

TAREA N° 2 Dockerfile

DEVOPS Y DESPLIEGUE MODULO IV

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1: creamos nuestra carpeta y dirigimos a la carpeta creada

```
C:\devOps\docker (0.328s)
mkdir P-2GOC-PYTHON

Directorio: C:\devOps\docker

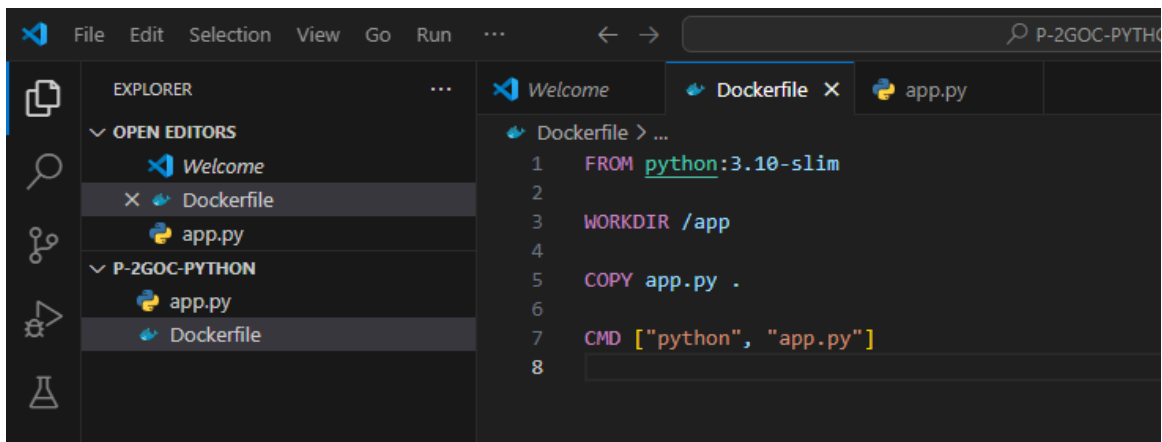
Mode                LastWriteTime         Length Name
----                -
d-----          04/06/2025   23:08                P-2GOC-PYTHON

C:\devOps\docker (0.055s)
cd P-2GOC-PYTHON
```

2: abrimos nuestro visual studio code

```
C:\devOps\docker\P-2GOC-PYTHON  Pair Ctrl I Dispatch Beta Ctrl Shift I
code .
```

