

Intensificación Técnico Organizativa

Nombre: Daniel

Apellidos: Fernández Caballero

UVUS: danfercab

Enlace al repositorio de GitHub:

<https://github.com/DaniFdezCab/EGC-2425>

Ejercicio Git

Apartado 1

```
practica@pc-14-68:~$ git clone https://github.com/DaniFdezCab/EGC-2425.git
Clonando en 'EGC-2425'...
remote: Enumerating objects: 382, done.
remote: Counting objects: 100% (382/382), done.
remote: Compressing objects: 100% (243/243), done.
remote: Total 382 (delta 84), reused 382 (delta 84), pack-reused 0 (from 0)
Recibiendo objetos: 100% (382/382), 1.60 MiB | 6.21 MiB/s, listo.
Resolviendo deltas: 100% (84/84), listo.
practica@pc-14-68:~$ ls
Descargas  EGC-2425  Imágenes  opengnsys.log  Público  Videos
Documentos Escritorio Música      Plantillas    snap
```

Ejercicio Git

Apartado 2

The screenshot shows a Firefox browser window with the URL `127.0.0.1:5000`. The browser's address bar and tabs are visible at the top. The website being displayed is **uvlhub.io**, which has a dark sidebar on the left with navigation links: Home, Explore, Team, Login, and Sign Up. The main content area is titled "Latest datasets" and features three dataset cards:

- Sample dataset 4**: January 10, 2025 at 03:26 PM. Description for dataset 4. Author 4 (Affiliation 4) (0000-0000-0000-0003). <http://localhost:5000/doi/10.1234/dataset4>. Tags: tag1, tag2. Buttons: View dataset, Download (1.21 KB).
- Sample dataset 3**: January 10, 2025 at 03:26 PM. Description for dataset 3. Author 3 (Affiliation 3) (0000-0000-0000-0002). <http://localhost:5000/doi/10.1234/dataset3>. Tags: tag1, tag2. Buttons: View dataset, Download (1.21 KB).
- Sample dataset 2**: January 10, 2025 at 03:26 PM. Description for dataset 2. Author 2 (Affiliation 2) (0000-0000-0000-0001).

On the right side of the page, there is a "Hub statistics" section showing:

- 4 datasets
- 12 feature models
- 0 datasets viewed
- 0 feature models viewed
- 0 datasets downloaded
- 0 feature models downloaded

Below this is a "Related publication" section with text about David Romero-Organvidez, José A. Galindo, Chico Sundermann, Jose-Miguel Horcas, David Benavides, and a link to a paper in the *Journal of Systems and Software*. At the bottom right, there is a "Let's get started!" section with a "Sign up" button.

Ejercicio Git

Apartado 3

```
(venv) practica@pc-14-68:~/EGC-2425$ git checkout feature/init-bug
rama 'feature/init-bug' configurada para rastrear 'origin/feature/init-bug'.
Cambiado a nueva rama 'feature/init-bug'
(venv) practica@pc-14-68:~/EGC-2425$ flask run --host=0.0.0.0 --reload --debug
Traceback (most recent call last):
  File "/home/practica/EGC-2425/venv/bin/flask", line 8, in <module>
    sys.exit(main())
    ~~~~~^
  File "/home/practica/EGC-2425/venv/lib/python3.12/site-packages/flask/cli.py", line 1105, in main
    cli.main()
  File "/home/practica/EGC-2425/venv/lib/python3.12/site-packages/click/core.py", line 1078, in main
```

