

Pset5_TeleoperationClient

```
/*  
 * File: Pset5_TeleoperationClient  
 * -----  
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 * ME327  
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 * PSET 5 Question 2  
 *  
 * Description:  
 *   Creates graphics for leader-follower system.  
 */
```

```
import processing.serial.*;
```

```
Serial myPort;
```

```
float inByte_m = 0;  
float inByte_s = 0;  
float lastByte_m = 0;  
float lastByte_s = 0;  
void setup () {  
  size(600, 400);  
  println(Serial.list());  
  myPort = new Serial(this, Serial.list()[13], 115200);  
  myPort.bufferUntil('\'');  
  background(0);  
}
```

```
void draw () {  
  background(0);
```

```
  // Draws leader  
  stroke(255,0,0);  
  strokeWeight(4);  
  circle(lastByte_m, height/2, 40);
```

```
  // Draws follower  
  stroke(0,255,0);  
  strokeWeight(4);  
  circle(lastByte_s, height/2, 40);
```

```
  // Draws interconnecting line  
  stroke (0,0,255);  
  strokeWeight(2);  
  if(lastByte_m>lastByte_s){  
    line(lastByte_s+20,height/2,lastByte_m-20,height/2);  
  }else{
```

```

    line(lastByte_m+20,height/2,lastByte_s-20,height/2);
}
}

void serialEvent (Serial myPort) {
    String inString = myPort.readStringUntil('&apos;\n&apos;');
    if (inString != null) {
        inString = trim(inString);
        String splitString[] = inString.split(" ");
        // Leader position reported first
        inByte_m = float(splitString[0]);
        // Follower position reported second
        inByte_s = float(splitString[1]);
    }
    // Corrupted values just default to last viable.
    if (Float.isNaN(inByte_s)||Float.isNaN(inByte_m)){
        inByte_s=lastByte_s;
        inByte_m=lastByte_m;
    }
    lastByte_s = map(inByte_s, -.1, .1, 0, 400);
    lastByte_m = map(inByte_m,-.1,.1,0,400);

}

```