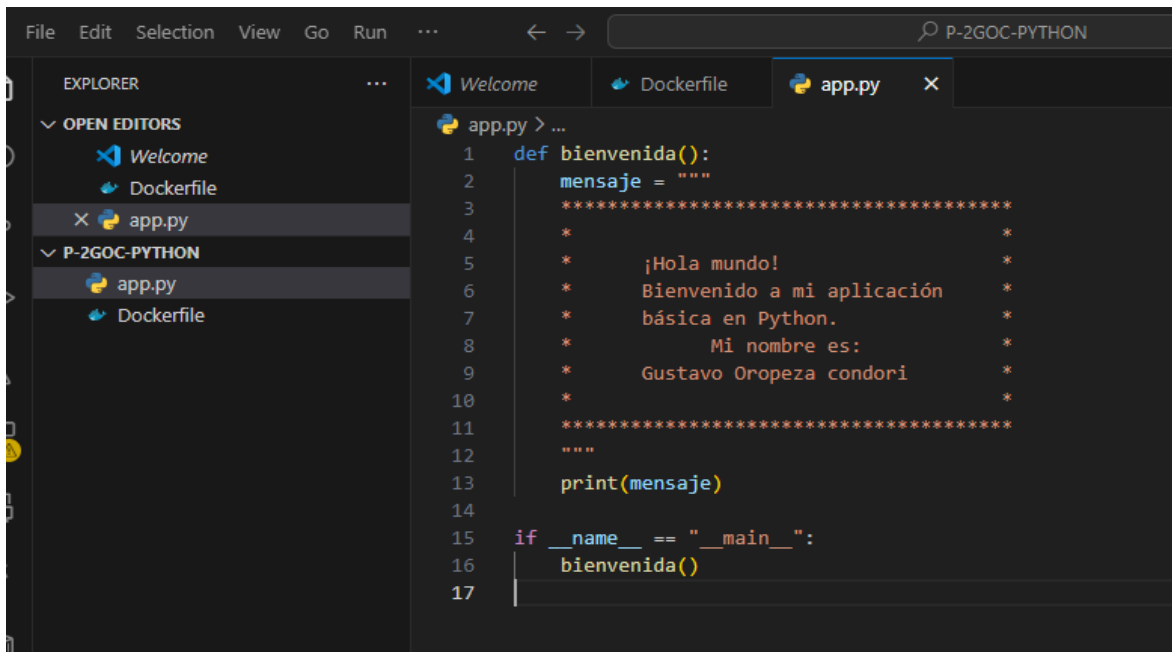
3: creamos un archivo de Dockerfile



The screenshot shows the Visual Studio Code interface with the Dockerfile open in the editor. The Explorer sidebar on the left shows the file structure with 'P-2GOC-PYTHON' expanded, containing 'app.py' and 'Dockerfile'. The Dockerfile content is as follows:

```
Dockerfile > ...
1 FROM python:3.10-slim
2
3 WORKDIR /app
4
5 COPY app.py .
6
7 CMD ["python", "app.py"]
8
```

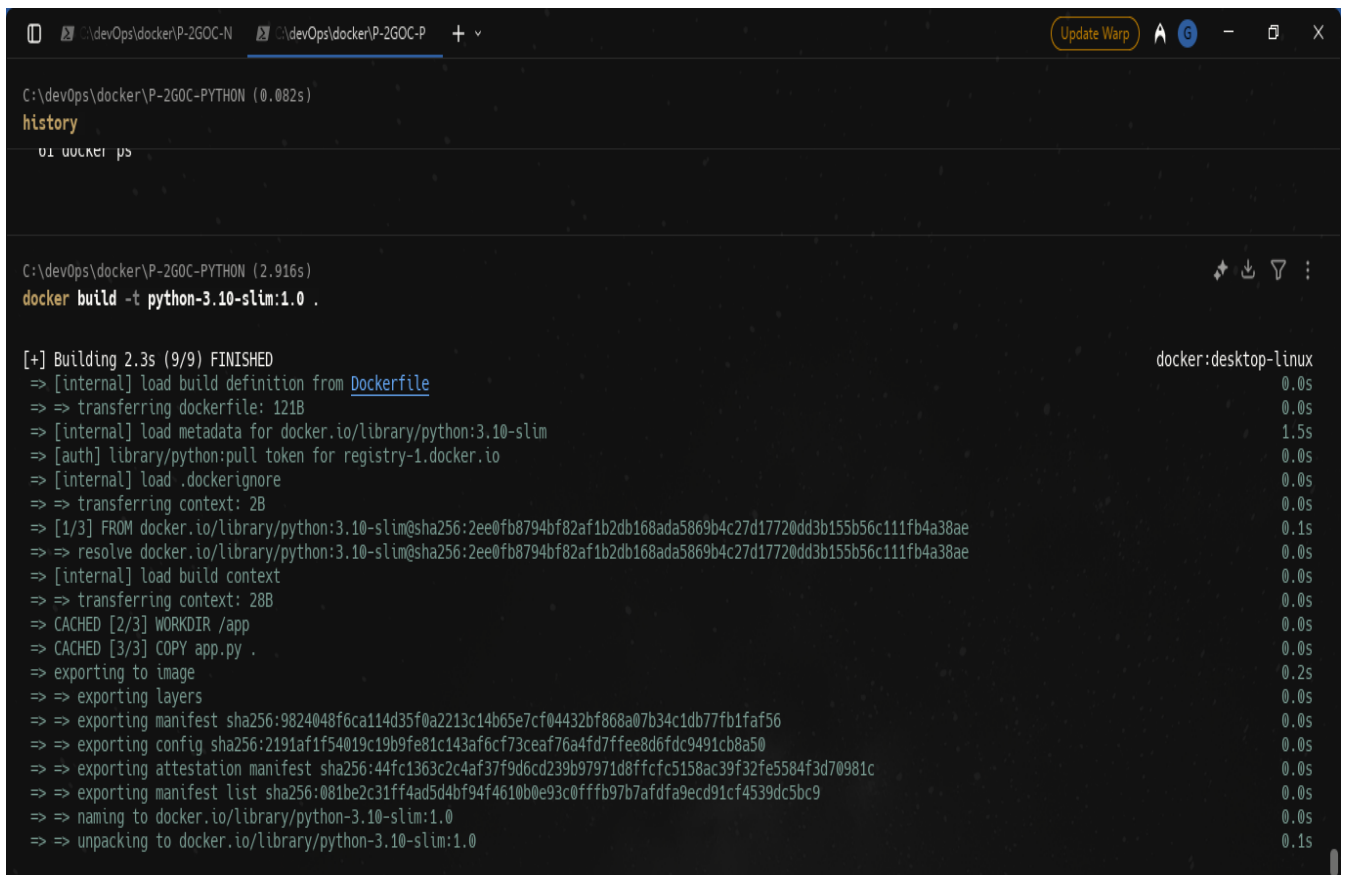
4: hacemos una mensaje de bienvenida con el archivo llamado app.py



