

```

#include <LiquidCrystal.h>
#include <Servo.h>
Servo s;
int t=8;
int e=9;
const int rs=12,en=11,d4=5,d5=4,d6=3,d7=2;
LiquidCrystal lcd(rs,en,d4,d5,d6,d7);
void setup()
{
  lcd.begin(16,2);
  lcd.print("temperature");
  s.attach(6);
  pinMode(t,OUTPUT);
  pinMode(e,INPUT);
  Serial.begin(9600);
}
void loop()
{
  double a=analogRead(A0);
  double aC=map(a,20,358,-40.0,125.0);
  lcd.setCursor(0,1);
  lcd.print(aC);
  delay(500);
  if(aC>50)
    for (int i=0;i<20000;i=i+10)
      tone(10,i);
  else
    noTone(10);
  digitalWrite(13,0);
  int b=digitalRead(7);
  if(b){
    digitalWrite(13,1);
    delay(100);
  }
  digitalWrite(t,0);
  digitalWrite(t,1);
  delay(10);
}

```

```
digitalWrite(t,0);  
float D=pulseIn(e,2);  
float d=(D*0.0343/2);  
Serial.println(d);  
delay(500);  
if (d<=100)  
    s.write(180);  
else  
    s.write(0);  
}
```