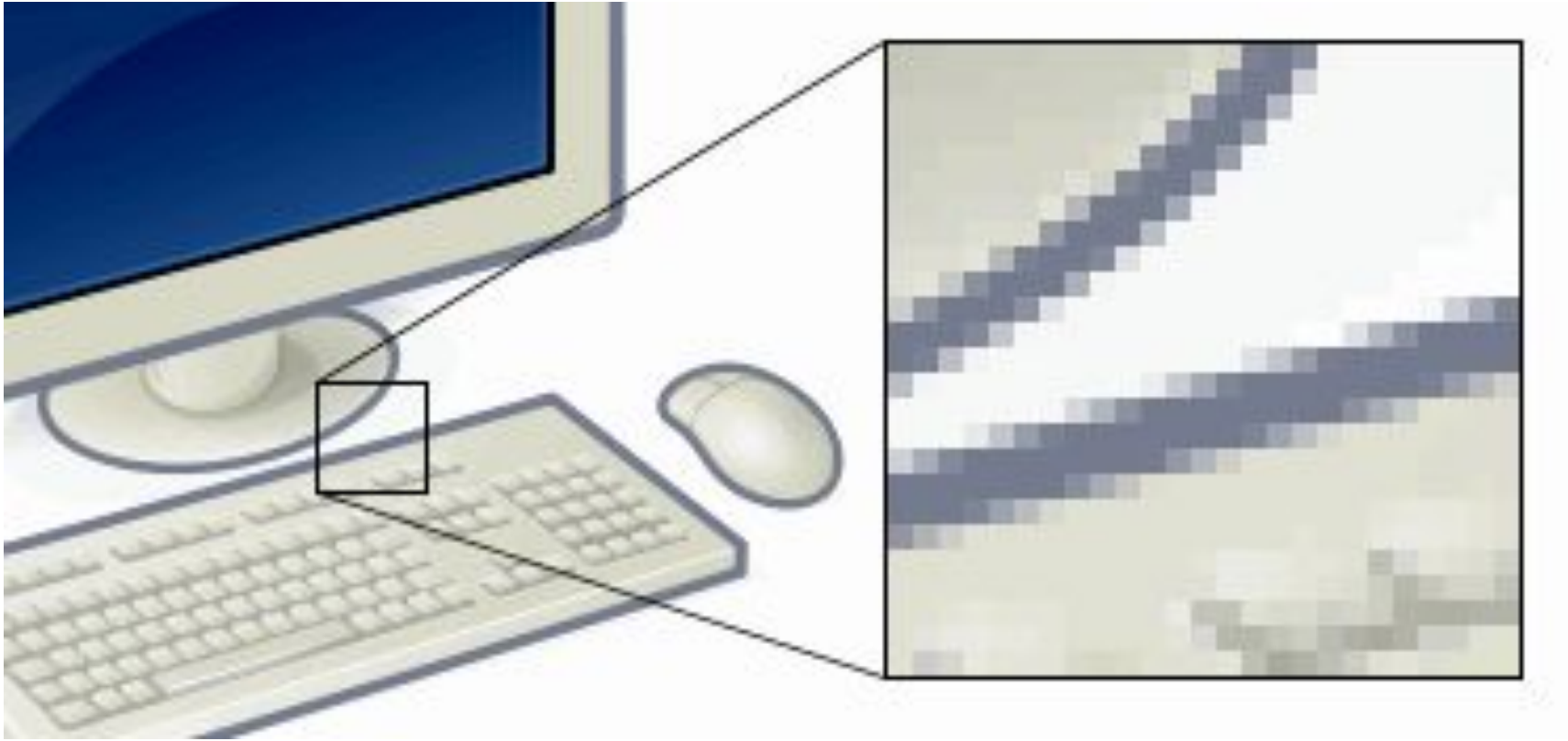
Functions

A **function** is a type of procedure or routine

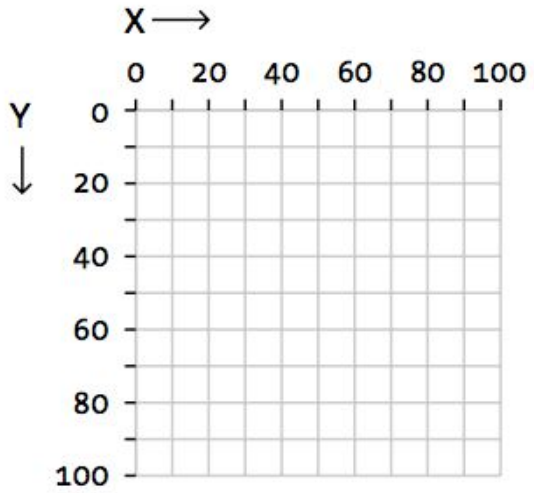
Pseudocode

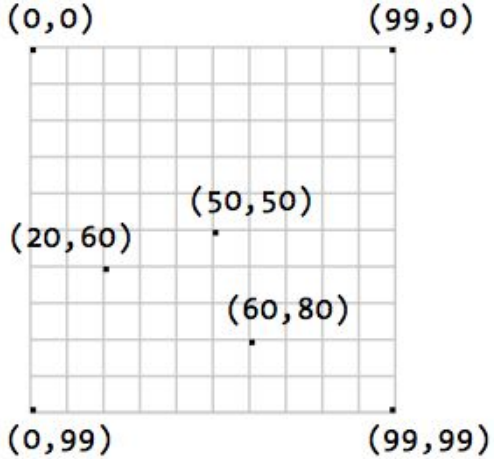
is an informal high-level description of the operating principle of a computer program or other algorithm.

