DHT22 Sensor Experiment Arduino

Initially I have tried a lot with Arduino contributed DHT sensor library, but there was no luck data was coming as NAN. Please find the urls followed below.

https://www.arduino.cc/en/Guide/Libraries
http://garagelab.com/profiles/blogs/tutorial-humidity-and-temperature-sensor-with-arduino
https://www.arduino.cc/en/Reference/HomePage
http://stackoverflow.com/questions/23096366/how-to-stop-a-loop-arduino
http://playground.arduino.cc/Main/DHTLib
https://learn.adafruit.com/dht
https://learn.adafruit.com/dht/connecting-to-a-dhtxx-sensor

Code

TempHumidityWithDHT22.ino

TempHumidityWithDHT22.txt

Then I tried the main DHT sensor library and then tried the example provide in the library. This worked without any changes. Please modify as per your needs.

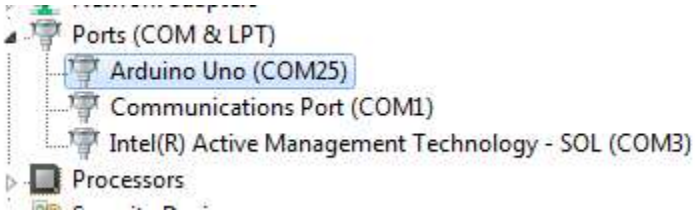
Finally worked with adafruit libray
https://learn.adafruit.com/dht
https://learn.adafruit.com/dht/connecting-to-a-dhtxx-sensor
Example given in
https://github.com/adafruit/DHT-sensor-library/blob/master/examples/DHTtester/DHTtester.ino

