```
#include "XL320.h"

// Name your robot!
XL320 robot;

// If you want to use Software Serial, uncomment this line
#include <SoftwareSerial.h>

// Set the SoftwareSerial RX & TX pins
SoftwareSerial mySerial(10, 11); // (RX, TX)

// Set some variables for incrementing position & LED colour
char rgb[] = "rgbypcwo";
int servoPosition = 0;

// Set the default servoID to talk to
int servoID = 1;

int MArr = 6; // Arduino PWM output pin 5; connect to IBT-2 pin 1 (RPWM) /Avant
int MAvant = 5; // Arduino PWM output pin 6; connect to IBT-2 pin 2 (LPWM) /Arrière
int avant = 12;
int arriere = 13;

int C1 = A0;
int C2 = A1;
int C3 = A2;
int CV1 = 0;
int CV2 = 0;
int CV3 = 0;

int obstaD = 0;
int obstaG = 0;

void setup() {

  // Talking standard serial, so connect servo data line to Digital TX 1
  // Comment out this line to talk software serial
  Serial.begin(115200);

  // Setup Software Serial
  mySerial.begin(115200);

  // Initialise your robot
  robot.begin(Serial); // Hand in the serial object you're using

  // I like fast moving servos, so set the joint speed to max!
  robot.setJointSpeed(servoID, 1023); //out of 1023

  pinMode(MArr, OUTPUT);
  pinMode(MAvant, OUTPUT);
  pinMode(avant, OUTPUT);
  pinMode(arriere, OUTPUT);
}

void loop() {
  digitalWrite(avant, HIGH);
  digitalWrite(arriere, HIGH);
  int PWMarr = 150;
  int PWMavant = 60;
```

```
  CV1 = analogRead(C1);
  Serial.println(CV1);
  CV2 = analogRead(C2);
  CV3 = analogRead(C3);
  CV2 = CV2 + 50;
  CV3 = CV3 - 30;
  int DCV = 0;
  DCV = abs(CV2 - CV3);
  if (DCV < 90) {
    CV2 = 0;
    CV3 = 0;
  }

  if (CV1 < 75) {
    analogWrite(MArr, 0);
    analogWrite(MAvant, PWMavant);
    delay(10);

  }
  else {
    analogWrite(MArr, PWMarr);
    analogWrite(MAvant, 0);
    delay(10);
  }

  if (CV1 > 100 && CV2 > CV3) {
    robot.moveJoint(1, 420);
    analogWrite(MArr, PWMarr);
    analogWrite(MAvant, 0);
    delay(450);
  } else {
    if (CV1 > 100 && CV2 < CV3) {
      robot.moveJoint(1, 235);
      analogWrite(MArr, PWMarr);
      analogWrite(MAvant, 0);
      delay(450);
    } else {
      if (CV1 > 100 && CV2 == CV3) {
        robot.moveJoint(1, 308);
        analogWrite(MArr, PWMarr);
        analogWrite(MAvant, 0);
        delay(450);
      }
      else {
        analogWrite(MArr, 0);
        analogWrite(MAvant, PWMavant);
        robot.moveJoint(1, 308);
        delay(100);
      }
    }
  }

  obstaD = 0;
}
```