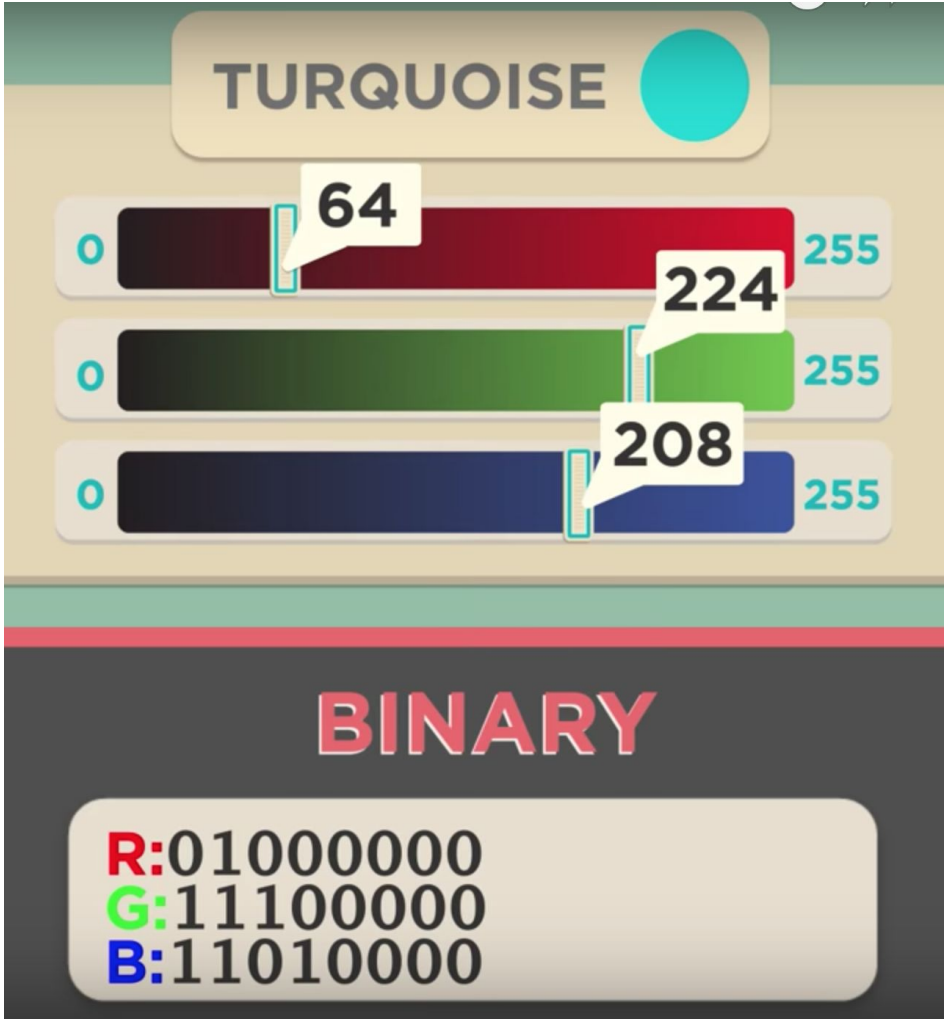
Drawing in Pixels

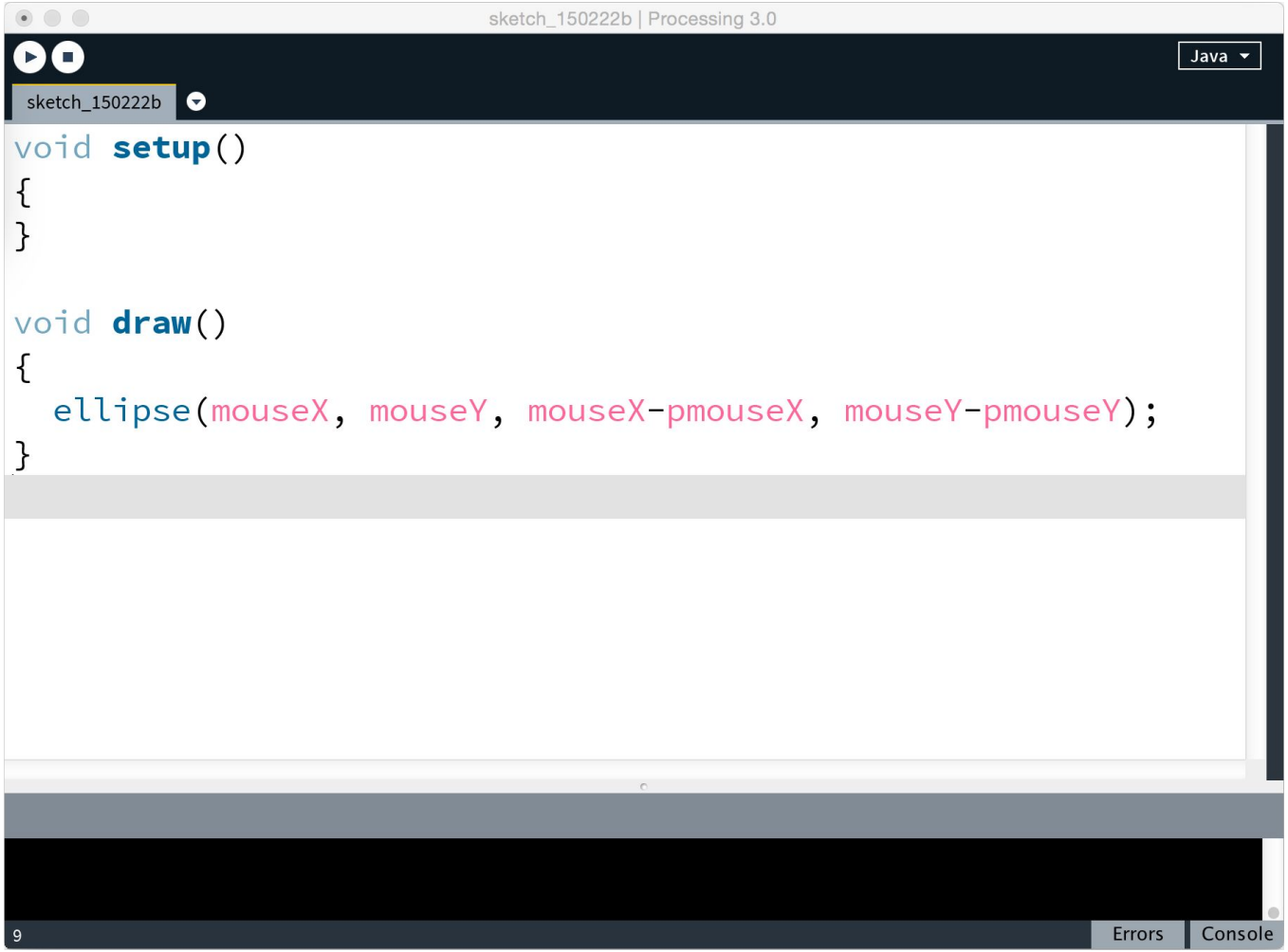


Processing Canvas






TURQUOISE
64
0
255
224
0
255
208
0
255
BINARY
R:01000000
G:11100000
B:11010000


sketch_150222b | Processing 3.0
Java
sketch_150222b
void setup()
{
}
void draw()
{
ellipse(mouseX, mouseY, mouseX-pmouseX, mouseY-pmouseY);
}
9
Errors
Console

CANVAS

