#define START\_CMD\_CHAR '>'  
#define END\_CMD\_CHAR '\n'  
#define DIV\_CMD\_CHAR ','  
  
#define DEBUG 1   
  
Servo panVariable;  
Servo tiltVariable;  
  
// Center servos  
inttiltValue = 90;   
intpanValue =90;   
  
  
String inText;  
float Constant1, Constant2, Constant3;  
  
void setup() {  
  
  // Attach servo objects to Arduino pins  
  panVariable.attach(11);   
  tiltVariable.attach(10);  
  
  Serial.begin(9600);

  Serial.println("Android Sensor Type No: ");  
  Serial.println("1- ACCELEROMETER  (m/s^2 - X,Y,Z)");  
  Serial.println("2- MAGNETIC\_FIELD (uT - X,Y,Z)");  
  Serial.println("3- ORIENTATION (yaw, pitch, roll)");  
    
  Serial.flush();  
}  
  
  
void loop()  
{  
  Serial.flush();  
  intinCommand = 0;  
  intsensorType = 0;  
  unsigned long CountVar = 0;  
  
  char getChar = ' ';  //read serial  
  
  // if serial empty, return to loop().  
  if (Serial.available() < 1) return;

  // parse incoming command start flag  
  getChar = Serial.read();  
  if (getChar != START\_CMD\_CHAR) return; // if no command start flag, return to loop().  
  
  // parse incoming pin# and value   
  sensorType = Serial.parseInt();   
  CountVar = Serial.parseInt();

  Constant1 = Serial.parseFloat();  // 1st sensor value  
  Constant2 = Serial.parseFloat();  // 2rd sensor value   
  Constant3 = Serial.parseFloat();  // 3rd sensor value  
  
  // Print Sensoduino readings on Computer  
  if (DEBUG) {  
    Serial.print("Sensor type: ");  
    Serial.println(sensorType);  
    Serial.print("Sensor log#: ");  
    Serial.println(CountVar);  
    Serial.print("Val[0]: ");  
    Serial.println(Constant1);  
    Serial.print("Val[1]: ");  
    Serial.println(Constant2);  
      
    Serial.println("-----------------------");  
    delay(10);  
  }  
  
  
  if (sensorType !=1) return;     
  
  panValue = Constant1; //X sensor   
  tiltValue = Constant2;  // Y sensor   
  
  tiltValue = map(tiltValue, 10, -10, 0, 179);   // Mapping y value of Accelerometer to tilt Angle

tiltVariable.write(tiltValue); // Create Required Files

delay(10);  
  
  panValue = map(panValue, -10, 10, 0, 179);  //Mapping X value of Accelerometer to pan Angle

  panVariable.write(panValue);     //Create Required Files  
  delay(10);   
}