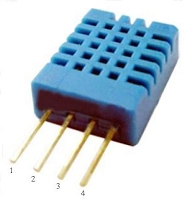
http://www.hobbyist.co.nz/

Wiring up DHT11 Temp & Humidity sensor to the Arduino

**DHT11 Temperature and Humidity sensor**

The DHT11 is chosen because it is lab calibrated, accurate and stable and its signal output is digital. Most important of all, it is relatively inexpensive for the given performance. Below is the pinout of the sensor.



[Datasheet](http://www.robotshop.com/PDF/dht11.pdf)

|  |  |  |
| --- | --- | --- |
| Pin | Name | Description |
| 1 | VDD | Power supply 3 - 5.5 V DC |
| 2 | DATA | Serial data output |
| 3 | NC | Not connected |
| 4 | GND | Ground |

**Wiring:**

Connect the sensor to the Arduino as shown below

|  |  |
| --- | --- |
| DHT11 | Arduino |
| Pin 1 | Vcc |
| Pin 2 | Analog0 |
| Pin 4 | Gnd |

**Install the DHT11 library:**

Down load this [zipped file](http://hobbyist.co.nz/sites/default/files/WeatherStation/DHT.zip) and unzip it under the libraries directory of the Arduino IDE folder. For example, for my computer's setup, the directory is

C:\arduino-1.0.1\libraries

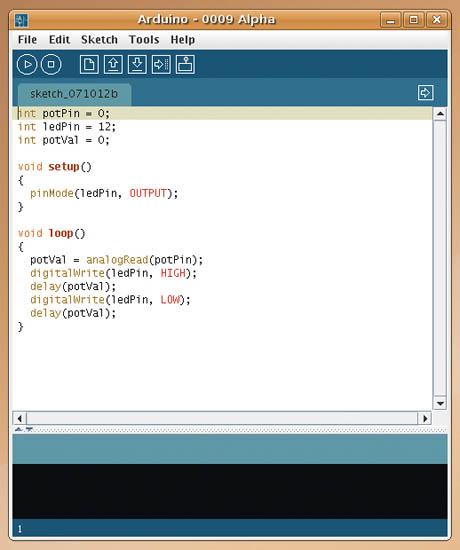
After copying files across, the directory

C:\arduino-1.0.1\libraries\DHT

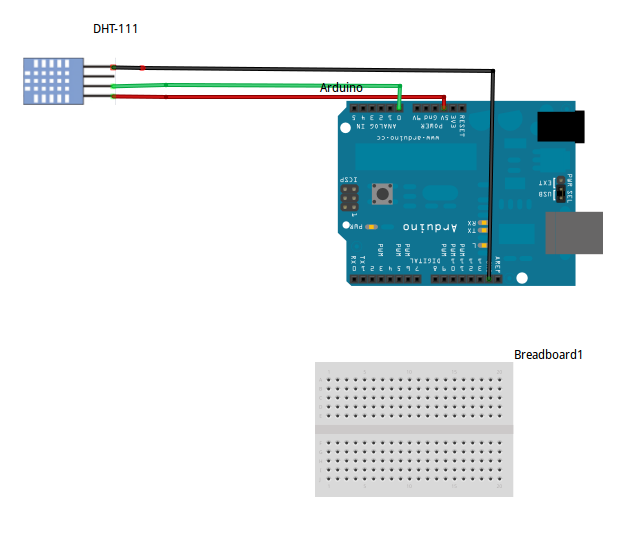
should have the following two files: dht.h and dht.cpp

**Program:**

Load the program [dht11.ino](http://code.google.com/p/weather--station/source/browse/trunk/Humid-Temp-Sens/dht11.ino) after you save it onto your computer and open it in Arduino IDE .



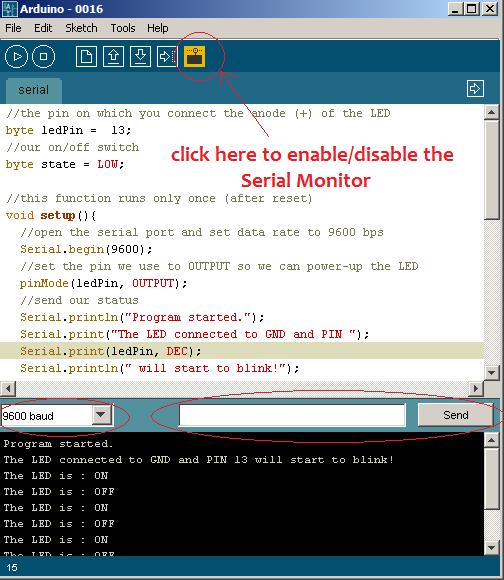
***Fig 1. Arduino IDE***

**

***Fig 2: How to connect the sensor to Arduino***

**Running the program:**

- Compile the program in the IDE  
- Run the program and open the Serial port ( shown below )



***Fig 3: How to see the Serial port output***

**Output of the program:**

And you should see the temperature and Humidity readings