Size of Canvas

```
size (width, height);
```

Background Color of Canvas

```
background (red,green,blue, alpha);
```

SHAPES

Rectangles

```
rec (x, y, w, h);
```

Ellipses

```
ellipse (x, y, w, h);
```

Lines

```
line(x1, y1, x2, y2);
```

COLOR

Fill with Color

```
fill (greyscale);
```

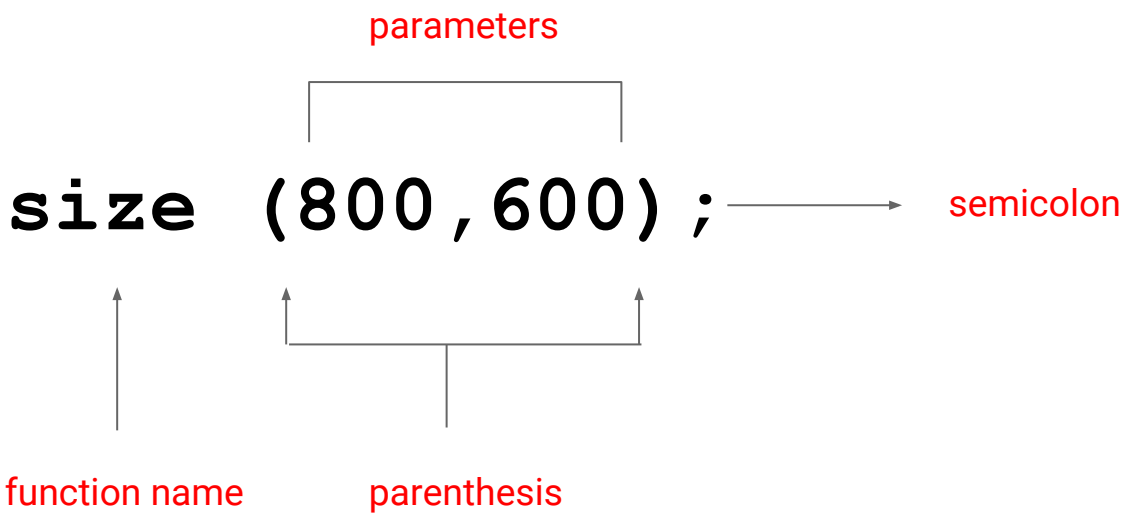
```
fill (r,g,b,a);
```

```
noFill();
```

