

RA: 324155609

```
Start Lab
Region: us-east-1
Lab ID: arn:aws:cloudformation:us-east-1:82717776496:stack/c183209a4717025112032108t1w82717776496/4d9ec5c0-caf3-11f0-b11f-120777143c8f
Creation Time: 2025-11-26T10:11:17-0800

Start session at: 2025-11-26 10:11:19
Remaining session time: 03:00:00(180 minutes)

🔄Lab status: in creation
```

	Name	ID da instância	Estado da inst...	Tipo de instanc...	Verificação de sta...	Status do alarm...	Zona de dispon...	DNS IPv4 público	Endereço IP...	IP elástico	IPs IPv6	Monito
<input checked="" type="checkbox"/>	vmpython	i-04d5c3801c2f6b2a	Executando	t2.micro	2/2 verificações a	Exibir alarmes +	us-east-1	ec2-15-217-228-19.co...	15.217.228.19	-	-	disable
<input type="checkbox"/>	Bastion Host	i-08a771b3155f570c2	Executando	t2.micro	2/2 verificações a	Exibir alarmes +	us-east-1a	ec2-34-239-45-89.com...	34.239.45.89	-	-	disable

```
C:\Users\tiago\Downloads>ssh -i "Linux-202i.1.pem" ec2-user@ec2-13-217-228-19.compute-1.amazonaws.com

      #_
     #####_
    ~\      ~_      Amazon Linux 2023
   ~\      #####\
  ~\      \###|
  ~\      \#/  ___
   ~\      V~'  ' -> https://aws.amazon.com/linux/amazon-linux-2023
    ~~~~~
      ~~~~~
     ~~~~~
    ~~~~~
   ~~~~~
  ~~~~~
 ~~~~~
/~~~~
/_m/'

[ec2-user@ip-172-31-28-79 ~]$
```

```
Running scriptlet: container-selinux-4:2.242.0-1.amzn2023.noarch 10/11
Running scriptlet: docker-25.0.13-1.amzn2023.0.2.x86_64 11/11
Installing : docker-25.0.13-1.amzn2023.0.2.x86_64 11/11
Running scriptlet: docker-25.0.13-1.amzn2023.0.2.x86_64 11/11
Created symlink /etc/systemd/systemd/sockets.target.wants/docker.socket → /usr/lib/systemd/system/docker.socket.

Running scriptlet: container-selinux-4:2.242.0-1.amzn2023.noarch 11/11
Running scriptlet: docker-25.0.13-1.amzn2023.0.2.x86_64 11/11
Verifying : container-selinux-4:2.242.0-1.amzn2023.noarch 1/11
Verifying : containerd-2.1.4-1.amzn2023.0.2.x86_64 2/11
Verifying : docker-25.0.13-1.amzn2023.0.2.x86_64 3/11
Verifying : iptables-libs-1.8.8-3.amzn2023.0.2.x86_64 4/11
Verifying : iptables-nft-1.8.8-3.amzn2023.0.2.x86_64 5/11
Verifying : libcgrou-3.0-1.amzn2023.0.1.x86_64 6/11
Verifying : libnetfilter_conntrack-1.0.8-2.amzn2023.0.2.x86_64 7/11
Verifying : libnftnl-1.0.1-19.amzn2023.0.2.x86_64 8/11
Verifying : libnftnl-1.2.2-2.amzn2023.0.2.x86_64 9/11
Verifying : pigz-2.5-1.amzn2023.0.3.x86_64 10/11
Verifying : runc-1.3.3-2.amzn2023.0.1.x86_64 11/11

Installed:
  container-selinux-4:2.242.0-1.amzn2023.noarch
  docker-25.0.13-1.amzn2023.0.2.x86_64
  iptables-nft-1.8.8-3.amzn2023.0.2.x86_64
  libnetfilter_conntrack-1.0.8-2.amzn2023.0.2.x86_64
  libnftnl-1.2.2-2.amzn2023.0.2.x86_64
  runc-1.3.3-2.amzn2023.0.1.x86_64
  containerd-2.1.4-1.amzn2023.0.2.x86_64
  iptables-libs-1.8.8-3.amzn2023.0.2.x86_64
  libcgrou-3.0-1.amzn2023.0.1.x86_64
  libnftnl-1.0.1-19.amzn2023.0.2.x86_64
  pigz-2.5-1.amzn2023.0.3.x86_64

