

ellipseAPP

```
PImage photo;  
import processing.serial.*;
```

```
String myString = null;  
Serial myPort;
```

```
int NUM_OF_VALUES = 2; /** YOU MUST CHANGE THIS ACCORDING TO YOUR  
PROJECT **/  
int[] sensorValues; /** this array stores values from Arduino **/
```

```
void setup() {  
    size(500, 500);  
    background(0);  
    photo = loadImage("111.gif");  
    setupSerial();  
}
```

```
void draw() {  
    updateSerial();  
    printArray(sensorValues);  
    background(255);  
    for(int i=0; i<500; i=i+40){  
        for(int j =0 ;j<500; j=j+40){  
            rotate(map(sensorValues[0],0,1023,0,1));  
            image(photo, i, j);  
        }  
    }  
}
```

```
//  
}
```

```
void setupSerial() {  
    printArray(Serial.list());  
    myPort = new Serial(this, Serial.list()[ 1 ], 9600);  
    // WARNING!  
    // You will definitely get an error here.  
    // Change the PORT_INDEX to 0 and try running it again.  
    // And then, check the list of the ports,  
    // find the port "/dev/cu.usbmodem----" or "/dev/tty.usbmodem----"  
    // and replace PORT_INDEX above with the index number of the port.
```

```
myPort.clear();
// Throw out the first reading,
// in case we started reading in the middle of a string from the sender.
myString = myPort.readStringUntil( 10 ); // 10 = '\n' Linefeed in ASCII
myString = null;

sensorValues = new int[NUM_OF_VALUES];
}

void updateSerial() {
    while (myPort.available() > 0) {
        myString = myPort.readStringUntil( 10 ); // 10 = '\n' Linefeed in ASCII
        if (myString != null) {
            String[] serialInArray = split(trim(myString), ",");
            if (serialInArray.length == NUM_OF_VALUES) {
                for (int i=0; i<serialInArray.length; i++) {
                    sensorValues[i] = int(serialInArray[i]);
                }
            }
        }
    }
}
```