IBM ASSIGNMENT 1

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CODE:-

// C++ code

//

int sensorState=0;

int baselineTemp = 0;

int celsius = 0;

int fahrenheit = 0;

void setup()

{

pinMode(A0, INPUT);

pinMode(2, INPUT);

pinMode(13, OUTPUT);

Serial.begin(9600);

}

void loop()

{

baselineTemp = 40;

celsius = map(((analogRead(A0) - 20) \* 3.04), 0, 1023, -40, 125);

fahrenheit = ((celsius \* 9) / 5 + 32);

Serial.println(celsius);

Serial.print(" C, ");

Serial.print(fahrenheit);

Serial.println(" F");

if (celsius > baselineTemp) {

tone(7, 220, 100);

}

sensorState = digitalRead(2);

if (sensorState == HIGH) {

digitalWrite(13, HIGH);

Serial.println("Sensor activated!");

} else {

digitalWrite(13, LOW);

}

// Delay a little bit to improve simulation performanc

}

CIRCUIT DIAGRAM:

