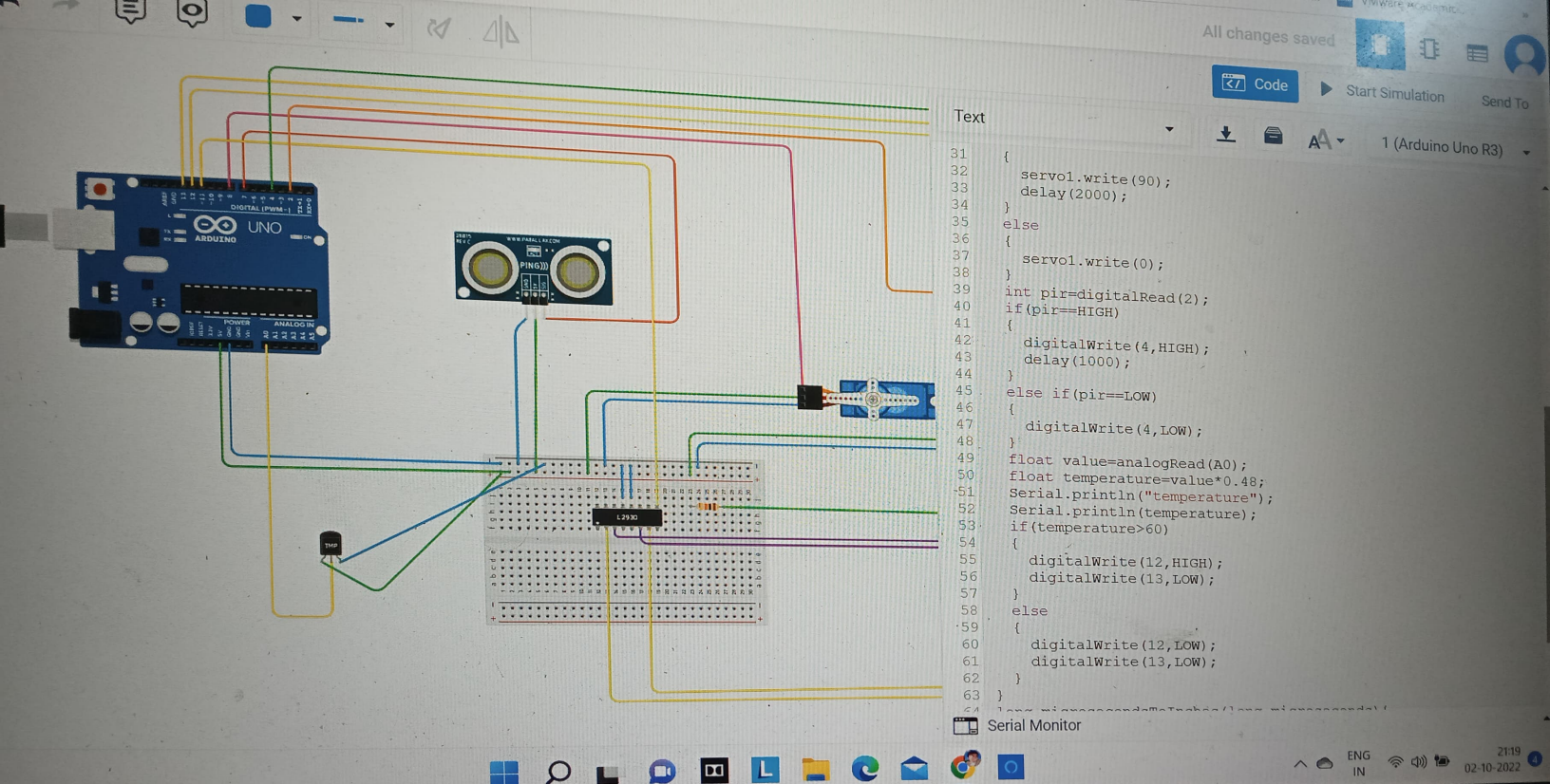


Text

```
1 #include<Servo.h>
2 const int pingPin=7;
3 int ServoPin=8;
4 Servo serv1;
5 void setup() {
6   Serial.begin(9600);
7   serv1.attach(servoPin);
8   pinMode(2,INPUT);
9   pinMode(4,OUTPUT);
10  pinMode(11,OUTPUT);
11  pinMode(12,OUTPUT);
12  pinMode(13,OUTPUT);
13  pinMode(A0,INPUT);
14  digitalWrite(2,LOW);
15  digitalWrite(11,HIGH);
16 }
17 void loop()
18 {
19   long duration,inches,cm;
20   pinMode(pingPin,OUTPUT);
21   digitalWrite(pingPin,LOW);
22   delayMicroseconds(5);
23   digitalWrite(pingPin,LOW);
24   pinMode(pingPin,INPUT);
25   duration=pulseIn(pingPin,HIGH);
26   inches=microsecondsToInches(duration);
27   cm=microsecondsToCentimeters(duration);
28   serv1.write(0);
29
30   if(cm<40)
31   {
32     serv1.write(90);
33     delay(2000);
34 }
```

