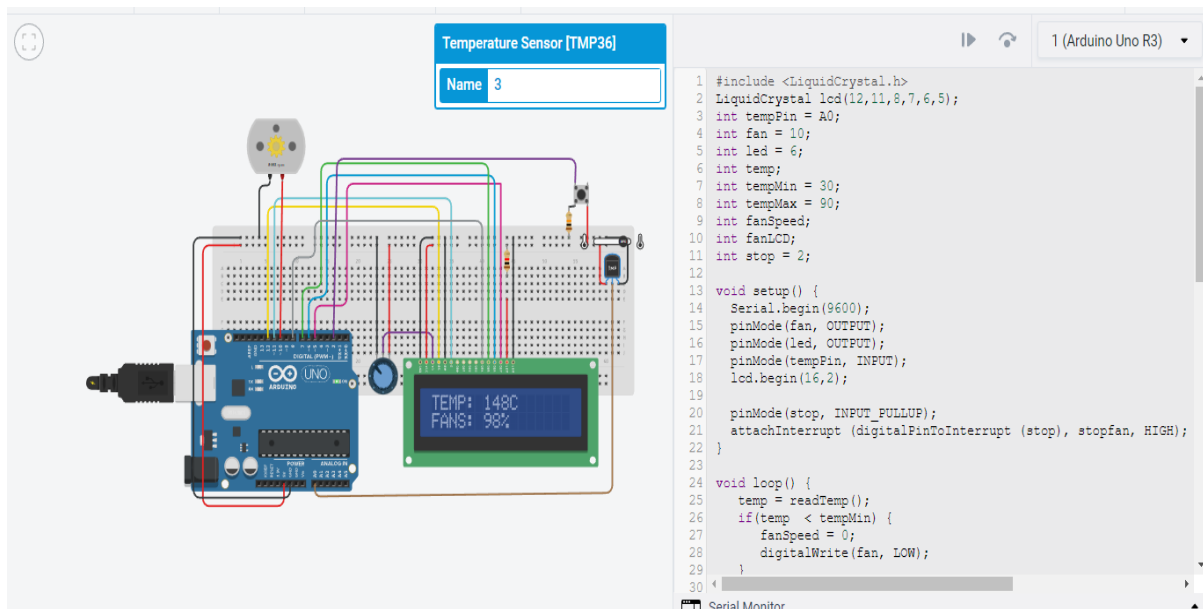
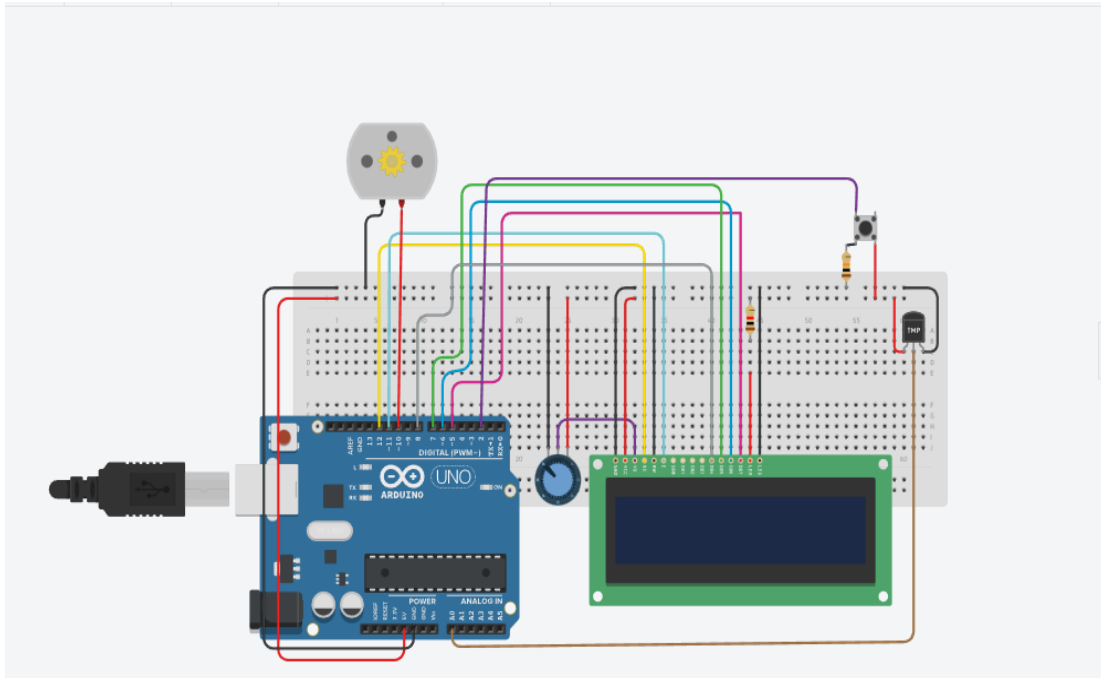


Assignment – 1

(SMART HOME AUTOMATION)

CIRCUIT DIAGRAM:



Program :

```
#include <LiquidCrystal.h>
```

```

LiquidCrystal lcd(12,11,8,7,6,5);

int tempPin = A0;

int fan = 10;

int led = 6;

int temp;

int tempMin = 30;

int tempMax = 90;

int fanSpeed;

int fanLCD;

int stop = 2;

void setup() {
    Serial.begin(9600);

    pinMode(fan, OUTPUT);

    pinMode(led, OUTPUT);

    pinMode(tempPin, INPUT);

    lcd.begin(16,2);

    pinMode(stop, INPUT_PULLUP);

    attachInterrupt (digitalPinToInterrupt (stop), stopfan, HIGH);
}

void loop() {
    temp = readTemp();

    if(temp < tempMin) {
        fanSpeed = 0;

        digitalWrite(fan, LOW);
    }

    if((temp >= tempMin) && (temp <= tempMax)) {
        fanSpeed = map(temp, tempMin, tempMax, 32, 255);

        fanLCD = map(temp, tempMin, tempMax, 0, 100);

        analogWrite(fan, fanSpeed);
    }

    if(temp > tempMax) {

```

