

ASSIGNMENT 4

CODE

```
#include<Servo.h>
const int pingPin = 7;
int servoPin = 8;

Servo servo1;

void setup() {
  // initialize serial communication:
  Serial.begin(9600);
  servo1.attach(servoPin);
  pinMode(2,INPUT);
  pinMode(4,OUTPUT);
  pinMode(11,OUTPUT);
  pinMode(12,OUTPUT);
  pinMode(13,OUTPUT);
  pinMode(A0,INPUT);
  digitalWrite(2,LOW);
  digitalWrite(11,HIGH);
}

void loop() {

  long duration, inches, cm;

  pinMode(pingPin, OUTPUT);
  digitalWrite(pingPin, LOW);
  delayMicroseconds(2);
  digitalWrite(pingPin, HIGH);
  delayMicroseconds(5);
  digitalWrite(pingPin, LOW);

  pinMode(pingPin, INPUT);
  duration = pulseIn(pingPin, HIGH);

  // convert the time into a distance
  inches = microsecondsToInches(duration);
  cm = microsecondsToCentimeters(duration);
}
```

```
Serial.print(inches);
Serial.print("in, ");
Serial.print(cm);
Serial.print("cm");
Serial.println();
delay(100);

servo1.write(0);

if(cm < 40)
{
    servo1.write(90);
    delay(2000);
}
else
{
    servo1.write(0);
}

int pir = digitalRead(2);

if(pir == HIGH)
{
    digitalWrite(4,HIGH);
    delay(1000);
}
else if(pir == LOW)
{
    digitalWrite(4,LOW);
}

float value=analogRead(A0);
float temperature=value*0.48;

Serial.println("temperature");
Serial.println(temperature);
```


Dazzling Inari

All changes saved

Code
 Stop Simulation
Send To

1 (Arduino Uno R3)

```

1 #include<Servo.h>
2 const int pingPin = 7;
3 int servoPin = 8;
4
5 Servo servo1;
6
7 void setup() {
8   // initialize serial communication:
9   Serial.begin(9600);
10  servo1.attach(servoPin);
11  pinMode(2,INPUT);
12  pinMode(4,OUTPUT);
13  pinMode(11,OUTPUT);
14  pinMode(12,OUTPUT);
15  pinMode(13,OUTPUT);
16  pinMode(A0,INPUT);
17  digitalWrite(2,LOW);
18  digitalWrite(11,HIGH);
19
20 }
21
22 void loop() {
23
24   long duration, inches, cm;

```

Dazzling Inari

All changes saved

Code
 Stop Simulation
Send To

1 (Arduino Uno R3)

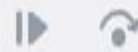
Serial Monitor

```

temperature
73.44
43in, 111cm
temperature
73.44
43in, 111cm
temperature
73.44
43in, 111cm
temperature
73.44
43in, 111cm
temperature
73.44
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```

Send
Clear



1 (Arduino Uno R3) ▼

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3 int servoPin = 8;
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5 Servo servol;
6
7 void setup() {
8   // initialize serial communication:
9   Serial.begin(9600);
10  // Serial.begin(9600);
```



Serial Monitor ▼

43in, 110cm
temperature
73.44
43in, 111cm
temperature
73.44
43in, 110cm
temperature
73.44
43in, 111cm
temperature
73.44
43in, 110cm

Send

Clear

