

Analog_Clock_Example_Basic_

//Analog Clock Example (Basic)

//loop example includes "for loop" for(a=0,a<100,a++)

//Mr. H.

int rDash = 200;

int rSecond = 180;

int rMinute = 160;

int rHour = 140;

float x;

float y;

void setup()

```
{  
  size(600, 600);  
}
```

void draw()

```
{  
  background(255);
```

//draws circle outline of clock

```
noFill();  
stroke(0);  
strokeWeight(2);  
ellipse(300, 300, 480, 480);
```

//draws hour hand of clock

```
x = 300+cos(map(hour(), 0, 12, 0, TWO_PI) - HALF_PI)*rHour;  
y = 300+sin(map(hour(), 0, 12, 0, TWO_PI) - HALF_PI)*rHour;  
stroke(0, 200, 0);  
strokeWeight(8);  
line(300, 300, x, y);
```

//draws minute hand of clock

```
x = 300+cos(map(minute(), 0, 60, 0, TWO_PI) - HALF_PI)*rMinute;  
y = 300+sin(map(minute(), 0, 60, 0, TWO_PI) - HALF_PI)*rMinute;  
stroke(0, 200, 0);  
strokeWeight(5);  
line(300, 300, x, y);
```

//draws second hand of clock

```
x = 300+cos(map(second(), 0, 60, 0, TWO_PI) - HALF_PI)*rSecond;  
y = 300+sin(map(second(), 0, 60, 0, TWO_PI) - HALF_PI)*rSecond;  
stroke(255, 0, 0);
```

```
strokeWeight(2);  
line(300, 300, x, y);
```

```
//creates a black "cap" on the clock hands  
fill(0);  
stroke(0);  
ellipse(300,300,15,15);  
}
```