float temp;

const int buzzer = 8;

void setup()

{

pinMode(A0, INPUT);

pinMode(11, OUTPUT);

pinMode(buzzer, OUTPUT);

Serial.begin(9600);

pinMode(3, INPUT);

pinMode(13, OUTPUT);

}

void loop()

{

temp = analogRead(A0);

temp =((temp\*5)/1024);

temp = (temp-0.5)\*100;

Serial.print("Temperature = ");

Serial.println(temp);

if (temp > 40)

{

digitalWrite(11, HIGH);

tone(buzzer, 1000);

delay(1000);

}

if (digitalRead(3) == HIGH) {

digitalWrite(13, HIGH);

} else {

digitalWrite(13, LOW);

}

delay(10); // Delay a little bit to improve simulation performance

}