Code

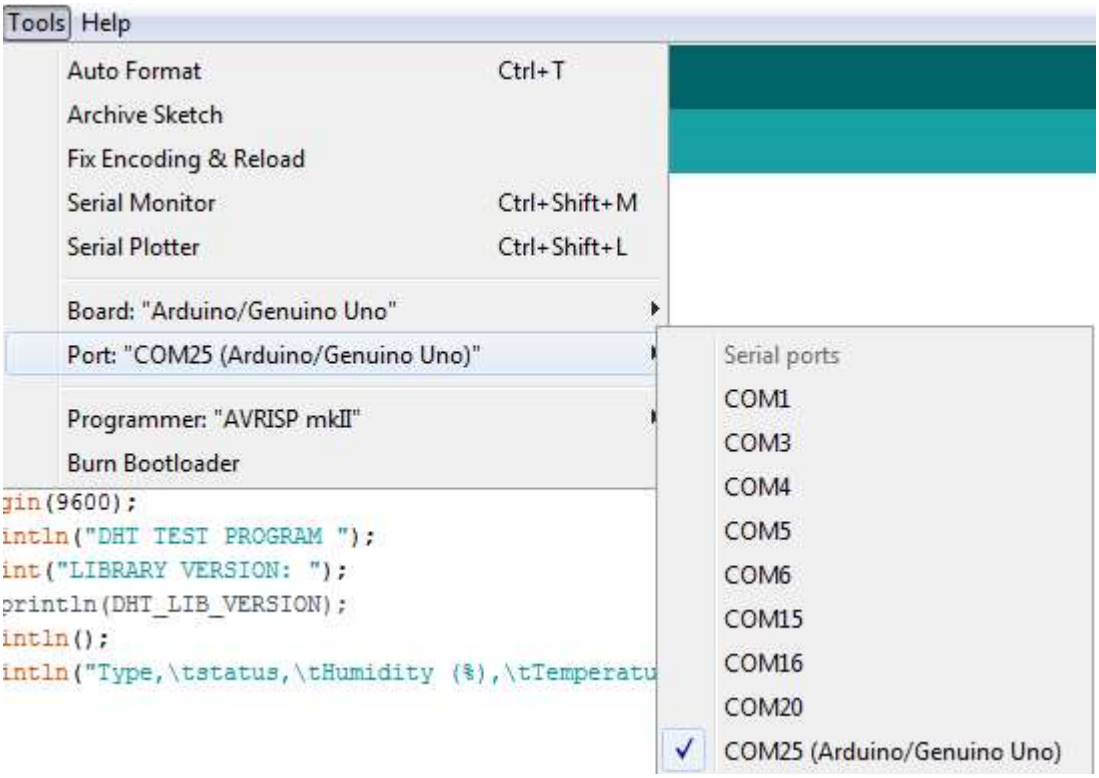
TempHumidityWithDHT22Try1.ino

TempHumidityWithDHT22Try1.txt

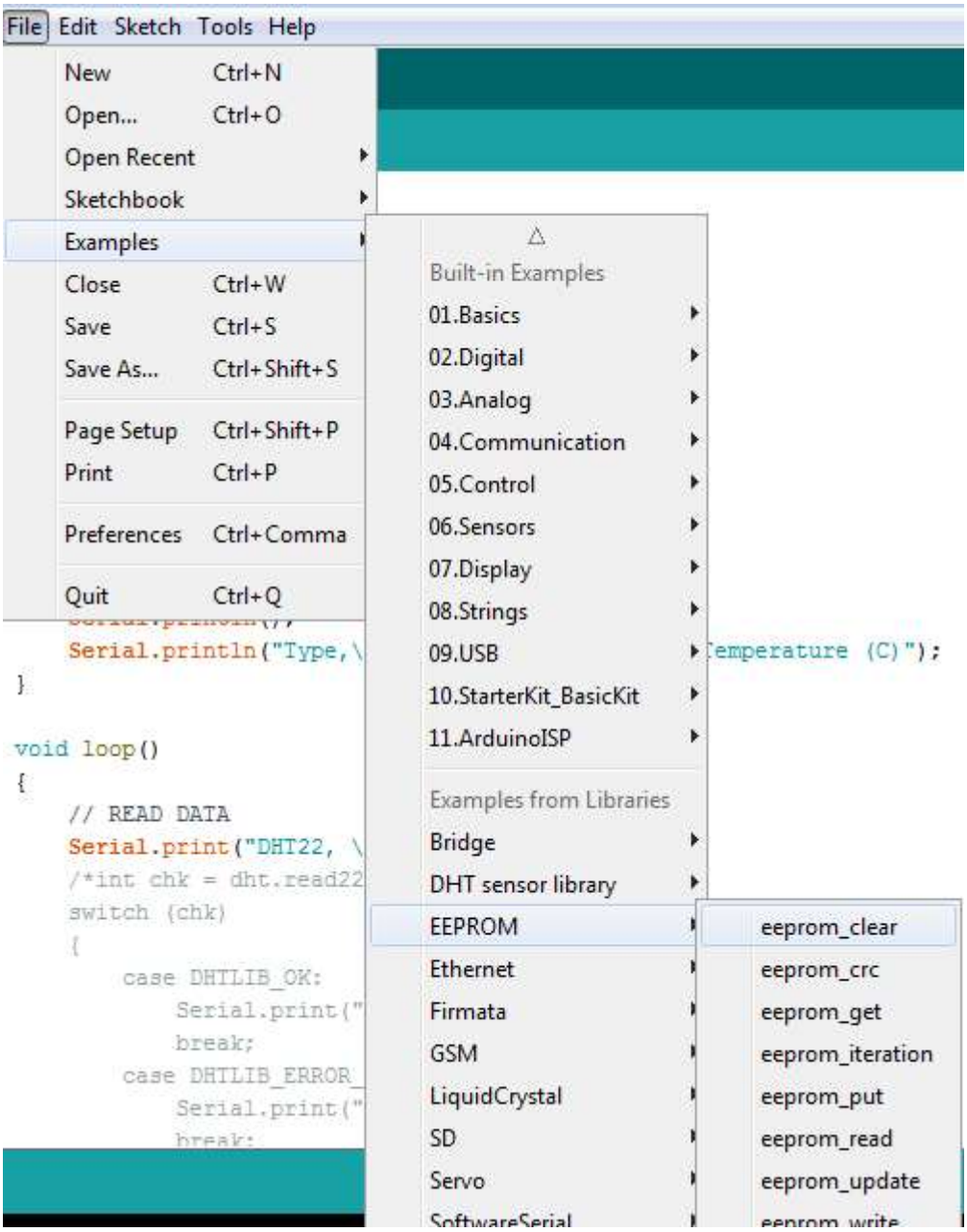
Note: After installing Arduino IDE and drivers, please select the appropriate port, which can be know from device manager.



