Assignment

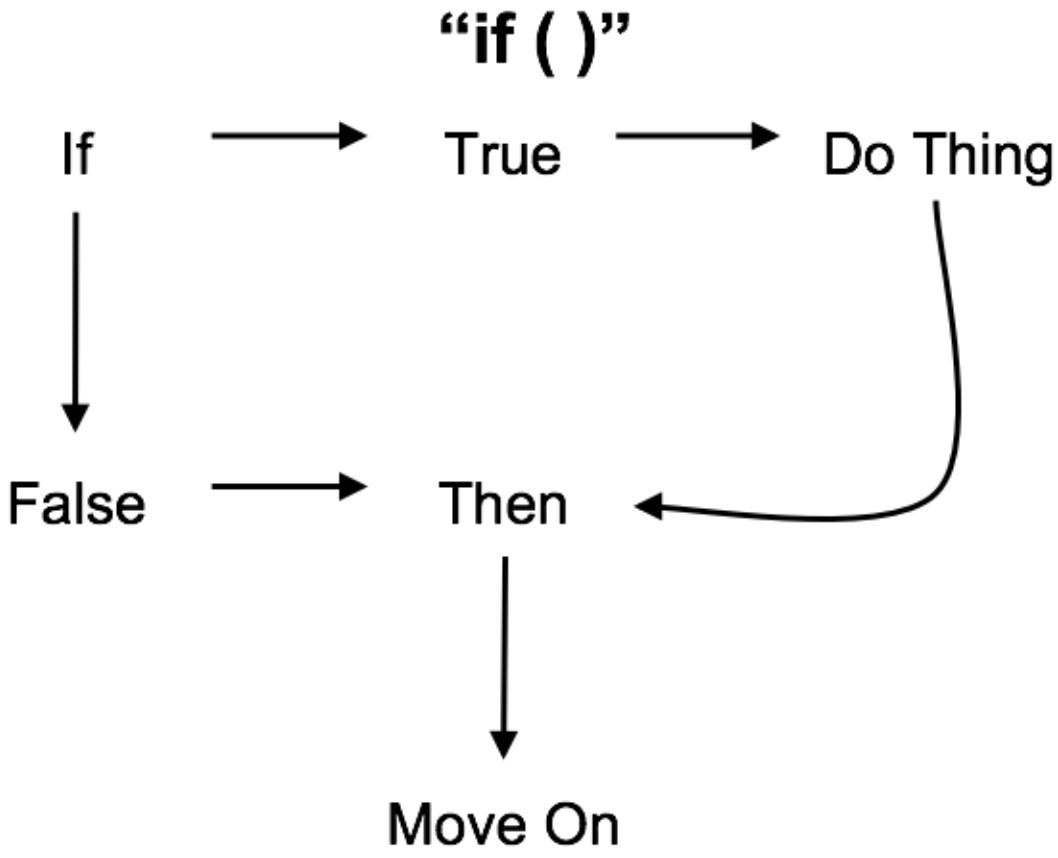
Recursion Exploration

Analyze and criticize this artwork:

1) **Explain this work to us like this was an artwork on your room's wall:**
   -Describe it aesthetically(composition, color choices etc.)
   -Describe the emotions, ideas it provokes.
   -Tell us what makes it the best artwork in the world!

2) **Convince us that this work promises hope however would be done better if...**
   -Give clear feedback, tell us the reason behind your thoughts/suggestions.
   -Point out the future potentials(Another way of criticizing).
   -*OPTIONAL*-Give the name of another work/ another artist that you think would worth to look at for inspiration (related to this artwork).

Conditionals


“if ( )”
If
True
Do Thing
False
Then
Move On

```
if (bored){
   WATCH NETFLIX;
}
else {
   DO NOT WATCH NETFLIX;
}
```

“while()” vs “if()”

```
if (test) {
    stuff to do if true;
}
```

Happens only once, and
then exits.

```
while (test) {
    stuff to do if true;
}
```

Repeats for the entire duration
that the test is true.

Operator+	Meaning	Example
==	"equal"	if (x==10){ //do something}
||	"or"	if (x==10 || x ==10){ //do something}
&&	"and"	if (x==10 && y ==10){ //do something}
<	"less than"	if (x < 10) { //do something}
<=	"less than or equal to"	if (x >= 15) { //do something}
>	"greater than"	if (x > 3) { //do something}
>=	"greater than or equal to"	if (x >= 7) { //do something}
!=	"not equal to"	if (x != 100) { //do something}

Demo

PFont font;

```
// The font must be located in the sketch's
// "data" directory to load successfully
```

```
font = createFont("LetterGothicStd.ttf", fontSize);
textFont(font,fontSize);

textAligned(CENTER);
text("word”, xLocation, yLocation);
```

map(value, start1, stop1, start2, stop2**);**

Re-maps a number from one range to another.

