**Touch Sensor:**  
from machine import Pin

from time import sleep

# Define the pin for TTP223B OUT pin is connected

touch\_pin = Pin(4, Pin.IN)

while True:

if touch\_pin.value() == 1:

print("Touch detected!")

else:

print("No touch detected.")

sleep(0.2)  
  
  
**OLED:**from machine import Pin, I2C

from ssd1306 import SSD1306\_I2C

i2c = I2C(0,sda=Pin(21),scl=Pin(22),freq=40000)

oled = SSD1306\_I2C(128,64,i2c)

oled.fill(0)

oled.text("Hello! Kunal",0,0)

oled.show()

OLED and DS180B:  
from ssd1306 import SSD1306\_I2C

from machine import Pin, ADC, I2C

import time

adc = ADC(Pin(28))

conversion\_factor = 3.3/65535

i2c = I2C(0,sda=Pin(16),scl=Pin(17),freq=40000)

oled = SSD1306\_I2C(128,64,i2c)

while True:

temp\_voltage\_raw = adc.read\_u16()

convert\_voltage = temp\_voltage\_raw\*conversion\_factor

C\_temp = convert\_voltage\*86

oled.text("Uday Temp Detector",0,0)

oled.text("LM35 temp value=",0,16)

oled.text(str(round(C\_temp, 2)) + " Degree",0,32)

oled.show()

time.sleep(1)

oled.fill(0)

**humidity**

#include <Wire.h>

#include <Adafruit\_Sensor.h>

#include <Adafruit\_BMP280.h>

#define I2C\_SDA 21

#define I2C\_SCL 22

Adafruit\_BMP280 bmp; // I2C interface

void setup() {

Serial.begin(115200);

Wire.begin(I2C\_SDA, I2C\_SCL); // ESP32 I2C pins

if (!bmp.begin(0x76)) {

Serial.println("Could not find BMP280 at 0x76!");

while (1);

}

Serial.println("BMP280 initialized successfully.");

}

void loop() {

Serial.print("Temperature = ");

Serial.print(bmp.readTemperature());

Serial.println(" °C");

Serial.print("Pressure = ");

Serial.print(bmp.readPressure() / 100.0F);

Serial.println(" hPa");

delay(2000);

}