Serial Monitor



Text

```
31 {
32   servomotor.write(90);
33   delay(2000);
34 }
35 else
36 {
37   servomotor.write(0);
38 }
39 int pir=digitalRead(2);
40 if(pir==HIGH)
41 {
42   digitalWrite(4,HIGH);
43   delay(1000);
44 }
45 else if(pir==LOW)
46 {
47   digitalWrite(4,LOW);
48 }
49 float value=analogRead(A0);
50 float temperature=value*0.48;
51 Serial.println("temperature");
52 Serial.println(temperature);
53 if(temperature>60)
54 {
55   digitalWrite(12,HIGH);
56   digitalWrite(13,LOW);
57 }
58 else
59 {
60   digitalWrite(12,LOW);
61   digitalWrite(13,LOW);
62 }
63 }
64 }
```

Serial Monitor

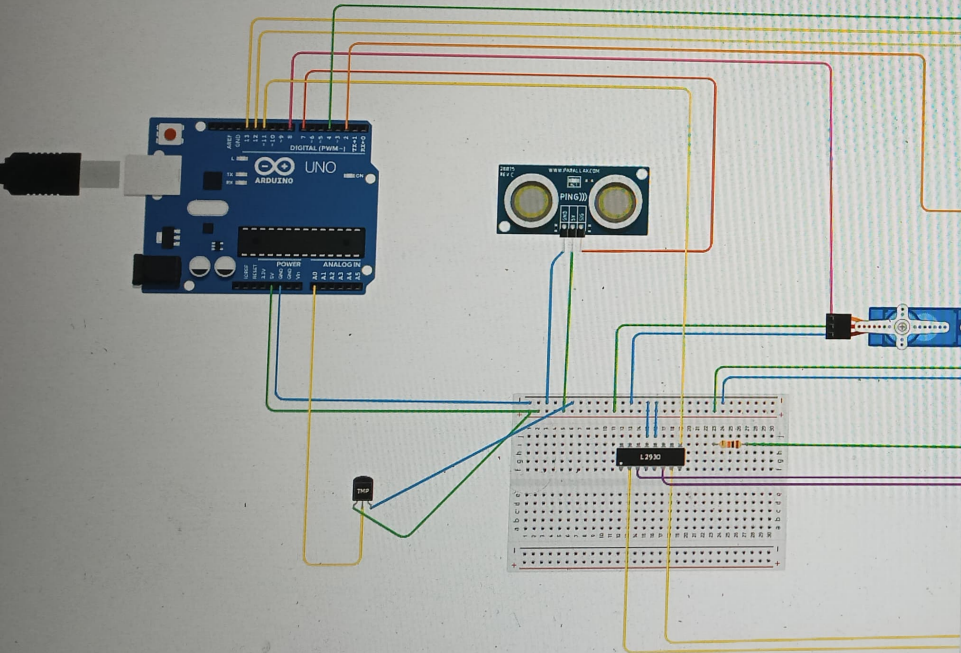
Running Lappi

All changes saved

Code

Start Simulation

Send To



Text

```

38 }
39 int pir=digitalRead(2);
40 if(pir==HIGH)
41 {
42     digitalWrite(4,HIGH);
43     delay(1000);
44 }
45 else if(pir==LOW)
46 {
47     digitalWrite(4,LOW);
48 }
49 float value=analogRead(A0);
50 float temperature=value*0.48;
51 Serial.println("temperature");
52 Serial.println(temperature);
53 if(temperature>60)
54 {
55     digitalWrite(12,HIGH);
56     digitalWrite(13,LOW);
57 }
58 else
59 {
60     digitalWrite(12,LOW);
61     digitalWrite(13,LOW);
62 }
63 }
64 long microsecondsToInches(long microseconds){
65     return microseconds/74/2;
66 }
67 long microsecondsToCentimeters(long microseconds){
68     return microseconds/29/2;
69 }
70

```

Serial Monitor