//

```
size(200, 200);
float value = 25;
float m = map(value, 0, 100, 0, width);
ellipse(m, 200, 10, 10);
```

frameCount

The system variable frameCount contains the number of frames that have been displayed since the program started.

nf();

Utility function for formatting numbers into strings. There are two versions: one for formatting floats, and one for formatting ints.

//

```
int a=200;
String sa = nf(a, 10);
println(sa);  // Prints "0000000200"
```

More Demo...

Time...

German Astronomical Clock
17th Century

Sun clock

Decimal Clock

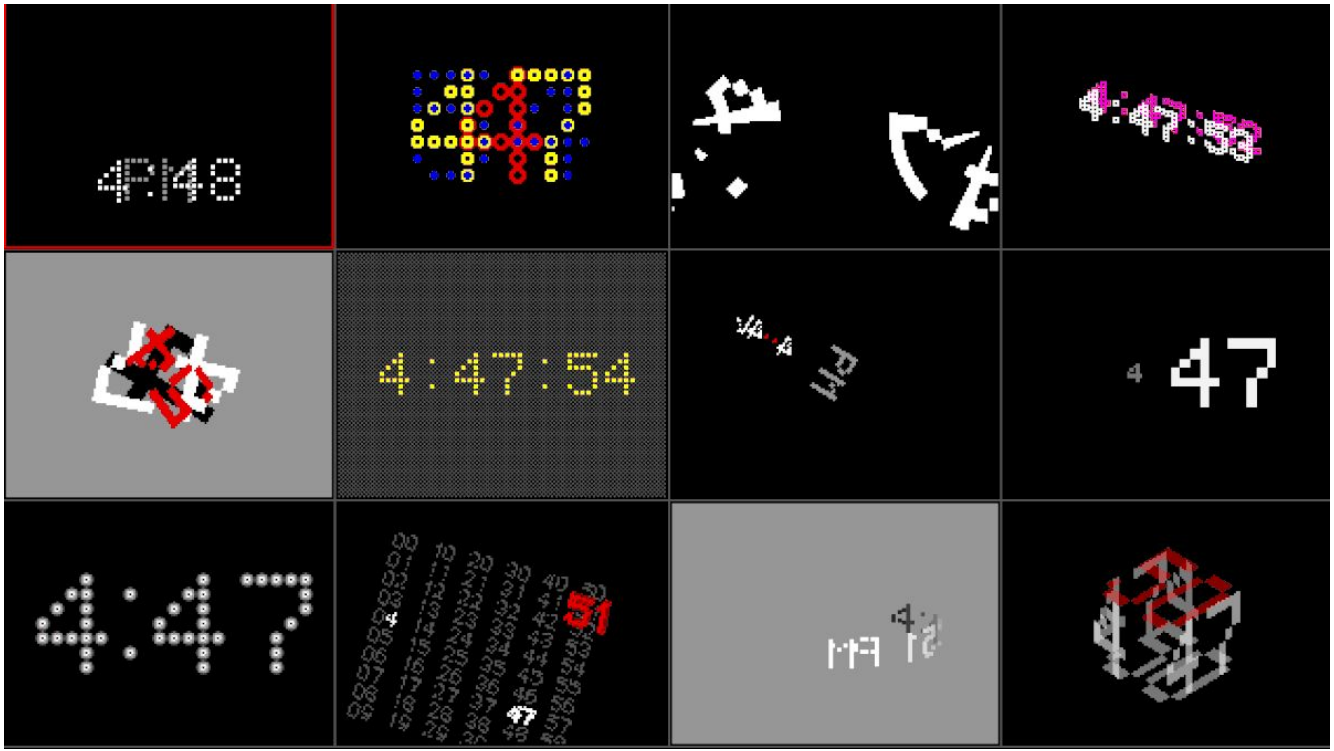
Prague Astronomical Clock

Bruno Munari
LOraX Clock 1945

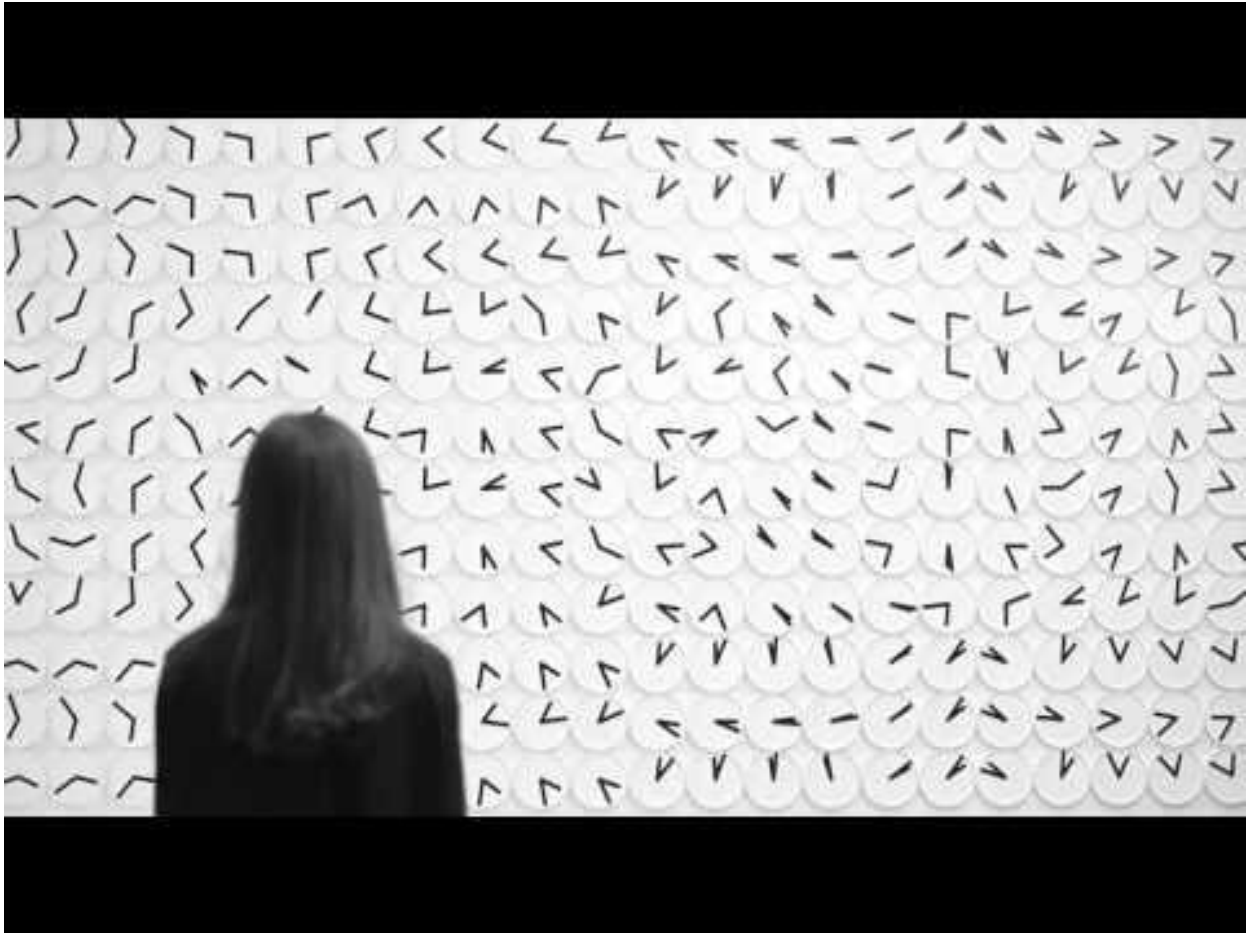
Robert Watts And George Maciunas
10 Hour Flux Clock_1969

