

# Computabilidad y Algoritmia

## Informe Práctica 1: El entorno de trabajo IaaS para la asignatura

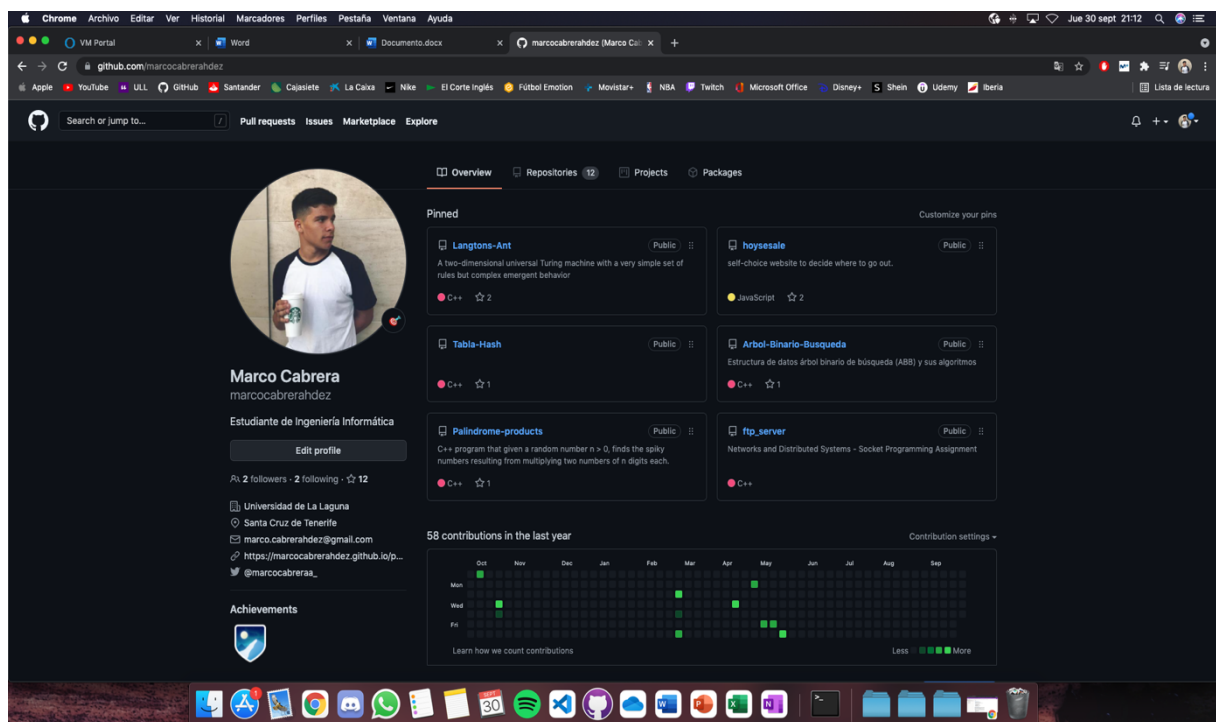
Apellidos y Nombre: **Cabrera Hernández, Marco Antonio**

e-mail: [alu0101327372@ull.edu.es](mailto:alu0101327372@ull.edu.es)

Dirección IP de la VM de la asignatura: **10.6.131.148**

Se adjuntan a continuación las cuatro imágenes correspondientes a las capturas de pantalla que acreditan la realización de algunos de los ejercicios propuestos en la práctica

