String readdata;

void setup() {

 Serial.begin(9600);

 pinMode(3, OUTPUT); // connect to input 1 of l293d

 pinMode(4, OUTPUT); // connect to input 4 of l293d

 pinMode(5, OUTPUT); // connect to input 3 of l293d

 pinMode(6, OUTPUT); // connect to input 2 of l293d

}

//-----------------------------------------------------------------------//

void loop() {

 while (Serial.available()){ //Check if there is an available byte to read

 delay(10); //Delay added to make thing stable

 char c = Serial.read(); //Conduct a serial read

 readdata += c; //build the string- "forward", "reverse", "left" and "right"

 }

 if (readdata.length() > 0) {

 Serial.println(readdata); // print data to serial monitor

// if data received as forward move robot forward

 if(readdata == "forward")

 {

 digitalWrite(3, HIGH);

 digitalWrite (4, HIGH);

 digitalWrite(5,LOW);

 digitalWrite(6,LOW);

 delay(100);

 }

 // if data received as reverse move robot reverse

 else if(readdata == "backward")

 {

 digitalWrite(3, LOW);

 digitalWrite(4, LOW);

 digitalWrite(5, HIGH);

 digitalWrite(6,HIGH);

 delay(100);

 }

// if data received as right turn robot to right direction.

 else if (readdata == "right")

 {

 digitalWrite (3,HIGH);

 digitalWrite (4,LOW);

 digitalWrite (5,LOW);

 digitalWrite (6,LOW);

 delay (100);

 }

// if data received as left turn robot to left direction

 else if ( readdata == "left")

 {

 digitalWrite (3, LOW);

 digitalWrite (4, HIGH);

 digitalWrite (5, LOW);

 digitalWrite (6, LOW);

 delay (100);

 }

 // if data received as stop, halt the robot

 else if (readdata == "stop")

 {

 digitalWrite (3, LOW);

 digitalWrite (4, LOW);

 digitalWrite (5, LOW);

 digitalWrite (6, LOW);

 delay (100);

 }

readdata="";}} //Reset the variable