TEMPRATURE & HUMIDITY MONITORING

PERFORMED BY:

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- I This project can print the values of the temperature and humidity on the serial monitor screen.
- When to provide the power to the nodemcu then the sensor starts working and continuously print the values on the serial monitor

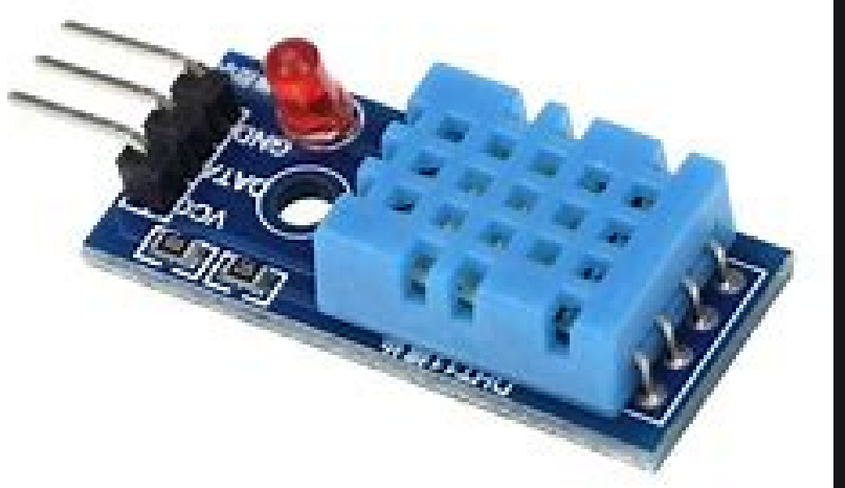
DHT11 SENSOR:-

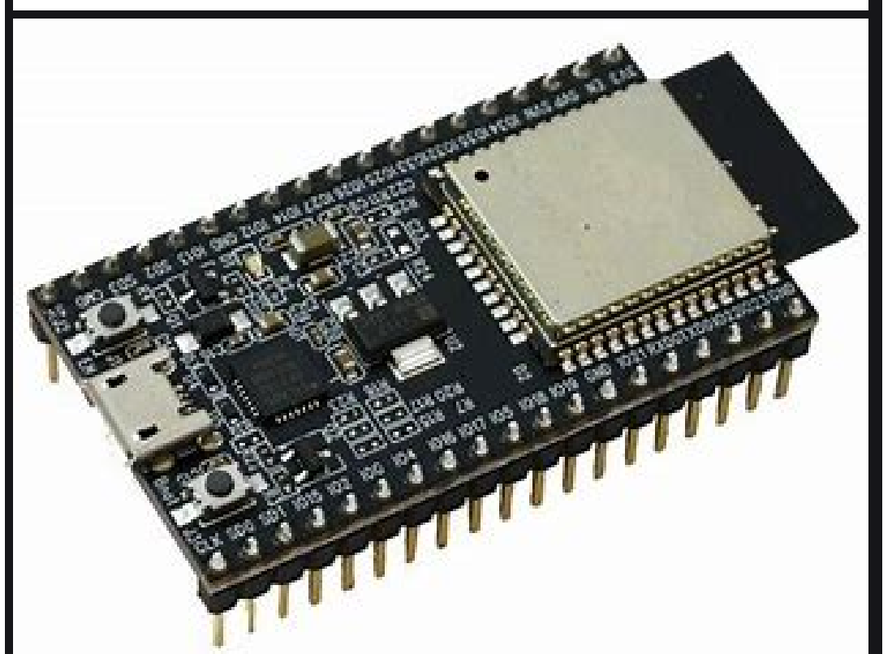
The **DHT11** is a commonly used Temperature and humidity sensor**.** The sensor comes with a dedicated NTC to measure temperature and an 8-bit microcontroller to output the values of temperature and humidity as serial data. The sensor is also factory calibrated and hence easy to interface with other microcontrollers.

The sensor can measure temperature from 0˚C to 50˚C and humidity from 20% to 90% with an accuracy of ±1˚C and ±1%. So if you are looking to measure in this range then this sensor might be the right choice for you.

COMPONENTS

- **ESP8266 nodemcu board**
- **DHT-11 sensor**
- **Jumper wires and a breadboard**
- **USB cable for uploading the code**
- **Arduino IDE**
- **Blynk App**





ESP8266

An ESP8266 Wi-Fi module is a SOC microchip mainly used for the development of end-point IoT (Internet of things) applications. It is referred to as a standalone wireless transceiver, available at a very low price. It is used to enable the internet connection to various applications of embedded systems.

ARDUINO IDE

The Arduino IDE is an open-source software, which is used to write and upload code to the Arduino boards. The IDE application is suitable for different operating systems such as Windows, Mac OS X, and Linux. It supports the programming languages C and C++. Here, IDE stands for Integrated Development Environment.

The program or code written in the Arduino IDE is often called as sketching. We need to connect the Genuino and Arduino board with the IDE to upload the sketch written in the Arduino IDE software. The sketch is saved with the extension '.ino.'

CIRCUIT DIAGRAM