

smart home

All changes saved

Code Start Simulation Send To

Text 1 (Arduino Uno R3)

```

1 // C++ code
2 //
3 int t=2;
4 int e=3;
5
6 void setup()
7 {
8   Serial.begin(9600);
9   pinMode(t,OUTPUT);
10  pinMode(e,INPUT);
11  pinMode(12,OUTPUT);
12 }
13
14 void loop()
15 {
16   //ultrasonic sensor
17   digitalWrite(t,LOW);
18   digitalWrite(t,HIGH);
19   delayMicroseconds(10);
20   digitalWrite(t,LOW);
21   float dur=pulseIn(e,HIGH);
22   float dis=(dur*0.0343)/2;
23   Serial.print("Distance is: ");
24   Serial.println(dis);
25
26   //LED ON

```

Serial Monitor

```
int t=2;
```

```
int e=3;
```

```
void setup()
```

```
{
```

```
  Serial.begin(9600);
```

```
  pinMode(t,OUTPUT);
```

```
  pinMode(e,INPUT);
```

```
  pinMode(12,OUTPUT);
```

```
}
```

```
void loop()
```

```
{
```

```

//ultrasonic sensor
digitalWrite(t,LOW);
digitalWrite(t,HIGH);
delayMicroseconds(10);
digitalWrite(t,LOW); float
dur=pulseIn(e,HIGH); float
dis=(dur*0.0343)/2;
Serial.print("Distance is: ");
Serial.println(dis);

```

```

//LED ON
if(dis>=100)
{
    digitalWrite(8,HIGH);
    digitalWrite(7,HIGH);
}

```

```

//Buzzer For ultrasonic Sensor
if(dis>=100)
{
    for(int i=0; i<=30000; i=i+10)
    {
        tone(12,i);
        delay(1000);
        noTone(12);
        delay(1000);
    }
}

```

```

//Temperate Sensor double a=
analogRead(A0); double
t=(((a/1024)*5)-0.5)*100;
Serial.print("Temp Value: ");
Serial.println(t); delay(1000);

```

```

//LED ON
if(t>=100)
{
    digitalWrite(8,HIGH);
    digitalWrite(7,HIGH);
}

```

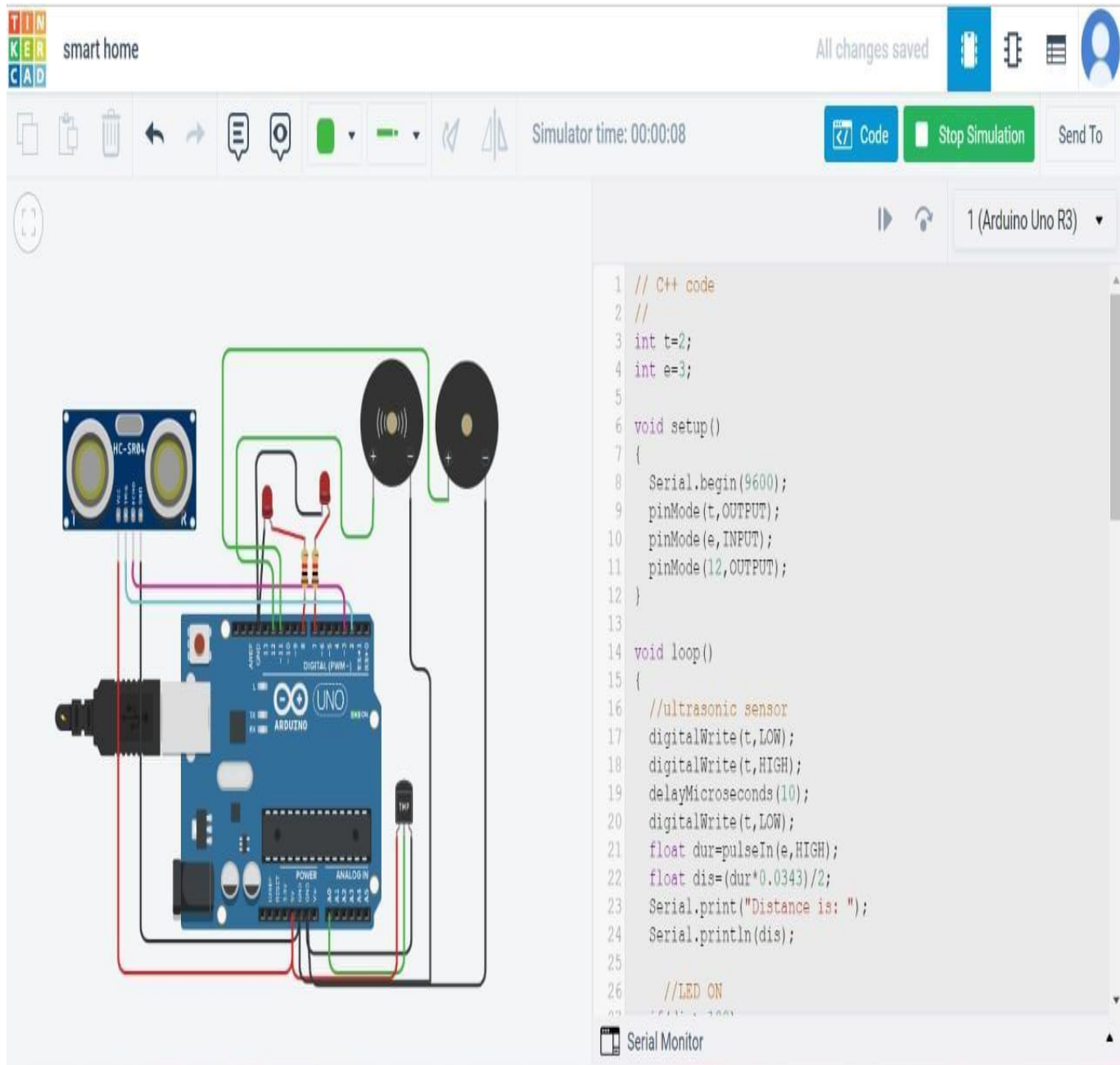
```

//Buzzer for Temperature Sensor
if(t>=100)
{

```

```
for(int i=0; i<=30000; i=i+10)
{
  tone(12,i);
  delay(1000);
noTone(12);  delay(1000);
}
}

//LED OFF
if(t<100)
{
    digitalWrite(8,LOW);
    digitalWrite(7,LOW);
}
}
```



Tinkercad link:

<https://www.tinkercad.com/things/OrayC9zuldP-smart-home/editel>