ESP8266 WiFi client

The ESP8266 WiFi Module is a self-contained SOC with integrated TCP/IP protocol stack that can give any microcontroller access to your WiFi network. The module has a wireless WiFi transceiver operating in an unlicensed frequency range of 2400-2484 MHz in the IEEE 802.11 b/g/n standard, with support for TCP/IP communication protocol stack and WiFi security including WAP3.

Connecting to a wifi network is relatively easy with ESP8266WiFi library.

Compile the following code and upload it to the device.

```
Upload
   WifiClient §
#include <ESP8266WiFi.h>
#include <ESP8266WiFiMulti.h>
#include "ESP8266Ping.h"
#ifndef STASSID
#define STASSID "ssid"
#define STAPSK "password"
#endif
const char* ssid = STASSID;
const char* password = STAPSK;
const char* remote host = "google.com";
ESP8266WiFiMulti WiFiMulti;
void setup() {
  Serial.begin(115200);
  // We start by connecting to a WiFi network
  WiFi.mode(WIFI STA);
  WiFiMulti.addAP(ssid, password);
  Serial.println();
  Serial.println();
  Serial.print("Wait for WiFi... ");
  while (WiFiMulti.run() != WL CONNECTED) {
   Serial.print(".");
   delay(500);
  1
  Serial.println("");
  Serial.println("WiFi connected");
  Serial.println("IP address: ");
  Serial.println(WiFi.localIP());
  delay(500);
void loop() {
if (Ping.ping(remote_host)) {
    Serial.println("Online");
    delay(1000);
  } else {
    Serial.println("Offline");
    delay(1000);
  1
}
```

In the above code please change ssid and password.

This code will connect to the wireless SSID and then ping the goolge web site $\,$