The screenshot shows the Visual Studio Code editor with the file explorer on the left. The 'EXPLORER' pane shows the project structure with 'app.py' selected. The main editor area displays the content of 'app.py', which is a Python script with a function 'bienvenida()' that prints a welcome message. The code is as follows:

```
1 def bienvenida():
2     mensaje = """
3     *****
4     *
5     *      ¡Hola mundo!
6     *      Bienvenido a mi aplicación
7     *      básica en Python.
8     *      Mi nombre es:
9     *      Gustavo Oropeza condori
10    *
11    *****
12    """
13    print(mensaje)
14
15 if __name__ == "__main__":
16     bienvenida()
17
```

5: aquí construimos nuestra imagen con el nombre de : python-3.10-slim:1.0



The screenshot shows a terminal window with the command 'docker build -t python-3.10-slim:1.0 .' being executed. The output shows the progress of the build, including the transfer of the Dockerfile, the pull of the base image 'python:3.10-slim', and the final export of the image. The build is completed successfully, and the image is named 'python-3.10-slim:1.0'.

```
C:\devOps\docker\P-2GOC-PYTHON (0.082s)
history
01 docker ps

C:\devOps\docker\P-2GOC-PYTHON (2.916s)
docker build -t python-3.10-slim:1.0 .

[+] Building 2.3s (9/9) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 121B
=> [internal] load metadata for docker.io/library/python:3.10-slim
=> [auth] library/python:pull token for registry-1.docker.io
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [1/3] FROM docker.io/library/python:3.10-slim@sha256:2ee0fb8794bf82af1b2db168ada5869b4c27d17720dd3b155b56c111fb4a38ae
=> => resolve docker.io/library/python:3.10-slim@sha256:2ee0fb8794bf82af1b2db168ada5869b4c27d17720dd3b155b56c111fb4a38ae
=> [internal] load build context
=> => transferring context: 28B
=> CACHED [2/3] WORKDIR /app
=> CACHED [3/3] COPY app.py .
=> exporting to image
=> => exporting layers
=> => exporting manifest sha256:9824048f6ca114d35f0a2213c14b65e7cf04432bf868a07b34c1db77fb1faf56
=> => exporting config sha256:2191af1f54019c19b9fe81c143af6cf73ceaf76a4fd7ffee8d6fdc9491cb8a50
=> => exporting attestation manifest sha256:44fc1363c2c4af37f9d6cd239b97971d8ffcf5158ac39f32fe5584f3d70981c
=> => exporting manifest list sha256:081be2c31ff4ad5d4bf94f4610b0e93c0fffb97b7afdfa9ecd91cf4539dc5bc9
=> => naming to docker.io/library/python-3.10-slim:1.0
=> => unpacking to docker.io/library/python-3.10-slim:1.0
```

6: Aquí verificamos si hemos creado la imagen y claramente lo hemos creado

```
C:\devOps\docker\P-2GOC-PYTHON (0.099s)
history

C:\devOps\docker\P-2GOC-PYTHON (0.611s)
docker image ls
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
gustavo345/python	3.10-slim-1.0.5	081be2c31ff4	About an hour ago	192MB
python-3.10-slim	1.0	081be2c31ff4	About an hour ago	192MB

7: Ejecutamos el contenedor de la imagen.

```
C:\devOps\docker\P-2GOC-PYTHON (0.961s)
docker run -it python-3.10-slim:1.0
```

```
*****
*                                     *
*      ¡Hola mundo!                  *
*      Bienvenido a mi aplicación     *
*      básica en Python.              *
*           Mi nombre es:            *
*      Gustavo Oropeza condori        *
*                                     *
*****
```

8: verificamos si está corriendo nuestro contenedor

```
C:\devOps\docker\P-2GOC-PYTHON (0.192s)
docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
c87edbc07c7	python-3.10-slim:1.0	"python app.py"	16 seconds ago	Exited (0) 15 seconds ago		nifty_sanderson

9: Nos logueamos para subir nuestra imagen cread a Docker Hub

```
C:\devOps\docker\P-2GOC-PYTHON (3.948s)
docker login
```

```
Authenticating with existing credentials... [Username: gustavo345]

Info → To login with a different account, run 'docker logout' followed by 'docker login'

Login Succeeded
```