When running or uploading sketches. Select the right “Board” and “Port”. Please “Serial Monitor” to see what is printing thru your program.

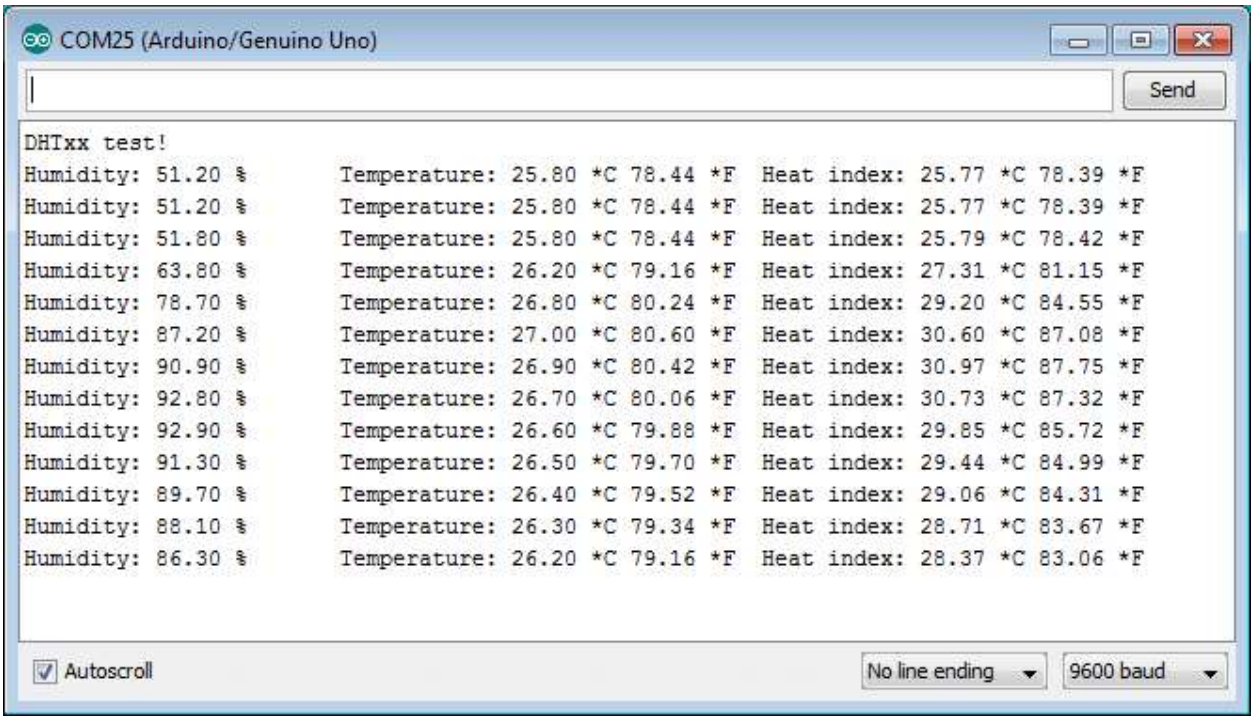


Use “eeprom_clear” example from library if your program continues to run to infinite loop.



