

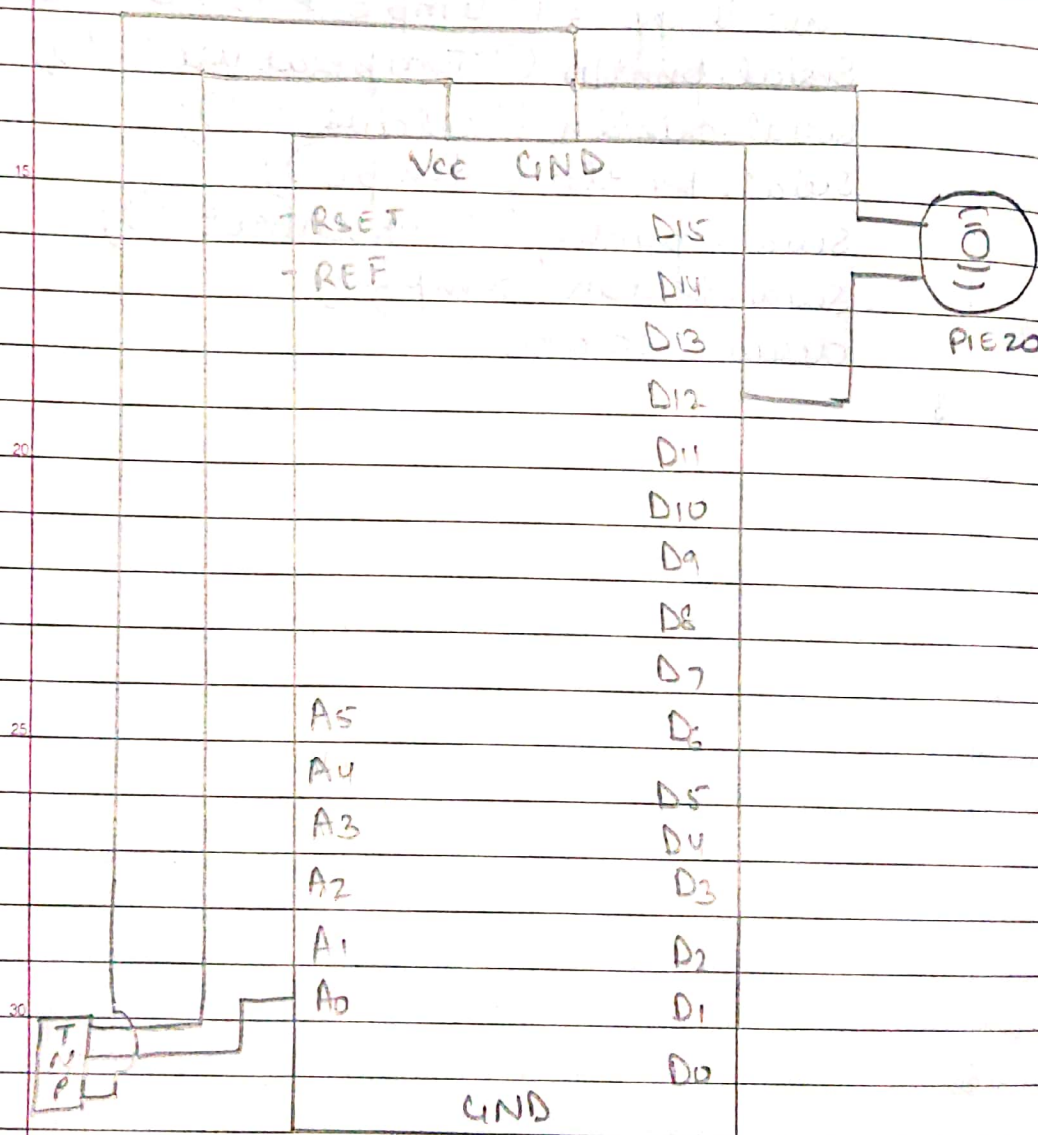
PROGRAM NO: 9

PROGRAM TITLE: Alert System

AIM: Design an alert system using flame sensor (use temp sensor for expt in tinkercad)

HARDWARE REQUIREMENTS: Arduino, Piezo, Temp -ature sensor, LED

CIRCUIT DIAGRAM:



CODE:

```
int temperaturePin = 0;
int buzzer = 12;
void setup()
{
    Serial.begin(9600);
    pinMode(buzzer, OUTPUT);
    pinMode(9, OUTPUT);
}

float getVoltage(int pin)
{
    return (analogRead(pin) * 0.004882814);
}

void loop()
{
    float voltage, degreeC;
    voltage = getVoltage(temperaturePin);
    degreeC = (voltage - 0.5) * 100.0;
    digitalWrite(9, LOW);
    if (degreeC < 37)
    {
        Serial.print(degreeC);
        Serial.println("SAFE!");
    }
    if (degreeC > 37)
    {
        Serial.print(degreeC);
        Serial.println("ALERT");
        digitalWrite(buzzer, LOW);
        digitalWrite(9, HIGH);
        tone(12, 10000, 100);
        delay(100);
    }
}
```