

Code for Robotic arm:

Remove pin 5..

```
#include <AccelStepper.h>
```

```
#include <MultiStepper.h>
```

```
// Define pin connections
```

```
const int dirPin1 = 32;
```

```
const int stepPin1 = 33;
```

```
const int dirPin2 = 12;
```

```
const int stepPin2 = 13;
```

```
const int dirPin3 = 9;
```

```
const int stepPin3 = 8;
```

```
const int dirPin4 = 5;
```

```
const int stepPin4 = 22;
```

```
const int dirPin5 = 51;
```

```
const int stepPin5 = 50;
```

```
//String incomingByte; // for incoming serial data
```

```
// Define motor interface type
```

```
#define motorInterfaceType 1
```

```
long positions[10]={0};
```

```
// Creates an instance
AccelStepper stepper1(motorInterfaceType, stepPin1, dirPin1);
AccelStepper stepper2(motorInterfaceType, stepPin2, dirPin2);
AccelStepper stepper3(motorInterfaceType, stepPin3, dirPin3);
AccelStepper stepper4(motorInterfaceType, stepPin4, dirPin4);
AccelStepper stepper5(motorInterfaceType, stepPin5, dirPin5);
```

```
MultiStepper steppers;
```

```
void setup() {
  Serial.begin(9600);
  String excess1 = Serial.readString();
  // Configure each stepper
  stepper1.setCurrentPosition(0);
  stepper2.setCurrentPosition(0);
  stepper3.setCurrentPosition(0);
  stepper4.setCurrentPosition(0);
  stepper5.setCurrentPosition(0);
  stepper1.setMaxSpeed(50);
  stepper2.setMaxSpeed(50);
  stepper3.setMaxSpeed(100);
  stepper4.setMaxSpeed(50);
  stepper5.setMaxSpeed(50);
  stepper1.setAcceleration(100);
  stepper2.setAcceleration(100);
  stepper3.setAcceleration(500);
  stepper4.setAcceleration(100);
  stepper5.setAcceleration(100);
  // Then give them to MultiStepper to manage
  steppers.addStepper(stepper1);
  steppers.addStepper(stepper2);
```

```

steppers.addStepper(stepper3);
steppers.addStepper(stepper4);
steppers.addStepper(stepper5);
}

void loop() {
  // send data only when you receive data:
  if (Serial.available() > 0) {
    // read the incoming byte:
    String incomingByte = Serial.readString();

    // say what you got:
    Serial.print("I received: ");
    //Serial.println(incomingByte, DEC);
    Serial.println(incomingByte);

    //int x = incomingByte.toInt();
    String word = "";
    long input[1000];
    int currinpt = 0;

    for (int i = 0; i < incomingByte.length(); i++)
    {
      if (incomingByte[i] == ' ')
      {
        input[currinpt] = word.toInt();
        word = "";
        currinpt++;
      }
      else
      {

```

```
        word = word + incomingByte[i];
    }
}
input[currinpt] = word.toInt();
word = "";
currinpt++;
//Serial.print(x);
```

```
for(int i = 0; i < currinpt; i++)
{
    Serial.println(input[i]);
}
```

```
for(int i = 0; i < currinpt; i++)
{
    Serial.println(positions[i]);
    // positions[i] = input[i];
    // steppers.moveTo(positions);
    // steppers.runSpeedToPosition();

}
```

```
for(int i = 0; i < currinpt; i++)
{

    positions[i] = input[i];
    steppers.moveTo(positions);
    steppers.runSpeedToPosition();

}
```

```
// positions[0] = x;
```

```
// positions[1] = x;  
  
}  
return;  
}
```