Ejercicio Git

Apartado 4

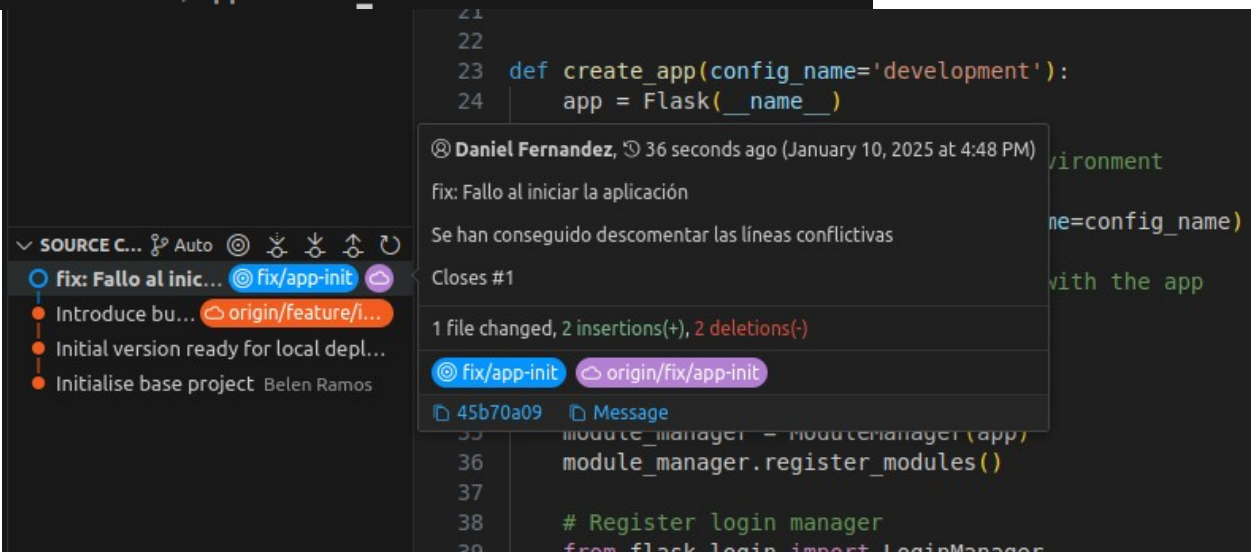
No se piden capturas.

Ejercicio Git

Apartado 5

Se ha realizado desde la rama de feature/init_bug

```
• (venv) practica@pc-14-68:~/EGC-2425$ git checkout -b fix/app-init  
Cambiado a nueva rama 'fix/app-init'
```



```
• (venv) practica@pc-14-68:~/EGC-2425$ git push --set-upstream origin fix/app-init  
Enumerando objetos: 7, listo
```

Ejercicio Git

Apartado 6

No se piden capturas.

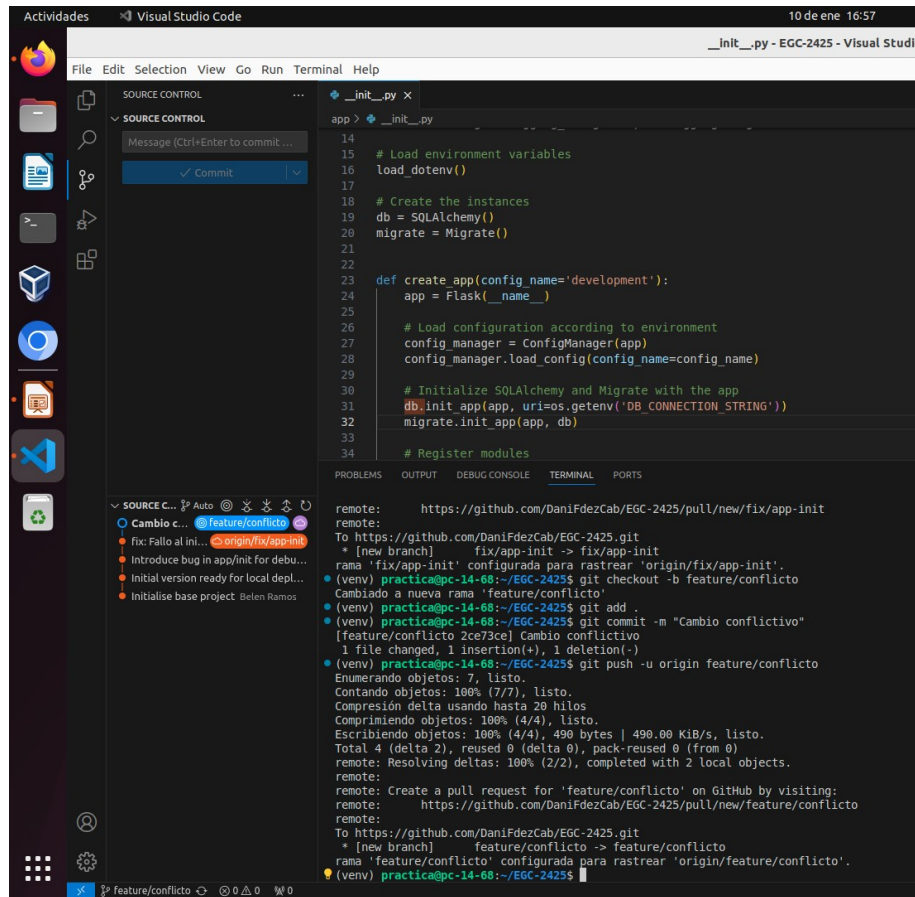
Ejercicio Git

Apartado 7

```
(venv) practica@pc-14-68:~/EGC-2425$ git checkout -b feature/conflicto  
Cambiado a nueva rama 'feature/conflicto'
```