Give a Stroke to the outline

```
Stroke(value):
```

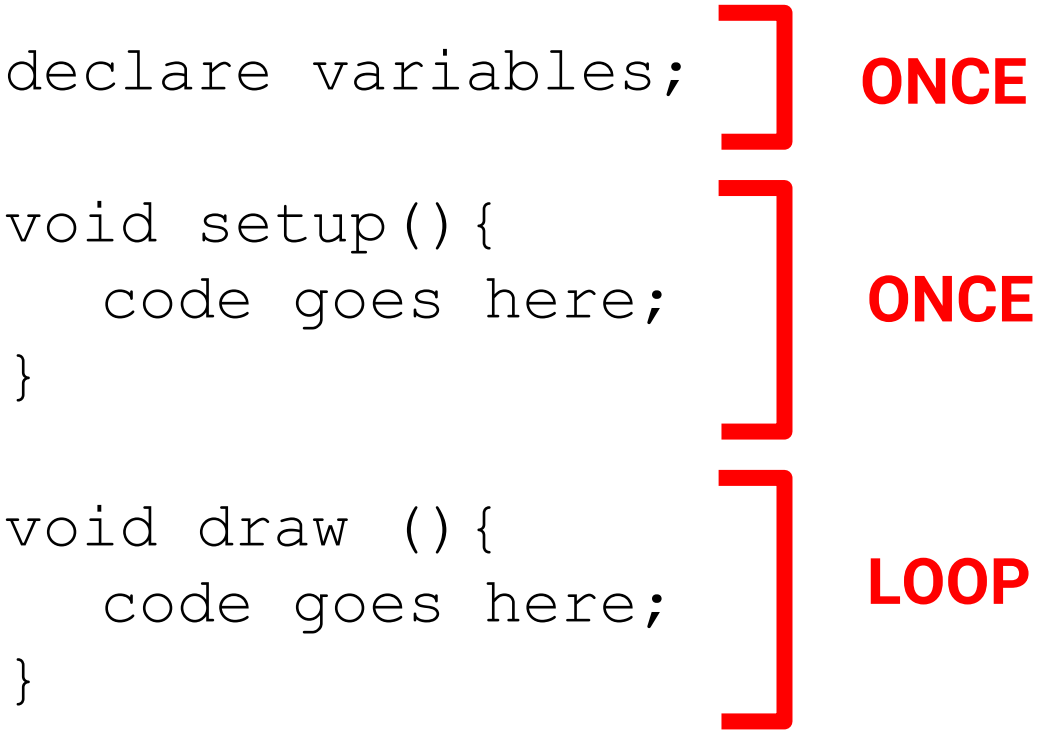
SYNTAX


parameters
size (800,600);
semicolon
function name
parenthesis

SYNTAX

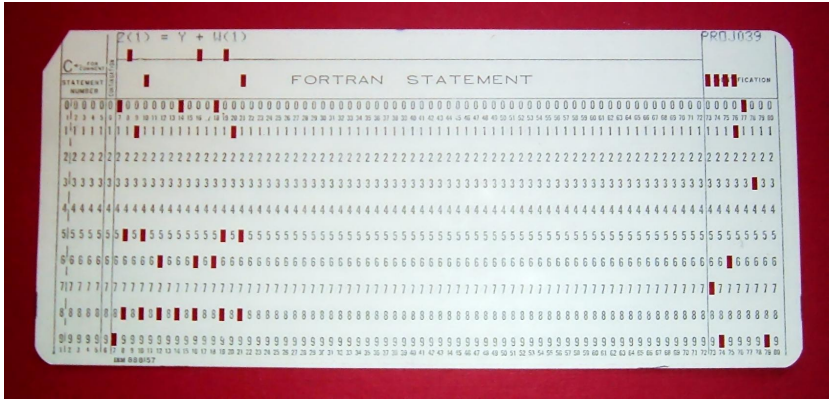
```
void setup(){
   code goes here;
}
```