Jim Campbell
Untitled For The Sun

https://www.youtube.com/watch?v=1EKIuhCwY_Q

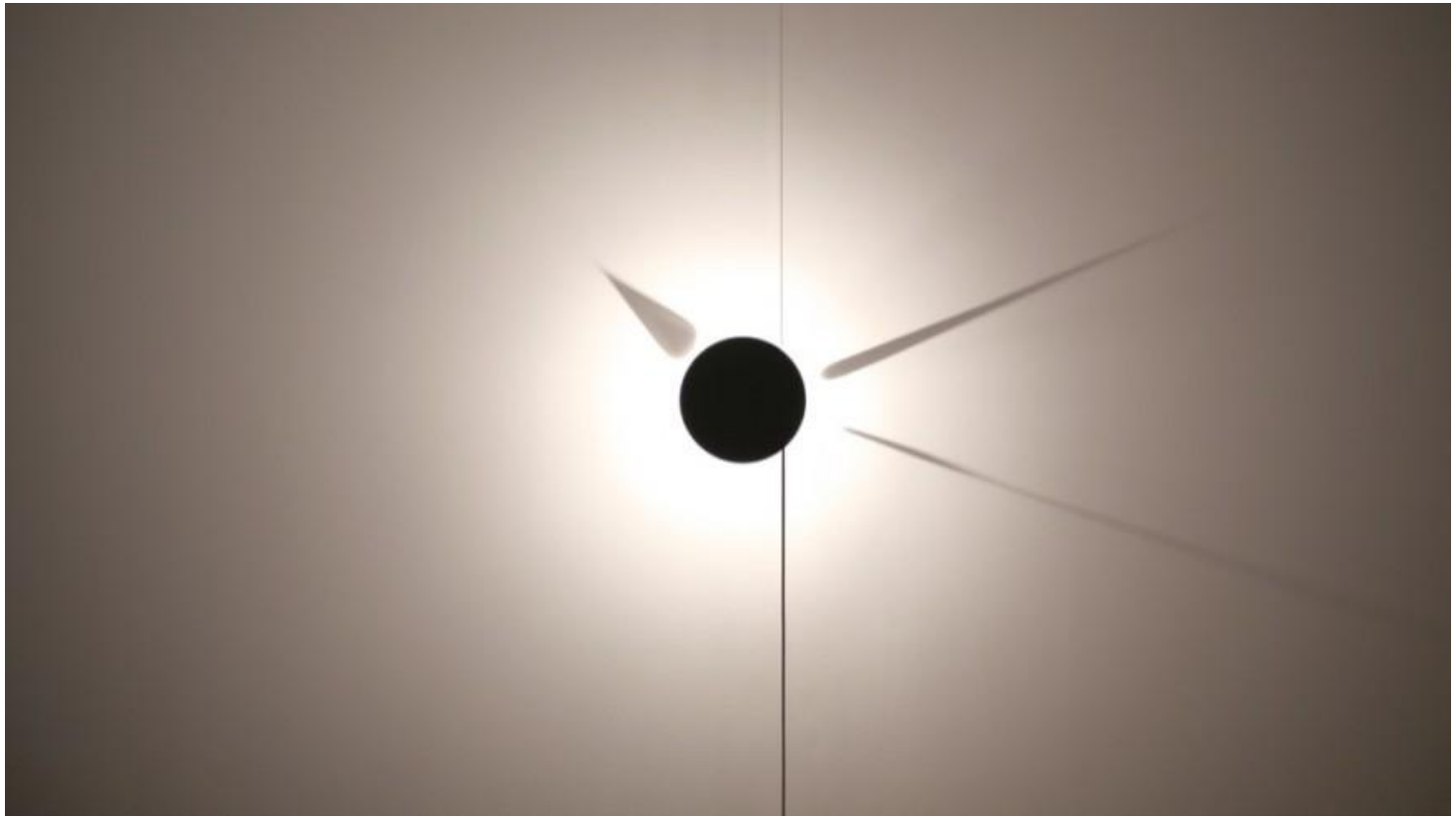


John Maeda
12 Clocks
1996-97
https://vimeo.com
/198494458



Clock Prototype
A Million Times
288h Humans Since
1982_2013

https://www.humanssince1982.com/



https://vimeo.com/80816999
shadow-clock-design-by-poetic-lab

Giha Woo and Shingoeun

Rafael Lozano Hemmer
Zero Noon
https://vimeo.com/68876953

Mark Formanek
Standard Time
https://www.youtube.com/watch?v=c8UHcyvpLYI

Maarten Baas Sweepers Clock
2009
https://vimeo.com/171086587

millis();

Returns the number of milliseconds (thousandths of a second) since starting the program. This information is often used for timing events and animation sequences.

```
void draw() {
  int m = millis();
  noStroke();
  fill(m % 255);
  rect(25, 25, 50, 50);
}
```

second();

Processing communicates with the clock on your computer. The second() function returns the current second as a value from 0 - 59.

```
second();
minute();
hour();
day();
month();
year();
```

```
void draw() {
  background(204);
  int s = second();  // Values from 0 - 59
  int m = minute();  // Values from 0 - 59
  int h = hour();    // Values from 0 - 23
  line(s, 0, s, 33);
  line(m, 33, m, 66);
  line(h, 66, h, 100);
}
```

Even more...

Assignment

Visual Clocks