```cpp
// C++ code
//
int trig =7;

int echo =4;

int piezo=3;

int temp = 0;

void setup()

{

  pinMode(trig,OUTPUT);

  pinMode(echo,INPUT);

  pinMode(8,OUTPUT);

  pinMode(10,OUTPUT);

  pinMode(11,OUTPUT);

  pinMode(9,OUTPUT);

  Serial.begin(9600);

}


void loop()

{

  digitalWrite(trig,LOW);

  digitalWrite(trig,HIGH);

   delayMicroseconds(10);

   digitalWrite(trig,LOW);

  float dur =pulseIn(echo,HIGH);

   float dist =  (dur*0.0343/2);

   Serial.print("distance");

   Serial.println('dist');

   if(dist >=100)

   {
```

```
    digitalWrite(9,HIGH);


  }
  else
  {
  digitalWrite(9,LOW);


}


{
  temp = map(((analogRead(A0) - 20) * 3.04), 0, 1023, -40, 125);
  Serial.println(temp);
  if (temp < 25)
  {
    digitalWrite(11,HIGH);
    digitalWrite(10,LOW);
    digitalWrite(8,LOW);
  }
  if (temp > 25 && temp < 50)
  {
    digitalWrite(11,LOW);
    digitalWrite(10,HIGH);
    digitalWrite(8,LOW);
  }
   if (temp > 50 && temp < 125)
  {
    digitalWrite(11,LOW);
    digitalWrite(10,LOW);
    digitalWrite(8,HIGH);
```

```
    }


  delay(20);
    }
}
```