FLOW

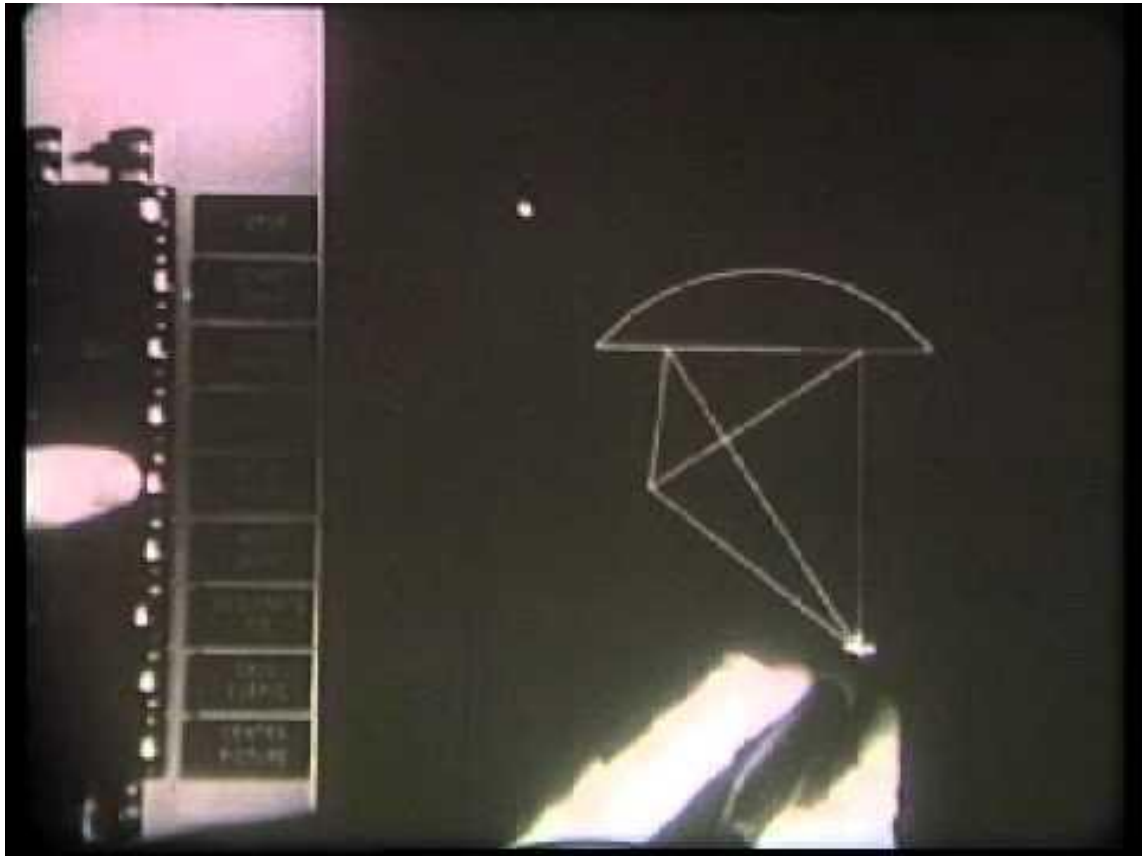

declare variables;
ONCE
void setup(){
code goes here;
}
ONCE
void draw (){
code goes here;
}
LOOP