Ejercicio Git

Apartado 7



The screenshot shows the Visual Studio Code interface. The editor displays a Python file named `__init__.py` with the following code:

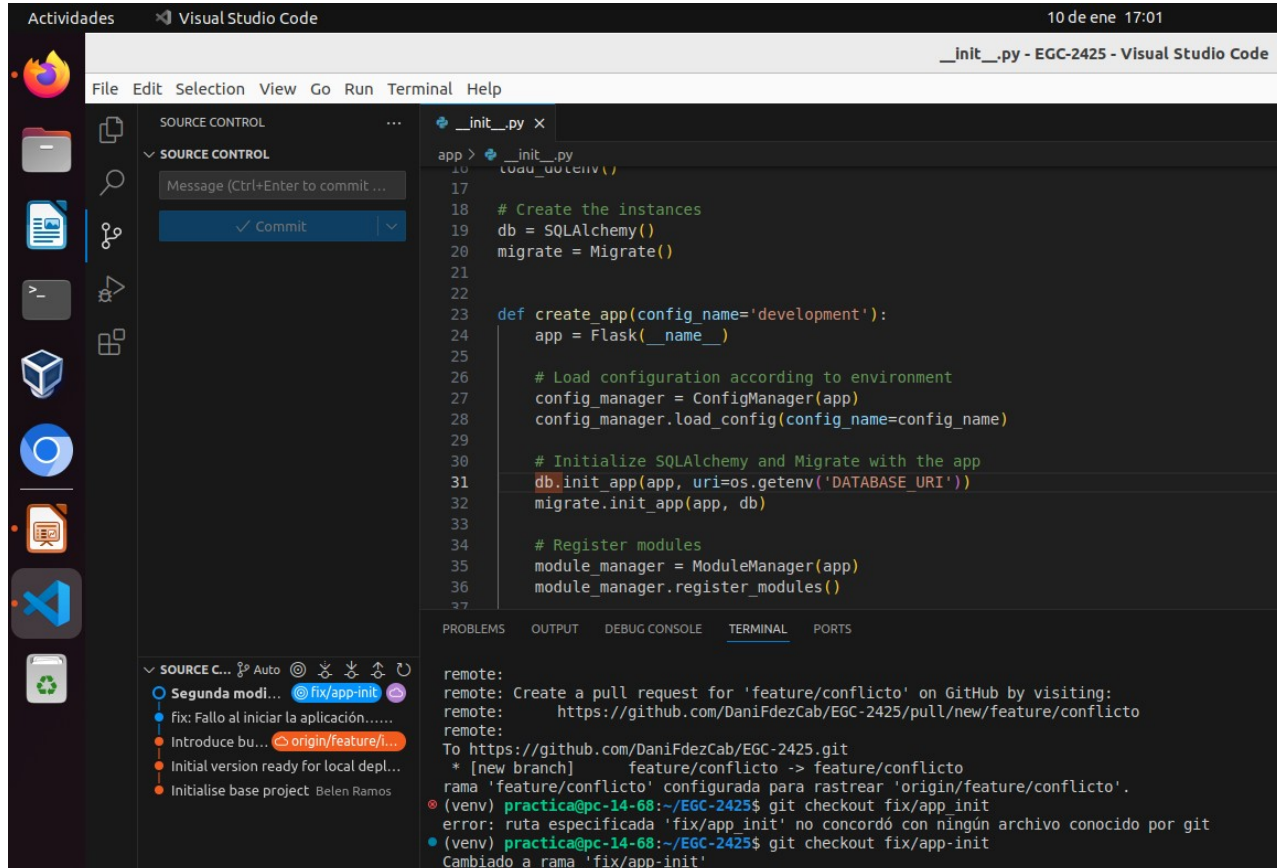
```
14
15 # Load environment variables
16 load_dotenv()
17
18 # Create the instances
19 db = SQLAlchemy()
20 migrate = Migrate()
21
22
23 def create_app(config_name='development'):
24     app = Flask(__name__)
25
26     # Load configuration according to environment
27     config_manager = ConfigManager(app)
28     config_manager.load_config(config_name=config_name)
29
30     # Initialize SQLAlchemy and Migrate with the app
31     db.init_app(app, uri=os.getenv('DB_CONNECTION_STRING'))
32     migrate.init_app(app, db)
33
34     # Register modules
```

