# Assignment: Blink a led

### Goal

Check that your local environment is working properly.

### Configure the Arduino IDE

- 1. Make sure the "ESP8266" core is installed. If it is not installed follow the installation instructions:
  - https://github.com/esp8266/Arduino#installing-with-boards-manager
- 2. Under Tools -> Board make sure that "NodeMCU 1.0 (ESP-12E Module)" is available and selected.
- 3. Select the correct serial port: Tools -> Port.
- 4. Select the highest upload speed: Tools -> Upload Speed.
- 5. Create a new sketch with  $File \rightarrow New$  and compile it with ctrl-R.

#### Step 1

Wire up this schematic on the bread board:



fritzing



The colors on the wires used does not matter. The resistors orientation is not important, but the LED's orientation is important.

## Step 2

Implement setup() and loop(): In setup() configure the LED pin and blink the LED in loop().

Use these functions:

```
Serial.begin(115200);
Serial.println(string);
```

```
// Pin is D1/D2/D..
// mode is INPUT or OUTPUT
pinMode(pin, mode);
```

// HIGH or LOW
digitalWrite(pin, state);

delay(ms);

### Tips

• It is useful to print a startup message just to see when the application has started.