Yaay!
Time to Code

Bundesarchiv, B 146 Bild-F031434-0006
Foto: Gathmann, Jens | 23. März 1970

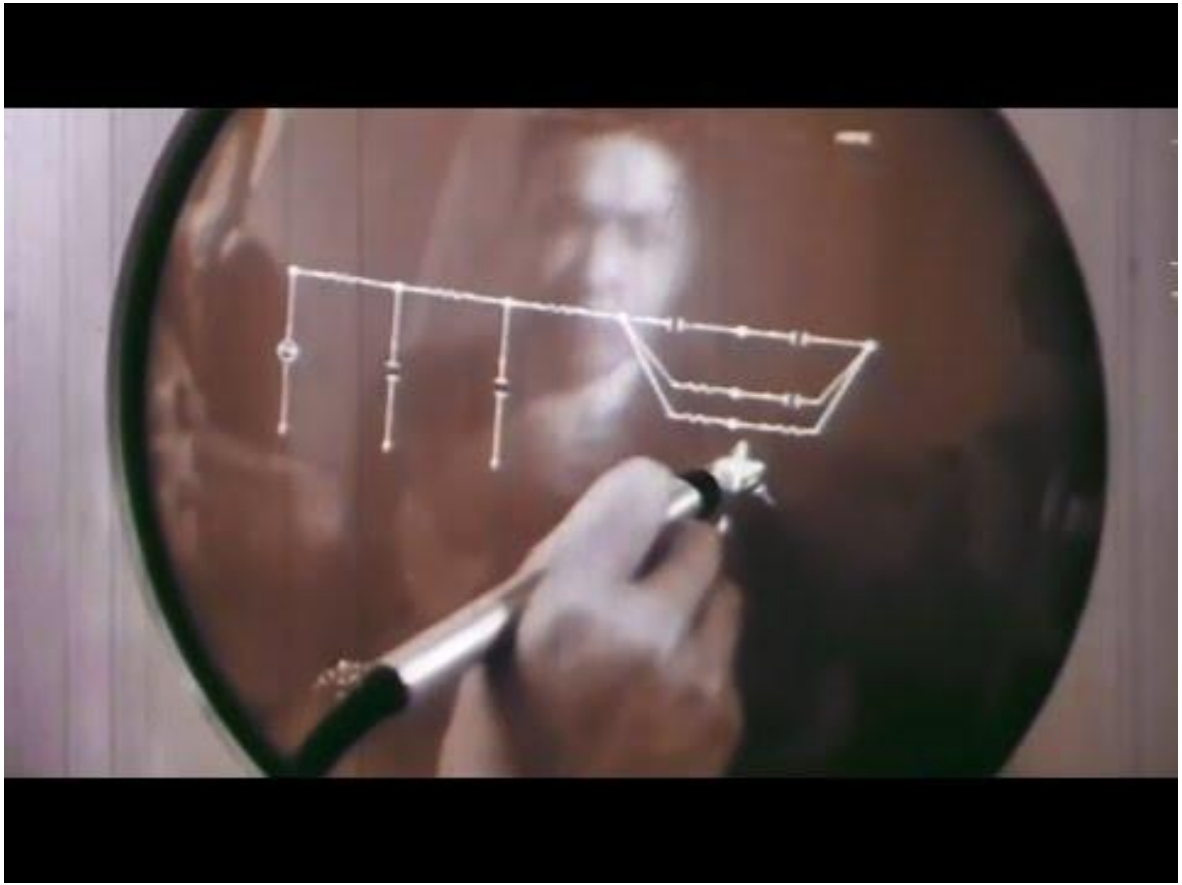


Computer programming with punched cards



Sketchpad,1963

Negroponte,
First Touch screen
Experiments



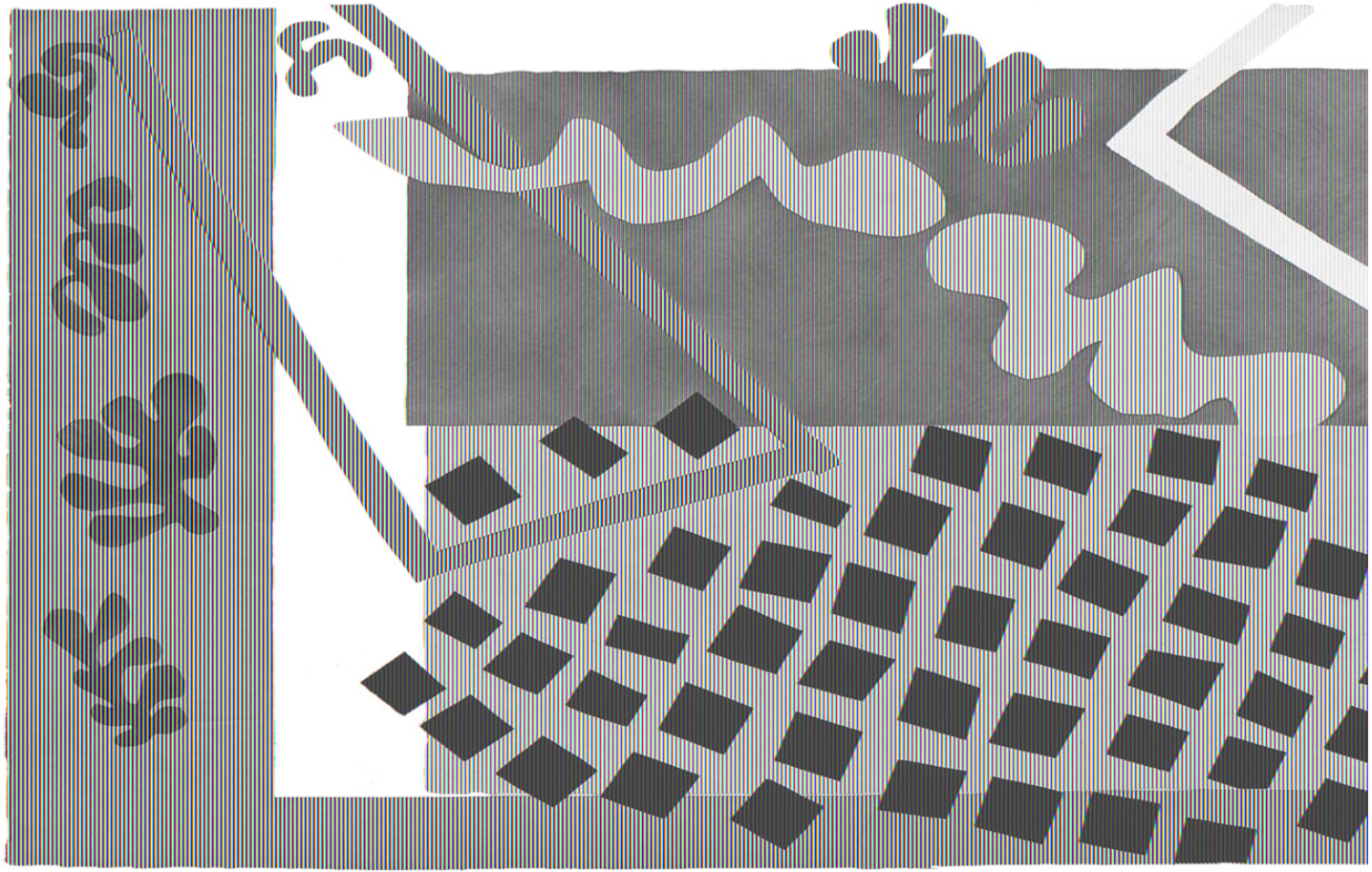
