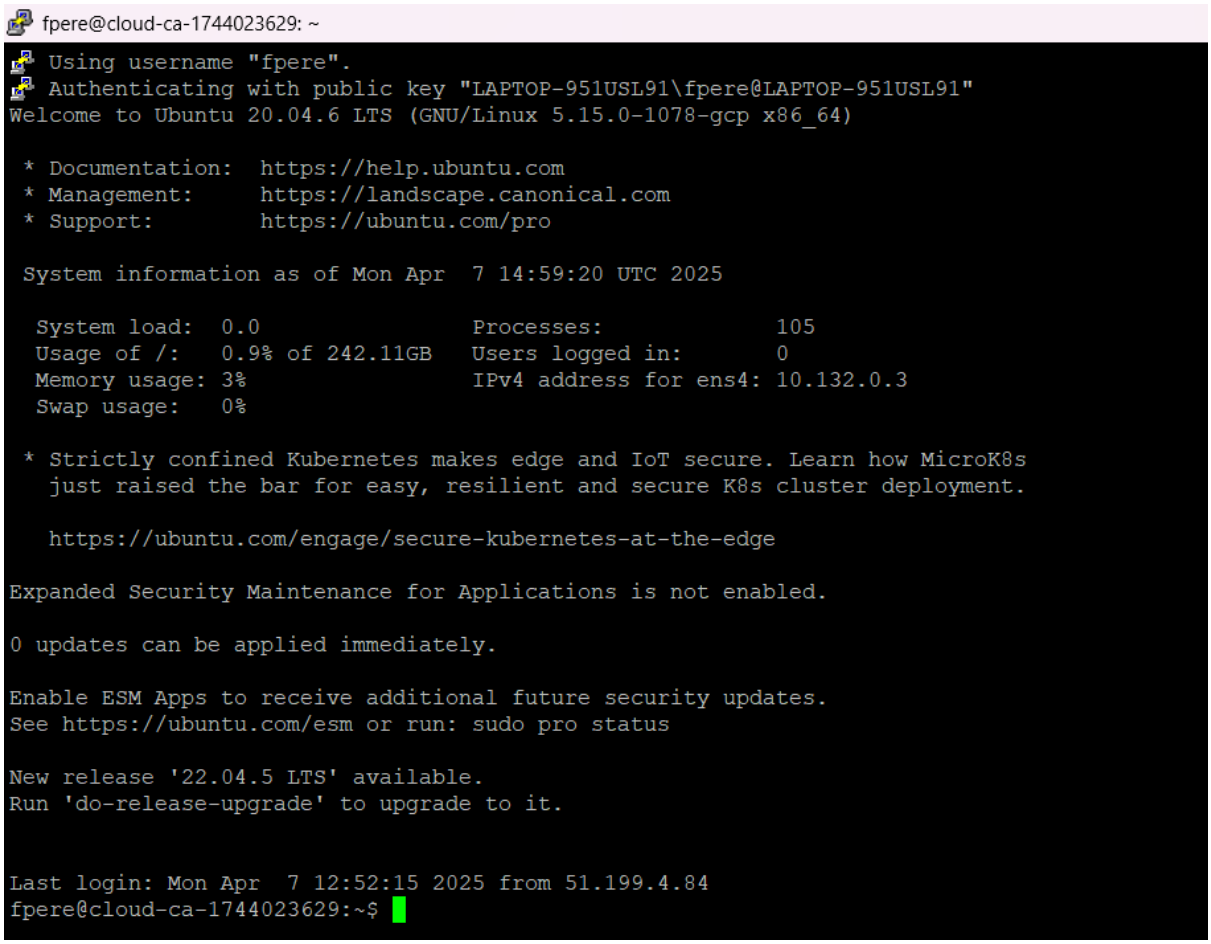
DEPLOYING GOOGLE CLOUD RESOURCES

Repository for the script: https://github.com/FbrFonseca/Cloud_CA.git

With the following command you will connect via ssh to the VM

The following terminar window will pop-up



With the following command on your physical machine (not on the VM) you will be able to see the HTTP and SSH ports using this command:

gcloud compute firewall-rules list

```
fpere@LAPTOP-951USL91 MINGW64 ~
$ gcloud compute firewall-rules list
NAME                    NETWORK  DIRECTION  PRIORITY  ALLOW                 DENY  DISABLED
allow-http-ssh          default  INGRESS    1000      tcp:22,tcp:80               False
allow-http-ssh-1744023629  default  INGRESS    1000      tcp:22,tcp:80               False
```

Nginx

Nginx was installed in the VM to host a “hello world” page.

With the “sudo systemclt status nginx” command you can see it is running.

```
fpere@cloud-ca-1744023629:~$ sudo systemctl status nginx
● nginx.service - A high performance web server and a reverse proxy server
     Loaded: loaded (/lib/systemd/system/nginx.service; enabled; vendor preset: enabled)
     Active: active (running) since Mon 2025-04-07 11:52:48 UTC; 3h 15min ago
       Docs: man:nginx(8)
   Main PID: 15171 (nginx)
      Tasks: 3 (limit: 9511)
     Memory: 4.2M
     CGroup: /system.slice/nginx.service
             ├─15171 nginx: master process /usr/sbin/nginx -g daemon on; master_process on;
             ├─15172 nginx: worker process
             └─15173 nginx: worker process

Apr 07 11:52:48 cloud-ca-1744023629 systemd[1]: Starting A high performance web server and a reverse proxy server...
Apr 07 11:52:48 cloud-ca-1744023629 systemd[1]: Started A high performance web server and a reverse proxy server.
fpere@cloud-ca-1744023629:~$
```

Using Vim I created a simple index.html file depict in the screen capture bellow.

```
<!DOCTYPE html>
<html lang="en">
<head>
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <title>Hello world from the Cloud VM</title>
</head>
<body>
        <h1>Hello, Derek! Welcome to my Google Cloud VM :D</h1>
</body>
</html>
~
~
~
```

Again, on the physical machine you can run the command on the picture bellow with your project id to its external IP, optionally you can use the Google Cloud Console on your browser.

```
fpere@LAPTOP-951USL91 MINGW64 ~
$ gcloud compute instances list --project=cloud-ca-456020
NAME                ZONE           MACHINE_TYPE   PREEMPTIBLE  INTERNAL_IP  EXTERNAL_IP     STATUS
cloud-ca-1744023629  europe-west1-b  e2-standard-2               10.132.0.3   35.205.89.240   RUNNING
```

The external IP of this instance is 35.205.89.240. When accessed from the browser you can see the page previously created on Vim. You can use Curl or Ping from the command line to check the IP.

```
fpere@LAPTOP-951USL91 MINGW64 ~
$ ping 35.205.89.240

Pinging 35.205.89.240 with 32 bytes of data:
Reply from 35.205.89.240: bytes=32 time=27ms TTL=58
Reply from 35.205.89.240: bytes=32 time=24ms TTL=58
Reply from 35.205.89.240: bytes=32 time=25ms TTL=58
Reply from 35.205.89.240: bytes=32 time=24ms TTL=58

Ping statistics for 35.205.89.240:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 24ms, Maximum = 27ms, Average = 25ms

fpere@LAPTOP-951USL91 MINGW64 ~
$ curl 35.205.89.240
<!DOCTYPE html>
<html lang="en">
<head>
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <title>Hello world from the Cloud VM</title>
</head>
<body>
        <h1>Hello, Derek! Welcome to my Google Cloud VM :D</h1>
</body>
</html>
```