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// POST Humidity test code
// Test to see if humidity sensor is working
// Will use temperature sensor as well

// Needed Libraries
   #include <Wire.h>
    #include"bmp.h"

// Global variables
// Humidity sensor on Analog pin A8
   const int HUM_SENS = A8;
   int humid_raw;
   float humid_volt;
   float sensorRH;
   float trueRH;

// Temperature variables
   short tempur;
   float tempurC;

void setup(){
// Start Serial communication.
   Serial.begin(9600);
   Serial.println("POST Humidity Sensor code star

// Start I2C Communication
   Serial.println("START WIRE");
   Wire.begin();

// calibrate the pressure and temperature sensor
```

```
    bmp085Calibration();

// Sets up the pins as inputs
    pinMode(HUM_SENS, INPUT);

}

void loop(){
// Read Temperature
     tempur = bmp085GetTemperature(bmp085ReadUT())
      tempurC  =  tempur/10.0;

// Read Humidity and convert to voltage
     humid_raw =analogRead(HUM_SENS);
     humid_volt = humid_raw * 0.0049;

// Convert to RH using temperature and equation
    sensorRH = ((humid_volt / 5.0) - 0.16) / 0.006
    trueRH = (sensorRH) / (1.0546 - 0.00216 * temp

//  Print  the  results
    Serial.print("SensorRH ");
    Serial.print(sensorRH);
    Serial.print("\t TrueRH ");
    Serial.println(trueRH);

    delay(100);

}
```