Complete!
[ec2-user@ip-172-31-28-79 ~]$
```

5) Startando o docker:

```
[ec2-user@ip-172-31-28-79 ~]$ sudo service docker start
Redirecting to /bin/systemctl start docker.service
[ec2-user@ip-172-31-28-79 ~]$ |
```

6) Instalando python e frameworks:

```
Transaction Summary
=====
Install 2 Packages

Total download size: 1.9 M
Installed size: 11 M
Is this ok [y/N]: y
Downloading Packages:
(1/2): libxcrypt-compat-4.4.33-7.amzn2023.x86_64.rpm           1.9 MB/s | 92 kB    00:00
(2/2): python3-pip-21.3.1-2.amzn2023.0.14.noarch.rpm         22 MB/s | 1.8 MB    00:00
-----
Total                                                         17 MB/s | 1.9 MB    00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing      :                                     1/1
  Installing     : libxcrypt-compat-4.4.33-7.amzn2023.x86_64 1/2
  Installing     : python3-pip-21.3.1-2.amzn2023.0.14.noarch 2/2
  Running scriptlet: python3-pip-21.3.1-2.amzn2023.0.14.noarch 2/2
  Verifying      : libxcrypt-compat-4.4.33-7.amzn2023.x86_64 1/2
  Verifying      : python3-pip-21.3.1-2.amzn2023.0.14.noarch 2/2

Installed:
  libxcrypt-compat-4.4.33-7.amzn2023.x86_64          python3-pip-21.3.1-2.amzn2023.0.14.noarch

Complete!
```

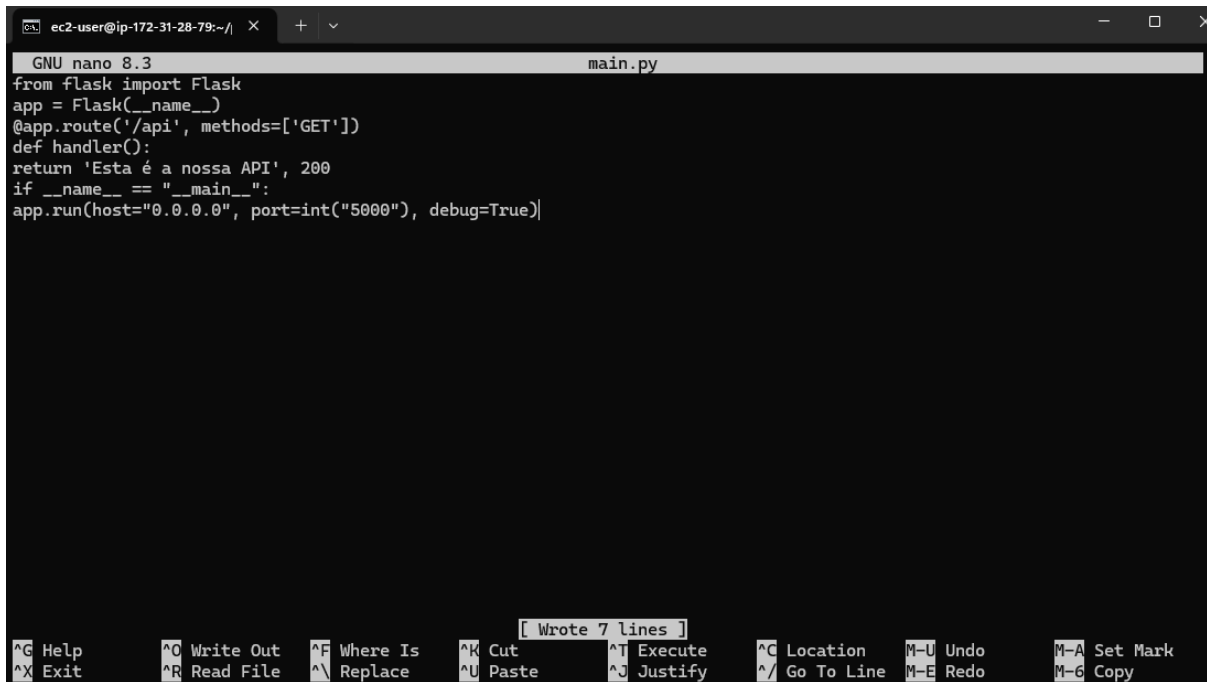
```
Collecting markupsafe>=2.1.1
  Downloading markupsafe-3.0.3-cp39-cp39-manylinux2014_x86_64.manylinux_2_17_x86_64.manylinux_2_28_x86_64.whl (20 kB)
Collecting werkzeug>=3.1.0
  Downloading werkzeug-3.1.3-py3-none-any.whl (224 kB)
    |████████████████████| 224 kB 61.1 MB/s
Collecting itsdangerous>=2.2.0
  Downloading itsdangerous-2.2.0-py3-none-any.whl (16 kB)
Collecting click>=8.1.3
  Downloading click-8.1.8-py3-none-any.whl (98 kB)
    |████████████████████| 98 kB 13.0 MB/s
Collecting importlib-metadata>=3.6.0
  Downloading importlib_metadata-8.7.0-py3-none-any.whl (27 kB)
Collecting blinker>=1.9.0
  Downloading blinker-1.9.0-py3-none-any.whl (8.5 kB)
Collecting zipp>=3.20
  Downloading zipp-3.23.0-py3-none-any.whl (10 kB)
Installing collected packages: zipp, markupsafe, werkzeug, jinja2, itsdangerous, importlib-metadata, click, blinker, flask
Successfully installed blinker-1.9.0 click-8.1.8 flask-3.1.2 importlib-metadata-8.7.0 itsdangerous-2.2.0 jinja2-3.1.6 markupsafe-3.0.3 werkzeug-3.1.3 zipp-3.23.0
```