The terminal window shows the following output:

```
remote:      https://github.com/DaniFdezCab/EGC-2425/pull/new/fix/app-init
remote:
To https://github.com/DaniFdezCab/EGC-2425.git
 * [new branch]      fix/app-init -> fix/app-init
rama 'fix/app-init' configurada para rastrear 'origin/fix/app-init'.
(venv) practica@pc-14-68:~/EGC-2425$ git checkout -b feature/conflicto
Cambiado a nueva rama 'feature/conflicto'
(venv) practica@pc-14-68:~/EGC-2425$ git add .
(venv) practica@pc-14-68:~/EGC-2425$ git commit -m "Cambio conflictivo"
[feature/conflicto 2ce73ce] Cambio conflictivo
1 file changed, 1 insertion(+), 1 deletion(-)
(venv) practica@pc-14-68:~/EGC-2425$ git push -u origin feature/conflicto
Enumerando objetos: 7, listo.
Contando objetos: 100% (7/7), listo.
Compresión delta usando hasta 20 hilos.
Comprimiendo objetos: 100% (4/4), listo.
Escribiendo objetos: 100% (4/4), 490 bytes | 490.00 KiB/s, listo.
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
remote:
remote: Create a pull request for 'feature/conflicto' on GitHub by visiting:
remote:      https://github.com/DaniFdezCab/EGC-2425/pull/new/feature/conflicto
remote:
To https://github.com/DaniFdezCab/EGC-2425.git
 * [new branch]      feature/conflicto -> feature/conflicto
rama 'feature/conflicto' configurada para rastrear 'origin/feature/conflicto'.
(venv) practica@pc-14-68:~/EGC-2425$
```

Ejercicio Git

Apartado 7



The screenshot shows the Visual Studio Code interface. The top bar indicates the file is `__init__.py` in the `EGC-2425` project. The left sidebar shows the 'SOURCE CONTROL' view with a commit message input and a 'Commit' button. The main editor displays the `__init__.py` file with the following code:

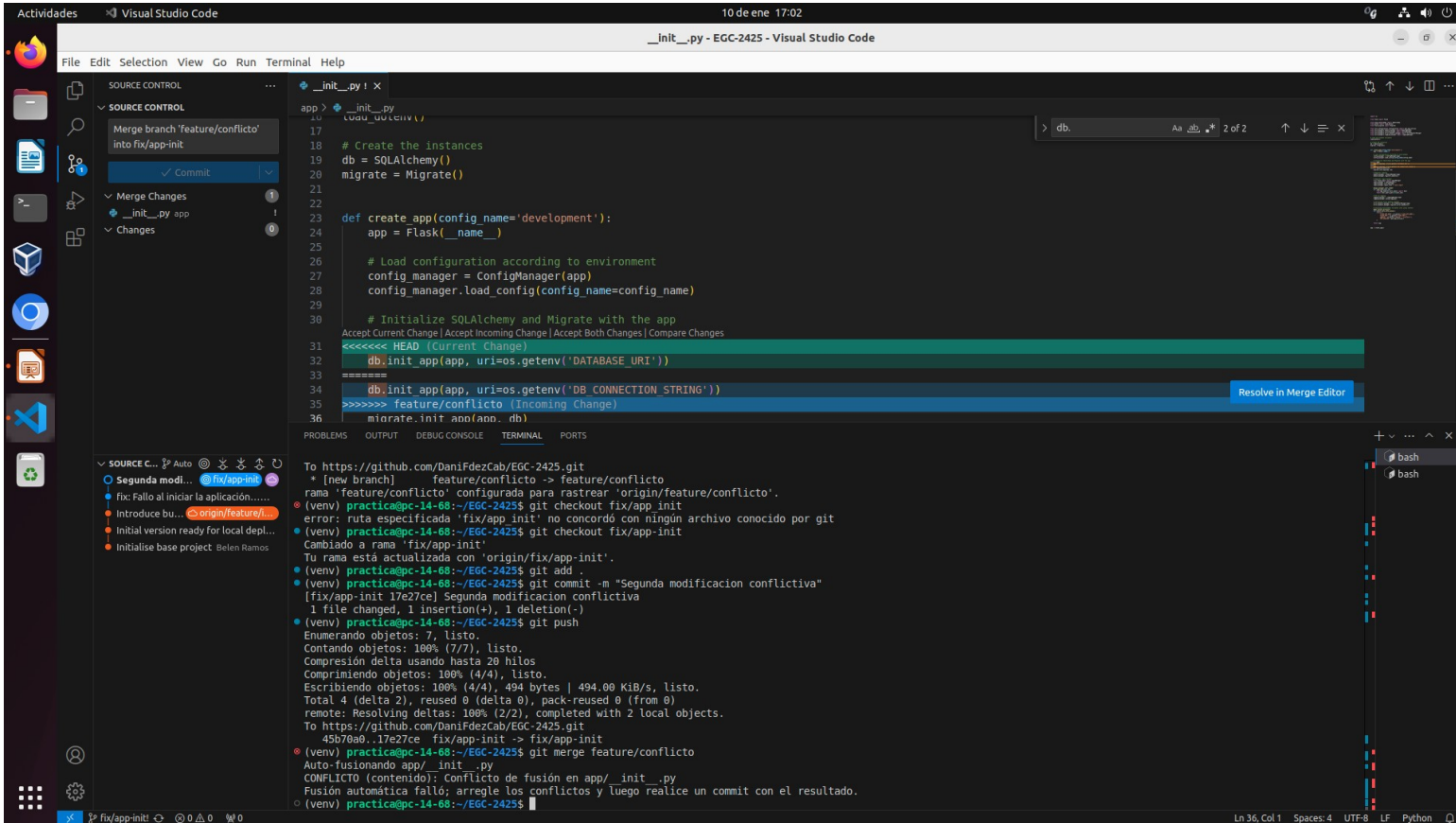
```
app > __init__.py
16 load_dotenv()
17
18 # Create the instances
19 db = SQLAlchemy()
20 migrate = Migrate()
21
22
23 def create_app(config_name='development'):
24     app = Flask(__name__)
25
26     # Load configuration according to environment
27     config_manager = ConfigManager(app)
28     config_manager.load_config(config_name=config_name)
29
30     # Initialize SQLAlchemy and Migrate with the app
31     db.init_app(app, uri=os.getenv('DATABASE_URI'))
32     migrate.init_app(app, db)
33
34     # Register modules
35     module_manager = ModuleManager(app)
36     module_manager.register_modules()
37
```