### Imagen 1: Perfil de la cuenta GitHub



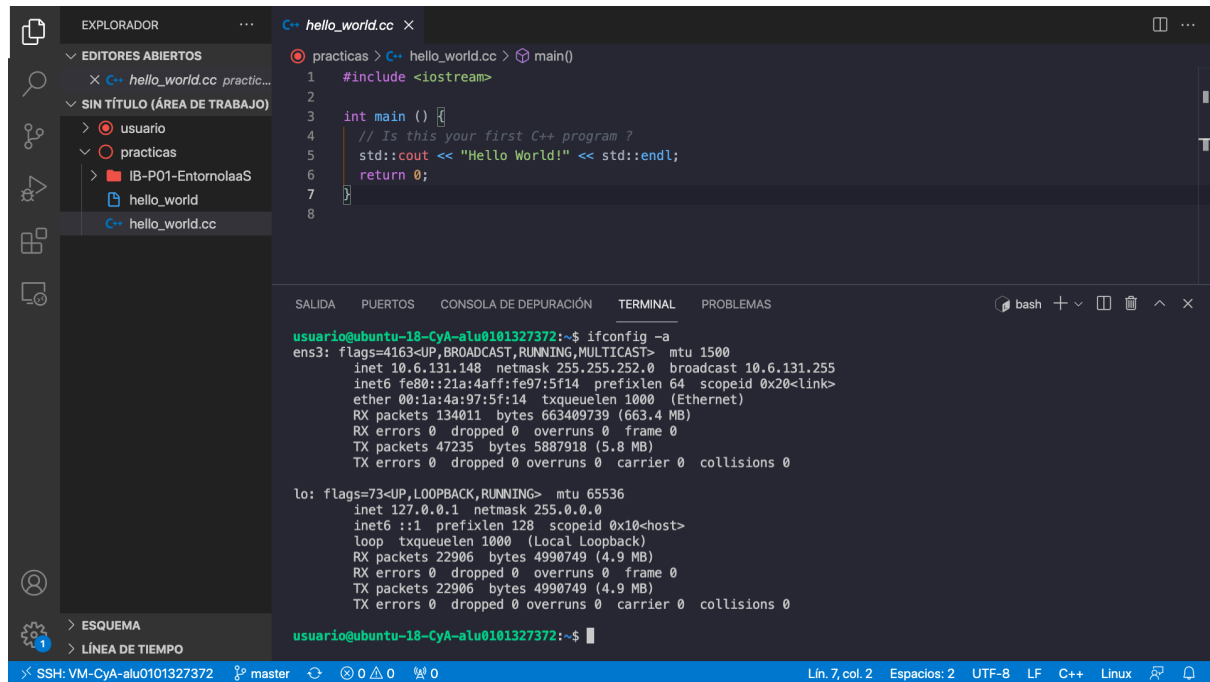
**Imagen 2:** Terminal en la que se muestra el acceso realizado a la VM y la ejecución del comando *ifconfig -a*

```
usuario@ubuntu-18-CyA-alu0101327372:~$ hostname
ubuntu-18-CyA-alu0101327372
usuario@ubuntu-18-CyA-alu0101327372:~$ whoami
usuario
usuario@ubuntu-18-CyA-alu0101327372:~$ ifconfig -a
ens3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.6.131.148 netmask 255.255.252.0 broadcast 10.6.131.255
    inet6 fe80::21a:4aff:fe97:5f14 prefixlen 64 scopeid 0x20<link>
    ether 00:1a:4a:97:5f:14 txqueuelen 1000 (Ethernet)
    RX packets 122 bytes 21073 (21.0 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 93 bytes 13266 (13.2 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 88 bytes 6696 (6.6 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 88 bytes 6696 (6.6 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

usuario@ubuntu-18-CyA-alu0101327372:~$
```

**Imagen 3:** Captura de pantalla del VSC que muestra la edición remota de un programa y el comando ejecutado en la terminal.



The screenshot displays the Visual Studio Code interface in a dark theme. On the left, the Explorer sidebar shows a file tree with folders 'usuario' and 'practicass', and files 'hello\_world' and 'hello\_world.cc'. The main editor window is open to 'hello\_world.cc', showing a C++ program with the following code:

```
1 #include <iostream>
2
3 int main () {
4     // Is this your first C++ program ?
5     std::cout << "Hello World!" << std::endl;
6     return 0;
7 }
8
```

Below the editor, the TERMINAL panel is active, showing the output of the command 'ifconfig -a' executed on a remote machine (ubuntu-18-CyA-alu0101327372). The output details network interface statistics for 'ens3' and 'lo'.

```
usuario@ubuntu-18-CyA-alu0101327372:~$ ifconfig -a
ens3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.6.131.148 netmask 255.255.252.0 broadcast 10.6.131.255
    inet6 fe80::21a:4aff:fe97:5f14 prefixlen 64 scopeid 0x20<link>
    ether 00:1a:4a:97:5f:14 txqueuelen 1000 (Ethernet)
    RX packets 134011 bytes 663409739 (663.4 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 47235 bytes 5887918 (5.8 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 22906 bytes 4990749 (4.9 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 22906 bytes 4990749 (4.9 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

usuario@ubuntu-18-CyA-alu0101327372:~$
```

The status bar at the bottom indicates the current file is 'hello\_world.cc' on line 7, column 2, with 2 spaces, UTF-8 encoding, LF line endings, and C++ language mode.

## Imagen 4: Terminal de linux mostrando el proceso de establecimiento de conexión con la VM-laaS

```
IMac-de-Marco.local
IMac-de-Marco:~ marcocabrerahez$ whoami
marcocabrerahez
IMac-de-Marco:~ marcocabrerahez$ ssh VM-CyA-alu0101327372
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.4.0-88-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Thu Sep 30 22:13:51 UTC 2021

System load:  0.08               Processes:    141
Usage of /:   41.9% of 19.56GB   Users logged in: 1
Memory usage: 9%                IPv4 address for ens3: 10.6.131.148
Swap usage:   0%

0 updates can be applied immediately.

Last login: Thu Sep 30 22:12:29 2021 from 10.20.53.218
usuario@ubuntu-18-CyA-alu0101327372:~$ hostname
ubuntu-18-CyA-alu0101327372
usuario@ubuntu-18-CyA-alu0101327372:~$ whoami
usuario
usuario@ubuntu-18-CyA-alu0101327372:~$ ifconfig -a
ens3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
    inet 10.6.131.148  netmask 255.255.252.0  broadcast 10.6.131.255
    inet6 fe80::21a:4aff:fe97:5f14  prefixlen 64  scopeid 0x20<link>
    ether 00:1a:4a:97:5f:14  txqueuelen 1000  (Ethernet)
    RX packets 131742  bytes 662768246 (662.7 MB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 45752  bytes 5085889 (5.0 MB)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
    inet 127.0.0.1  netmask 255.0.0.0
    inet6 ::1  prefixlen 128  scopeid 0x10<host>
    loop txqueuelen 1000  (Local Loopback)
    RX packets 20581  bytes 3887557 (3.8 MB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 20581  bytes 3887557 (3.8 MB)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

usuario@ubuntu-18-CyA-alu0101327372:~$
```