10: Etiquetamos la imagen con nuevo nombre para subirlo

```
C:\devOps\docker\P-2G0C-PYTHON (0.295s)
docker tag nginx:perl-1.0 gustavo345/python:3.10-slim-1.0.5
```

11: Finalizamos al subir nuestra imagen a nuestra cuenta de Docker Hub

```
C:\devOps\docker\P-2G0C-PYTHON (0.266s)
docker tag python-3.10-slim:1.0 gustavo345/python:3.10-slim-1.0.5

C:\devOps\docker\P-2G0C-PYTHON (1m 25.01s)
docker push gustavo345/python:3.10-slim-1.0.5

The push refers to repository [docker.io/gustavo345/python]
aa22326727c8: Pushed
1332bc95f947: Pushed
a9c316b0532d: Pushed
61320b01ae5e: Mounted from library/httpd
3245b8408196: Pushed
8f4feadac48a: Pushed
a8eb8613d815: Pushed
3.10-slim-1.0.5: digest: sha256:081be2c31ff4ad5d4bf94f4610b0e93c0fffb97b7afdfa9ecd91cf4539dc5bc9 size: 856
```

12: Aquí verificamos nuestro repositorio de Docker Hub y vemos claramente que esta ya subida nuestra imagen a nuestra cuenta:

The screenshot shows the Docker Hub web interface. The top navigation bar is blue with the Docker Hub logo, 'Explore', 'My Hub' (selected), and a search bar. The left sidebar shows the user profile 'gustavo345' and a menu with 'Repositories' (selected), 'Collaborations', 'Settings', 'Billing', and 'Usage'. The main content area is titled 'Repositories' and shows a table of repositories for the namespace 'gustavo345'. The table has columns for Name, Last Pushed, Contains, Visibility, and Scout. One repository is listed: 'gustavo345/python', pushed 'about 1 hour ago', containing an 'IMAGE', with 'Public' visibility and an 'Inactive' scout status. A 'Create a repository' button is in the top right of the main area.

Name	Last Pushed	Contains	Visibility	Scout
gustavo345/python	about 1 hour ago	IMAGE	Public	Inactive

gustavo345
Docker Personal

- Repositories
- Collaborations
- Settings
- Default privacy
- Notifications
- Billing
- Usage
- Pulls
- Storage

gustavo345/python

Last pushed about 1 hour ago • Repository size: 65.2 MB

Add a description

Add a category

Docker commands

To push a new tag to this repository:

```
docker push gustavo3e
```

General Tags Image Management BETA Collaborators Webhooks Settings

Tags

DOCKE SCOUT INACTIVE
[Activate](#)

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
3.10-slim-1.0.5		Image	less than 1 day	about 1 hour

[See all](#)

Build with
Docker Build Cloud

Accelerate image build times with ac based builders and shared cache.

Docker Build Cloud executes builds o dimensioned cloud infrastructure witi

Repositories

Collaborations

Settings

Default privacy


Notifications

Billing

Usage

Pulls

Storage



gustavo345/python:3.10-slim-1.0.5

INDEX DIGEST sha256:081be2c31ff4ad5d4bf94f4610b0e93c0fffb97b7afdfa9ecd91cf4539dc5bc9

OS/ARCH

linux/amd64

COMPRESSED SIZE

45.19 MB

LAST PUSHED

about 1 hour by [gustavo345](#)

TYPE

Image

MANIFEST DIGEST

sha256:9824048f...

Image Layers

Vulnerabilities

Image Layers

Command

1 # debian.sh --arch 'amd64' out/ 26.92 MB

2 ENV PATH=/usr/local/bin:/usr/local/sbin:/usr/local/... 0 B

3 ENV LANG=C.UTF-8 0 B

4 RUN /bin/sh -c set -eux; 3.35 MB

5 ENV GPG_KEY=A035C8C19219BA821ECEA86B64E628F8D684696D 0 B

debian.sh --arch 'amd64' out/ 'bookworm' '@1747699200'

Link de mi repositorio de Docker Hub: <https://hub.docker.com/r/gustavo345/python>

Link de mi github: https://github.com/gustavo-gts175/TAREA-N-2_GOC-MOD-IV.git

Ssh: [git@github.com:gustavo-gts175/TAREA-N-2_GOC-MOD-IV.git](https://github.com/gustavo-gts175/TAREA-N-2_GOC-MOD-IV.git)