The bottom panel shows the 'TERMINAL' view with the following output:

```
remote:
remote: Create a pull request for 'feature/conflicto' on GitHub by visiting:
remote:   https://github.com/DaniFdezCab/EGC-2425/pull/new/feature/conflicto
remote:
To https://github.com/DaniFdezCab/EGC-2425.git
 * [new branch]   feature/conflicto -> feature/conflicto
rama 'feature/conflicto' configurada para rastrear 'origin/feature/conflicto'.
(venv) practica@pc-14-68:~/EGC-2425$ git checkout fix/app-init
error: ruta especificada 'fix/app-init' no concordi6 con ning6n archivo conocido por git
(venv) practica@pc-14-68:~/EGC-2425$ git checkout fix/app-init
Cambiado a rama 'fix/app-init'
```

Ejercicio Git

Apartado 7



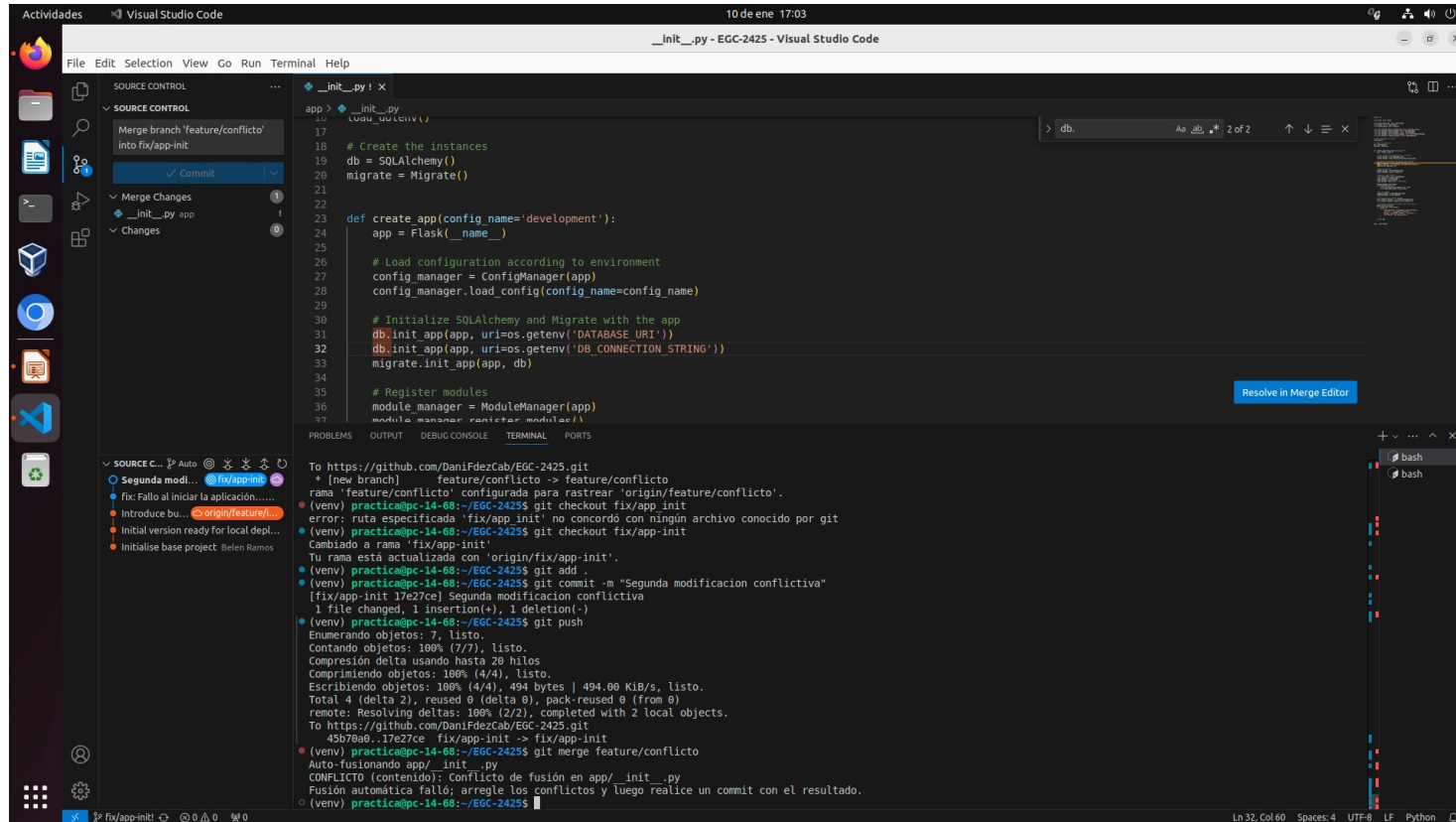
The screenshot shows the Visual Studio Code interface with the following components:

- Source Control Panel (Left):** Displays the merge process for branch 'feature/conflicto' into 'fix/app-init'. It shows a conflict in the file `__init__.py`.
- Editor (Center):** Shows the Python code for `__init__.py`. The code includes database initialization and a `create_app` function. A merge conflict is visible in the `db.init_app` call, with the 'HEAD (Current Change)' and 'feature/conflicto (Incoming Change)' versions highlighted in green and blue respectively.