Output

Let run the example and see the output on serial monitor



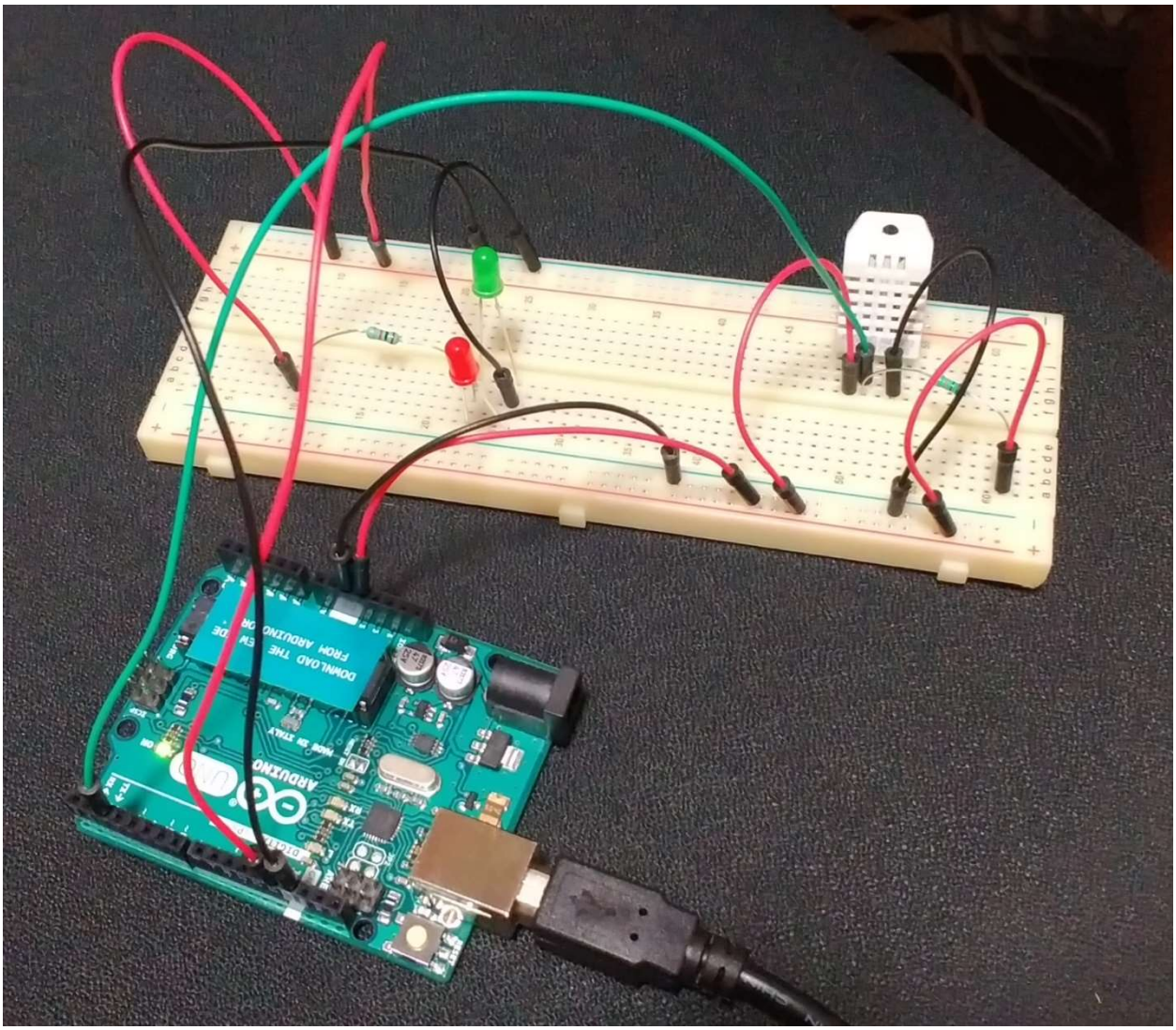
Circuit

This has LED circuit plus DHT22 sensor circuit, but each one is using diff “+” and “-” sides on breadboard. Please observe carefully and understand. 5V is passed to pin 2 of sensor using 10K ohm resistor

DHT22

Pin 1) we have used 5V instead of 3.3V
Pin 2) data is connect to pin 2 on arduino
Pin 3) No connection
Pin 4) Connected to GND of arduino


DHT22
1 2 3 4
1 - 3.3 V
2 - Data
3 - No Connection
4 - GND



In the above circuit along with DHT22, we have another light blink circuit.