```
[ec2-user@ip-172-31-28-79 ~]$ sudo pip3 install gunicorn
Collecting gunicorn
  Downloading gunicorn-23.0.0-py3-none-any.whl (85 kB)
    |████████████████████| 85 kB 5.7 MB/s
Collecting packaging
  Downloading packaging-25.0-py3-none-any.whl (66 kB)
    |████████████████████| 66 kB 8.9 MB/s
Installing collected packages: packaging, gunicorn
Successfully installed gunicorn-23.0.0 packaging-25.0
```

7) Criação do diretório API:

```
[ec2-user@ip-172-31-28-79 ~]$ mkdir projetos
[ec2-user@ip-172-31-28-79 ~]$ cd projetos
[ec2-user@ip-172-31-28-79 projetos]$ mkdir api
[ec2-user@ip-172-31-28-79 projetos]$ cd api
[ec2-user@ip-172-31-28-79 api]$ |
```

8) Colando e salvando o código em [main.py](#):



```
GNU nano 8.3 main.py
from flask import Flask
app = Flask(__name__)
@app.route('/api', methods=['GET'])
def handler():
    return 'Esta é a nossa API', 200
if __name__ == "__main__":
    app.run(host="0.0.0.0", port=int("5000"), debug=True)
```

[Wrote 7 lines]

^G Help ^O Write Out ^F Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^_ Go To Line M-E Redo M-G Copy

9) Modificando o requirements.txt:



```
GNU nano 8.3 requirements.txt
click==8.1.8
docutils==0.16
Flask==3.1.2
gunicorn==23.0.0
importlib_metadata==8.7.0
itsdangerous==2.2.0
Jinja2==3.1.6
lockfile==0.12.2
MarkupSafe==3.0.3
PySocks==1.7.1
python-daemon==2.3.0
Werkzeug==3.1.3
zipp==3.23.0
```

[Wrote 13 lines]

^G Help ^O Write Out ^F Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^_ Go To Line M-E Redo M-G Copy

10) Criado o arquivo dockerfile:

```
ec2-user@ip-172-31-28-79: ~/ | X + v
GNU nano 8.3 dockerfile
FROM python:3
COPY . /work
WORKDIR /work
EXPOSE 5000
RUN pip3 install --no-cache-dir -r requirements.txt
CMD gunicorn --workers 2 --bind 0.0.0.0:5000 main:app
```

[Wrote 6 lines]

^G Help ^O Write Out ^F Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark
^X Exit ^R Read File ^N Replace ^U Paste ^J Justify ^_ Go To Line M-E Redo M-G Copy

11) Concluido a build do docker:

```
=> => transferring context: 2B 0.0s
=> [internal] load build context 0.0s
=> => transferring context: 890B 0.0s
=> [1/4] FROM docker.io/library/python:3@sha256:edf6433343f65f94707985869aeaaf8beadaeae11c4bc02068fca52dce28d 24.4s
=> resolve docker.io/library/python:3@sha256:edf6433343f65f94707985869aeaaf8beadaeae11c4bc02068fca52dce28d 0.0s
=> sha256:edf6433343f65f94707985869aeaaf8beadaeae11c4bc02068fca52dce28d 10.95kB / 10.95kB 0.0s
=> sha256:936d907e9a6c65749833463d200ff283faacfd603d458892d2e52215918dbb5d 6.49kB / 6.49kB 0.0s
=> sha256:53c88f1dfeb79b2f207f7f1a03a45e0dc5ed208b9f496de16b98f81189dc0392 49.29MB / 49.29MB 1.4s
=> sha256:ff2e6e687b6ce78177a4cac678dd533c8e72b97469f030783b6bb491f681fd4c 67.78MB / 67.78MB 2.3s
=> sha256:da6cc0443346c30914c68d265b8dba465cb85708c572d97846122fd036edc003 2.32kB / 2.32kB 0.0s
=> sha256:eae668646f447b181fe300ae6756351b6167aa2578be449b167ba79ed4926798 25.61MB / 25.61MB 0.9s
=> sha256:7c40a3faff76845154c32b7b35d5535b201d3bd04f94a0c408f8e98f9ed98ad6 235.98MB / 235.98MB 5.7s
=> extracting sha256:53c88f1dfeb79b2f207f7f1a03a45e0dc5ed208b9f496de16b98f81189dc0392 4.7s
=> sha256:85694cfea2c4dfd425b9947a149670940f0625182653d556ed9c541e0cb1f292 6.08MB / 6.08MB 1.7s
=> sha256:d7d82d76b698080549e693e4b53493dc29835ae4ac836fb2aa2d6ef513e9008c 29.22MB / 29.22MB 2.9s
=> sha256:50475ada0cb12c5af6c0c7c3188df0354108a5096b87a1ba0ca5a34e4e1150d3 250B / 250B 2.4s
=> extracting sha256:eae668646f447b181fe300ae6756351b6167aa2578be449b167ba79ed4926798 1.1s
=> extracting sha256:ff2e6e687b6ce78177a4cac678dd533c8e72b97469f030783b6bb491f681fd4c 3.6s
=> extracting sha256:7c40a3faff76845154c32b7b35d5535b201d3bd04f94a0c408f8e98f9ed98ad6 11.0s
=> extracting sha256:85694cfea2c4dfd425b9947a149670940f0625182653d556ed9c541e0cb1f292 0.4s
=> extracting sha256:d7d82d76b698080549e693e4b53493dc29835ae4ac836fb2aa2d6ef513e9008c 1.3s
=> extracting sha256:50475ada0cb12c5af6c0c7c3188df0354108a5096b87a1ba0ca5a34e4e1150d3 0.0s
=> [2/4] COPY . /work 0.1s
=> [3/4] WORKDIR /work 0.0s
=> [4/4] RUN pip3 install --no-cache-dir -r requirements.txt 6.0s
=> exporting to image 0.4s
=> => exporting layers 0.4s
=> writing image sha256:057f1337b827821c624d2c10fdaf3e691aa33ff0e11afb9884eab11bcd2e84 0.0s
=> => naming to docker.io/library/my.api 0.0s
[ec2-user@ip-172-31-28-79 api]$
```

12) Executando container:

```
[ec2-user@ip-172-31-28-79 api]$ sudo docker run --name main -p 5000:5000 my-api
[2025-11-26 20:14:37 +0000] [8] [INFO] Starting gunicorn 23.0.0
[2025-11-26 20:14:37 +0000] [8] [INFO] Listening at: http://0.0.0.0:5000 (8)
[2025-11-26 20:14:37 +0000] [8] [INFO] Using worker: sync
[2025-11-26 20:14:37 +0000] [9] [INFO] Booting worker with pid: 9
[2025-11-26 20:14:37 +0000] [10] [INFO] Booting worker with pid: 10
```