"The Incredible Machine" 1968

Lillian Schwartz

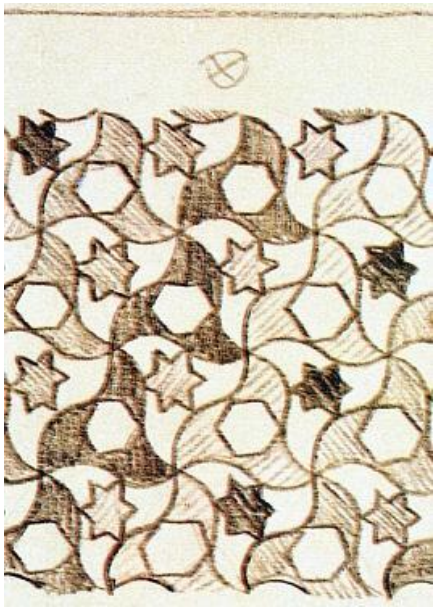
http://lillian.com/films/

John Whitney
Catalog, 1961

Henri Matisse
1947

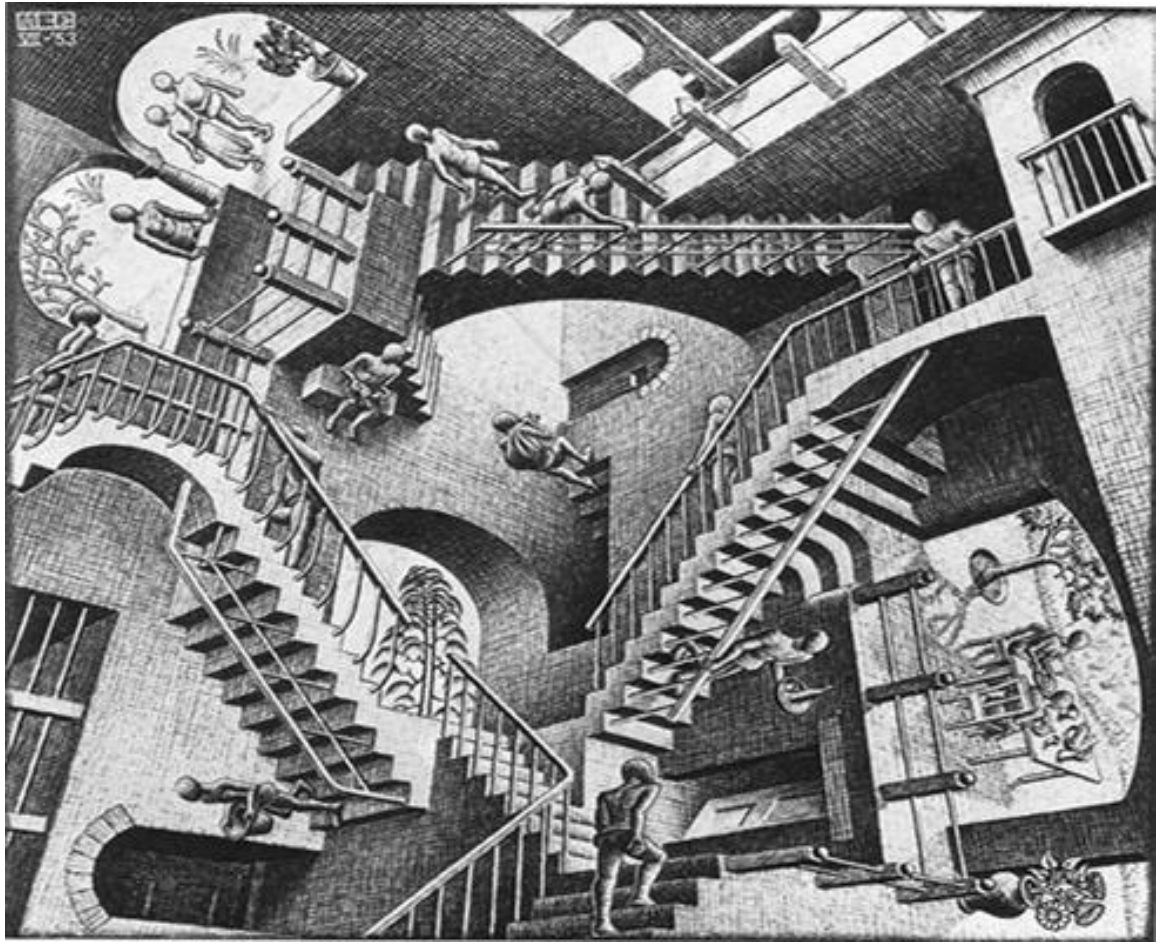


Henri Matisse
1947

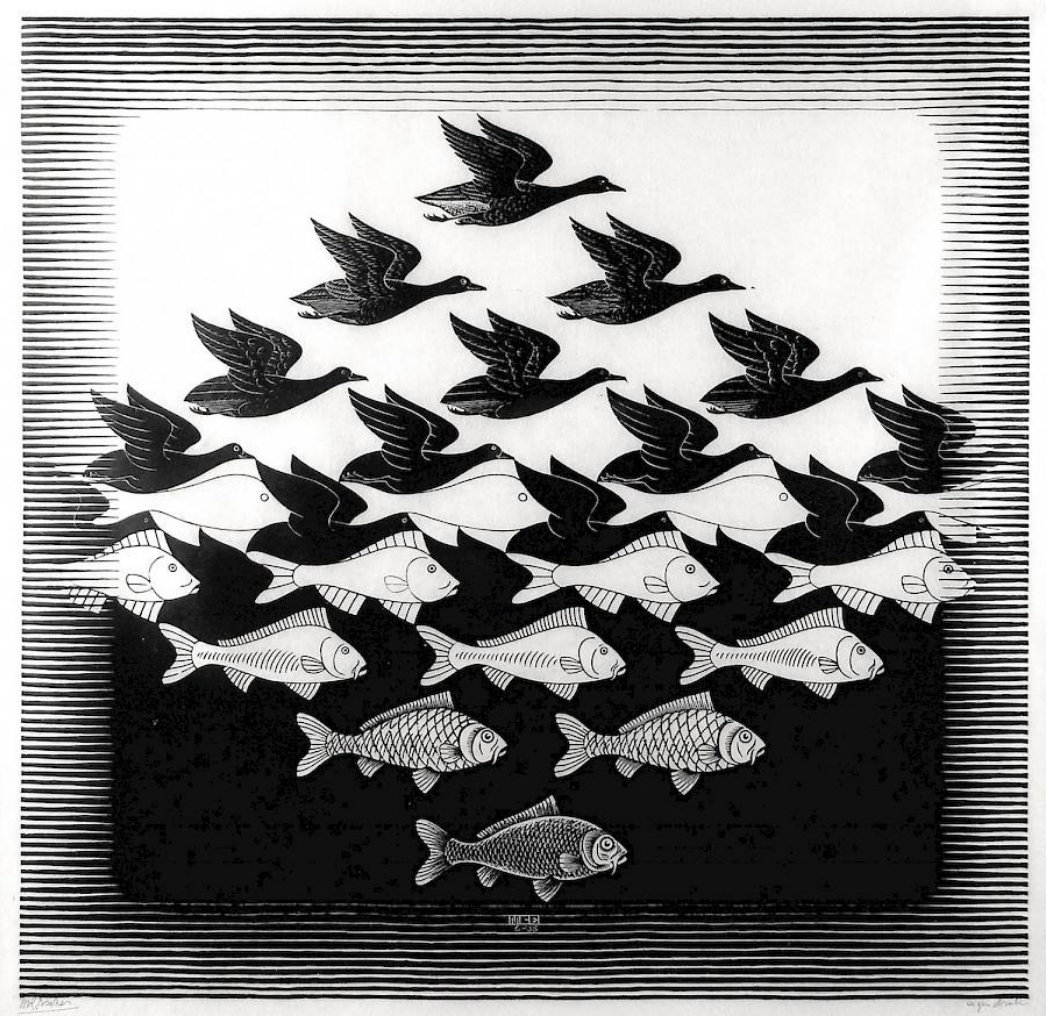


