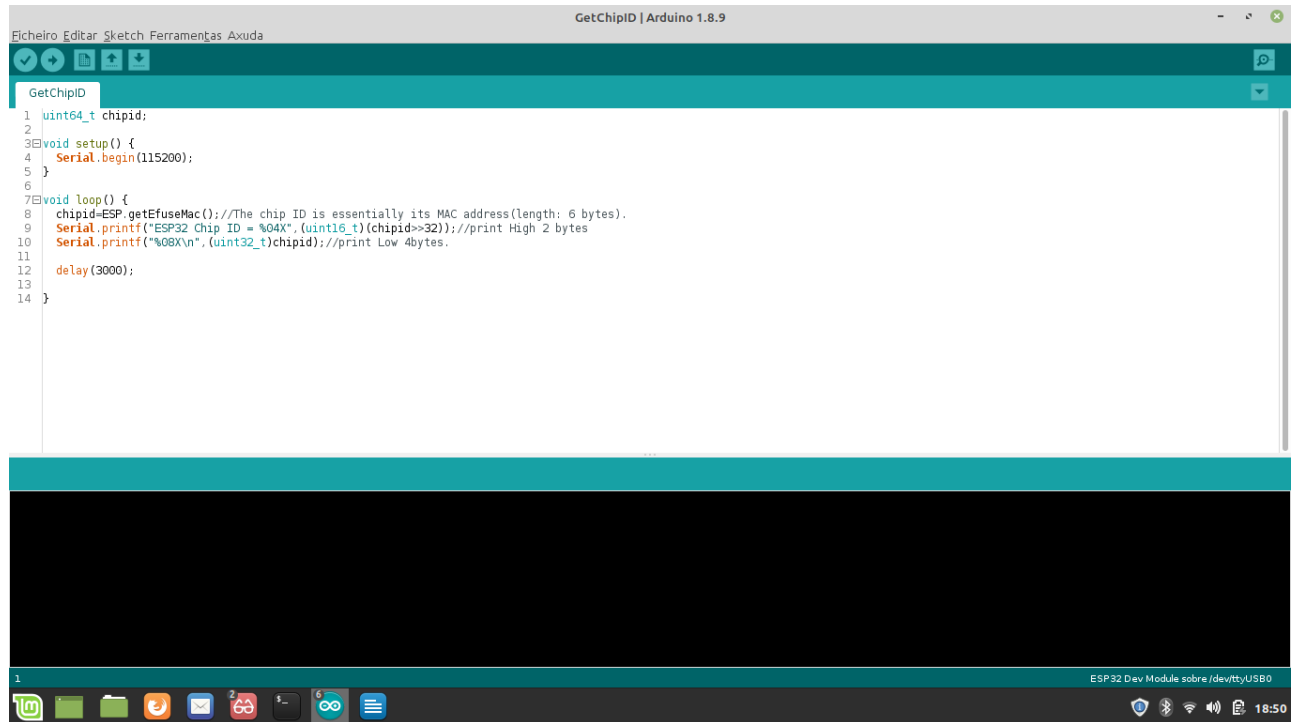


Como probamos a conexión do ESP32 coa nosa wifi

1. Agora vamos realizar a primeira proba co Espressif 32, aproveitando os exemplos da librería, para elo vamos a Ficheiro – Exemplos – ESP32 – ChipID – GetChipID

Abrimos o arquivo e o primeiro que podemos observar é que a velocidade de transmisión do serie son 115200 en lugar dos 9600 das placas arduino



```
GetChipID
1 uint64_t chipid;
2
3 void setup() {
4   Serial.begin(115200);
5 }
6
7 void loop() {
8   chipid=ESP.getEfuseMac(); //The chip ID is essentially its MAC address(length: 6 bytes).
9   Serial.printf("ESP32 Chip ID = %04X", (uint16_t)(chipid>>32)); //print High 2 bytes
10  Serial.printf("%08X\n", (uint32_t)chipid); //print Low 4bytes.
11
12  delay(3000);
13
14 }
```

2. Nas ferramentas temos que escoller placa ESP32 Dev Module, upload speed 115200 e o porto que nos recoñeza o noso equipo no meu caso USB0
3. Para cargar o programa acordémonos de premer o BOOT
4. E para comezar a executar o programa temos que premer EN
5. Abrimos o monitor serie xa mentres cargamos para non perder información, ou incluso antes de cargar o programa, e así mostraranos o chip do noso ESP32

```
1 uint64_t chipid;
2
3 void setup() {
4   Serial.begin(115200);
5 }
6
7 void loop() {
8   chipid=ESP.getEfuseMac(); //The chip ID is essentially its MAC address (length: 6 bytes).
9   Serial.printf("ESP32 Chip ID = %04X", (uint16_t)(chipid>>32)); //print High 2 bytes
10  Serial.printf("%08X\n", (uint32_t)chipid); //print Low 4bytes.
11
12  delay(3000);
13
14 }
```

