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# **SMART HOME**

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# Door Buzzer Using Ultrasonic Sensor

## CODE:

```
// Door Alarm Using Arduino UNO and Ultrasonic Sensor  
// Code to be used in the Text sub-window of tinkercad.com circuit page
```

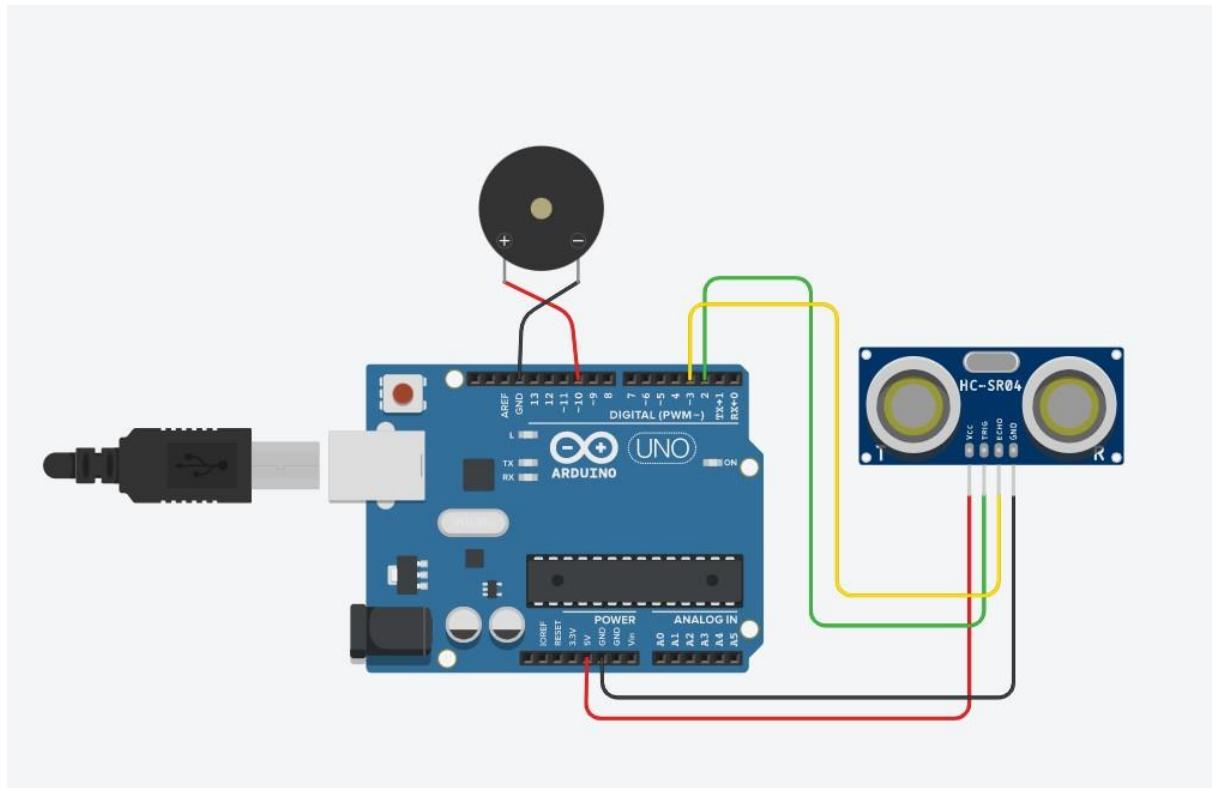
```
int trigger_pin=2;  
int echo_pin=3;  
int buzzer_pin=10;  
int time;  
int distance;  
void setup()  
{  
  Serial.begin(9600);  
  pinMode(trigger_pin,OUTPUT);  
  pinMode(echo_pin,INPUT);  
  pinMode(buzzer_pin,OUTPUT);  
}  
void loop()  
{  
  digitalWrite(trigger_pin,HIGH);  
  delayMicroseconds(10);  
  digitalWrite(trigger_pin,LOW);  
  time=pulseIn(echo_pin,HIGH);  
  distance=(time*0.034)/2;  
  if(distance<=10)
```

```
{  
  Serial.println("Door Open");  
  Serial.print("Distance=");  
  Serial.println(distance);  
  digitalWrite(buzzer_pin,HIGH);  
  delay(500);  
}  
else  
{  
  Serial.println("Door Closed");  
  Serial.print("Distance");  
  Serial.println(distance);  
  digitalWrite(buzzer_pin,LOW);  
  delay(500);  
}  
}
```

## **TINKERCAD LINK:**

<https://www.tinkercad.com/things/8IgU3MQO6zi-neat-snicket/editel>

## FIGURE:



Whenever anyone comes in the path/range of Ultrasonic Sensor, microcontroller detects the distance of object is in the defined range, it sends the High signal to the buzzer and buzzer starts beeping.