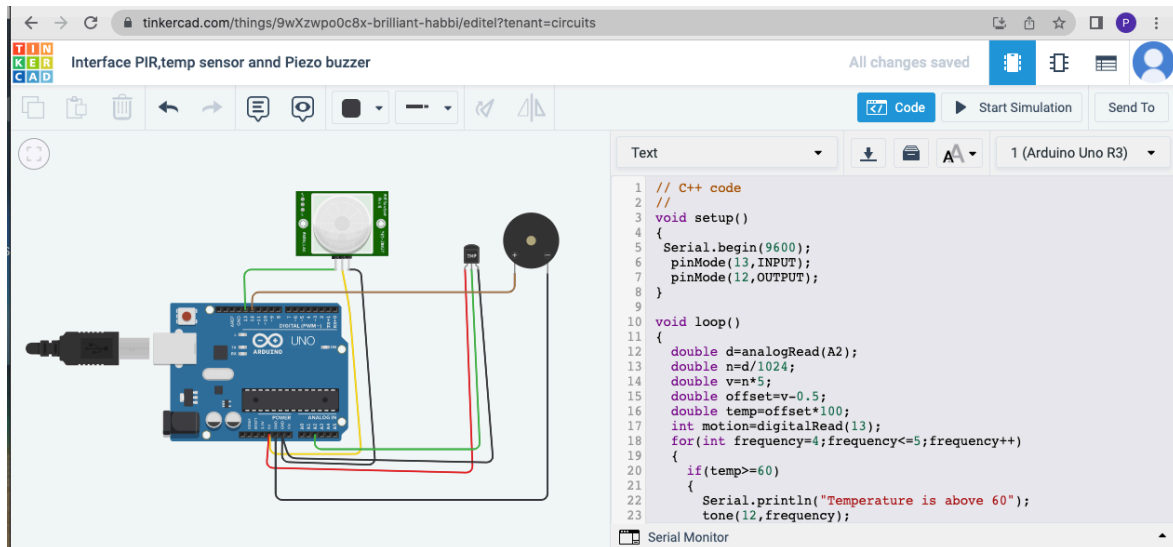


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Assignment -1
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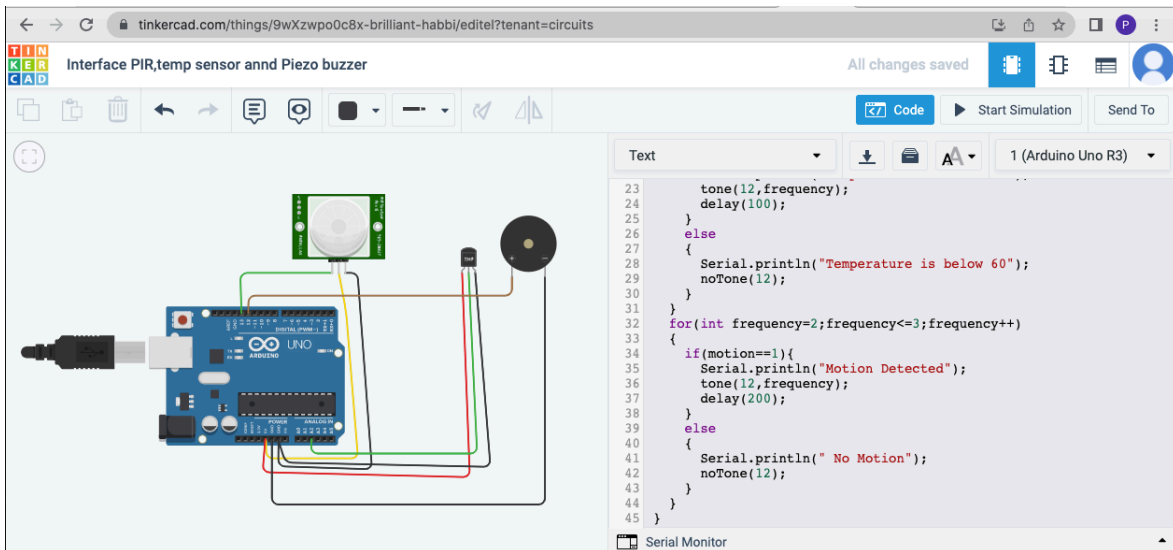
Circuit



The screenshot shows a Tinkercad workspace titled "Interface PIR,temp sensor annd Piezo buzzer". The circuit includes an Arduino Uno connected to a PIR sensor, a temperature sensor (DS18B20), and a piezo buzzer. The code in the "Text" block is as follows:

```
1 // C++ code
2 //
3 void setup()
4 {
5   Serial.begin(9600);
6   pinMode(13,INPUT);
7   pinMode(12,OUTPUT);
8 }
9
10 void loop()
11 {
12   double d=analogRead(A2);
13   double n=d/1024;
14   double v=n*5;
15   double offset=v-0.5;
16   double temp=offset*100;
17   int motion=digitalRead(13);
18   for(int frequency=4;frequency<=5;frequency++)
19   {
20     if(temp>=60)
21     {
22       Serial.println("Temperature is above 60");
23       tone(12,frequency);
```

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The screenshot shows the same Tinkercad workspace. The code in the "Text" block is more complete, including motion detection and buzzer control logic:

```
23   tone(12,frequency);
24   delay(100);
25 }
26 else
27 {
28   Serial.println("Temperature is below 60");
29   noTone(12);
30 }
31 }
32 for(int frequency=2;frequency<=3;frequency++)
33 {
34   if(motion==1){
35     Serial.println("Motion Detected");
36     tone(12,frequency);
37     delay(200);
38   }
39   else
40   {
41     Serial.println(" No Motion");
42     noTone(12);
43   }
44 }
45 }
```

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Serial Monitor

Temperature is below 60
Temperature is below 60
No Motion
No Motion
Temperature is below 60
Temperature is below 60
No Motion
No Motion
Temperature is below 60
Temperature is below 60
No Motion
No Motion
Temperature is below 60
Temperature is below 60
No Motion
No Motion
Temperature is below 60
Temperature is below 60
No Motion
No Motion
Temperature is below 60
Temperature is b

Send

Clear

