



```
int redBulb = 8;
int greenBulb = 7;
int echo = 3;
int trigger = 2;
int buzzer = 12;

void setup(){
  Serial.begin(9600);
  pinMode(buzzer, OUTPUT);
  pinMode(greenBulb, OUTPUT);
  pinMode(redBulb, OUTPUT);
  pinMode(trigger, OUTPUT);
  pinMode(echo, INPUT);
}

void loop(){
  double avalue = analogRead(A0);
  double temperature = (((avalue/1024)*5)-0.5)*100;

  digitalWrite(trigger, LOW);
  digitalWrite(trigger, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigger, LOW);
  float duration = pulseIn(echo, HIGH);
  float distance = (duration * 0.0343)/2;
```

```
if(temperature > 50){  
    digitalWrite(greenBulb, LOW);  
    digitalWrite(redBulb, HIGH);  
}  
else{  
    digitalWrite(greenBulb, HIGH);  
    digitalWrite(redBulb, LOW);  
}  
  
if(distance < 150)  
    digitalWrite(buzzer, HIGH);  
else  
    digitalWrite(buzzer, LOW);  
}
```