ESP32 Dev Module sobre /dev/ttyUSB0

6. Tamén temos outros exemplos como a wifi que podemos empregar do noso ESP32. Se collemos Ficheiro- Exemplos – Wifi – WifiScan poderemos ver nuns minutos cales son as redes wifi que ten o alcance o ESP32

```
1 /*
2  * This sketch demonstrates how to scan WiFi networks.
3  * The API is almost the same as with the WiFi Shield
4  * the most obvious difference being the different file
5  */
6 #include "WiFi.h"
7
8 void setup()
9 {
10   Serial.begin(115200);
11
12   // Set WiFi to station mode and disconnect from an AP if it was previously connected.
13   WiFi.mode(WIFI_STA);
14   WiFi.disconnect();
15   delay(100);
16   Serial.println("Setup done");
17 }
18
19
20 void loop()
21 {
22   Serial.println("scan start");
23
24   // WiFi.scanNetworks will return the number of networks found
25   int n = WiFi.scanNetworks();
26   Serial.println("scan done");
27   if (n == 0) {
28     Serial.println("no networks found");
29   } else {
30     Serial.print(n);
31     Serial.println(" networks found");
32     for (int i = 0; i < n; ++i) {
33       // Print SSID and RSSI for each network found
34     }
```

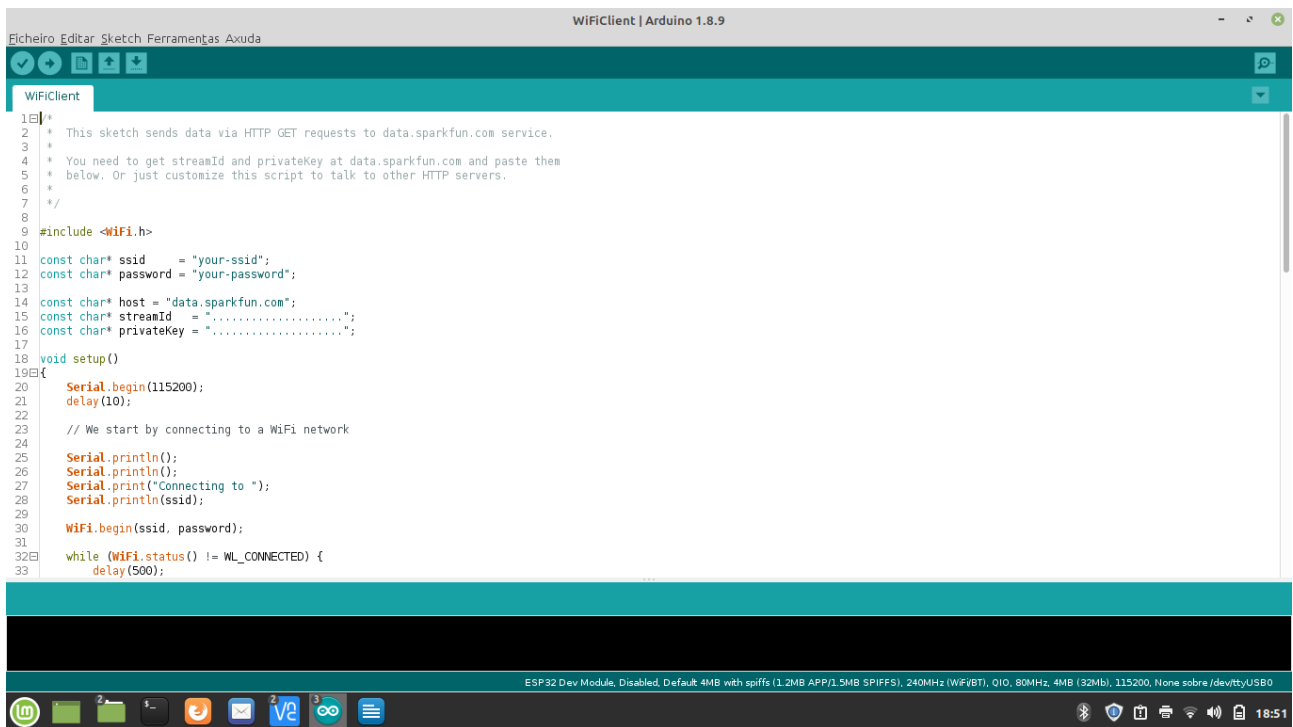
Subido correctamente.

Leaving...

Hard resetting via RTS pin...

ESP32 Dev Module sobre /dev/ttyUSB1

7. E tamén podemos conectarnos a nosa wifi cun dos exemplos que temos xa preparados. Temos que ir a Ficheiro – Exemplos – Wifi – WifiClient



```
1 // This sketch sends data via HTTP GET requests to data.sparkfun.com service.
2 //
3 // You need to get streamId and privateKey at data.sparkfun.com and paste them
4 // below. Or just customize this script to talk to other HTTP servers.
5 //
6 //
7 //
8
9 #include <WiFi.h>
10
11 const char* ssid = "your-ssid";
12 const char* password = "your-password";
13
14 const char* host = "data.sparkfun.com";
15 const char* streamId = ".....";
16 const char* privateKey = ".....";
17
18 void setup()
19 {
20   Serial.begin(115200);
21   delay(10);
22
23   // We start by connecting to a WiFi network
24
25   Serial.println();
26   Serial.println();
27   Serial.print("Connecting to ");
28   Serial.println(ssid);
29
30   WiFi.begin(ssid, password);
31
32   while (WiFi.status() != WL_CONNECTED) {
33     delay(500);
```

Soamente temos que mudar o nome da nosa wifi e o contrasinal.

E mostraranos no monitor serie si estamos conectados e cal foi a IP que nos asignou o router