VSB Engineering College, Karur-639111 Department of Electronics and Communication Engineering IOT Assignment

TOPIC: Assignment on temperature and humidity sensing and alarm.

DOMAIN NAME: Internet Of Things

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Coding:

```
const int TRIG_PIN = 7;
const int ECHO_PIN = 8;
const unsigned int MAX_DIST = 23200;

void setup() {
    pinMode(TRIG_PIN, OUTPUT);
    digitalWrite(TRIG_PIN, LOW);

pinMode(ECHO_PIN, INPUT);

Serial.begin(9600);
}

void loop() {
    unsigned long t1;
    unsigned long pulse_width;
```

```
float cm;
 float inches;
 digitalWrite(TRIG_PIN, HIGH);
 delayMicroseconds(10);
 digitalWrite(TRIG_PIN, LOW);
 while ( digitalRead(ECHO_PIN) == 0 );
 t1 = micros();
 while ( digitalRead(ECHO_PIN) == 1);
   t2 = micros();
 pulse_width = t2 - t1;
 cm = pulse_width / 58.0;
 inches = pulse_width / 148.0;
 if ( pulse_width > MAX_DIST ) {
  Serial.println("Out of range");
 } else { Serial.print(cm);
  Serial.println(" cm ");
 }
 // Wait at least 60ms before next measurementdelay(60);
}
```