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