```
//
C++
code
      //
      int trig =2;
       int echo=3;
      void setup()
       Serial.begin(9600);
         pinMode(13, OUTPUT);
         pinMode(trig, OUTPUT);
         pinMode(echo, INPUT);
         pinMode(4, OUTPUT);
       }
      void loop()
       {
         double a=analogRead(A1);
        Serial.print("ADC Value:");
         Serial.println(a);
         double v=a/1024;
         double volt=v*5;
         Serial.print("Temp Value:");
         Serial.println(volt);
         double x=volt-0.5;
         double t=x*100;
        Serial.print("Temperature:");
         Serial.println(t);
         if(t>40)
         {
           digitalWrite(13, HIGH);
         }
         else
           digitalWrite(13,LOW);
         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(4, HIGH);
}
else
{
    digitalWrite(4, LOW);
}
```