Moorish tessellations in Alhambra and M.C.Escher's sketch, 1936

M.C.Escher's, tessellations



M.C.Escher's, Relativity

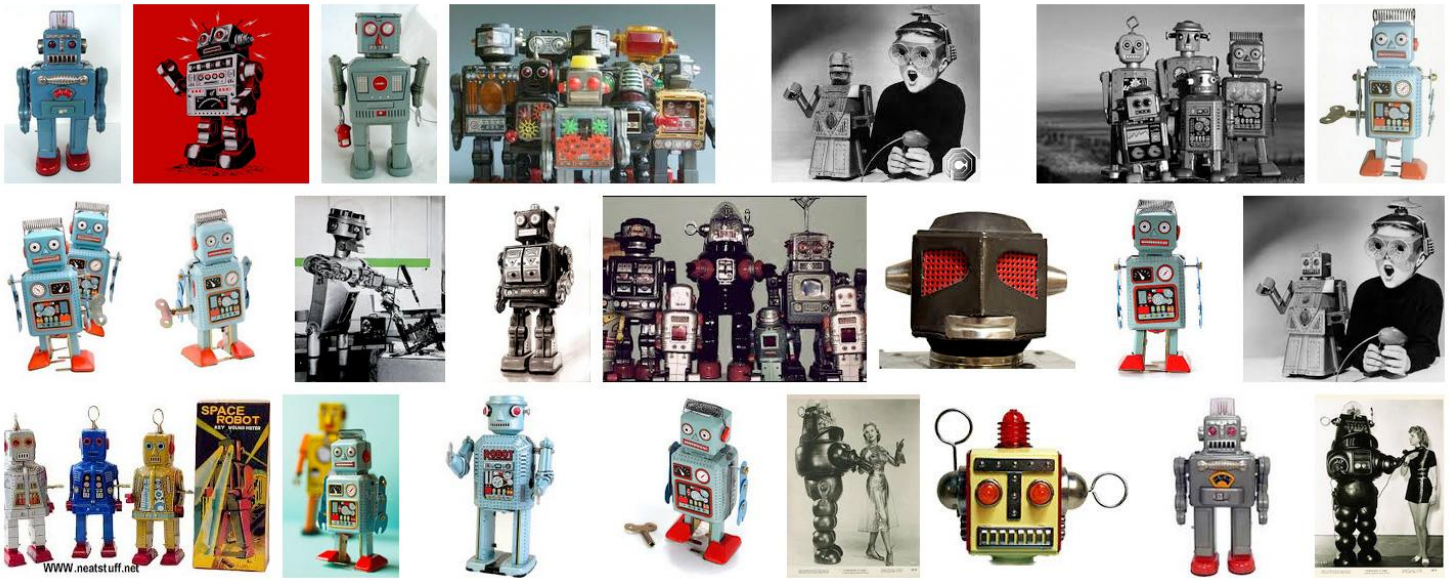


Abstract work,
woodcut

The Art Of Computer Designing,
Osamu Sato 1993

Assignment

Drawing Robots


SPACE
ROBOT
WWW.neatstuff.net