

Code:

|  |
| --- |
| 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); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
|  |
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|  |
| --- |
| //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); |
|  |

|  |
| --- |
| } |
|  |

}