- Terminal (Bottom):** Shows the command history and output of the merge process. The output indicates that the merge was successful, with the following commands and results:

```
To https://github.com/DaniFdezCab/EGC-2425.git
* [new branch] feature/conflicto -> feature/conflicto
rama 'feature/conflicto' configurada para rastrear 'origin/feature/conflicto'.
(venv) practica@pc-14-68:~/EGC-2425$ git checkout fix/app-init
error: ruta especificada 'fix/app-init' no concorda con ningún archivo conocido por git
(venv) practica@pc-14-68:~/EGC-2425$ git checkout fix/app-init
Cambiado a rama 'fix/app-init'
Tu rama está actualizada con 'origin/fix/app-init'.
(venv) practica@pc-14-68:~/EGC-2425$ git add .
(venv) practica@pc-14-68:~/EGC-2425$ git commit -m "Segunda modificacion conflictiva"
[fix/app-init 17e27ce] Segunda modificacion conflictiva
1 file changed, 1 insertion(+), 1 deletion(-)
(venv) practica@pc-14-68:~/EGC-2425$ git push
Enumerando objetos: 7, listo.
Contando objetos: 100% (7/7), listo.
Compresión delta usando hasta 20 hilos.
Comprimiendo objetos: 100% (4/4), listo.
Escribiendo objetos: 100% (4/4), 494 bytes | 494.00 KiB/s, listo.
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/DaniFdezCab/EGC-2425.git
45b70a0..17e27ce fix/app-init -> fix/app-init
(venv) practica@pc-14-68:~/EGC-2425$ git merge feature/conflicto
Auto-fusionando app/_init_.py
CONFLICTO (contenido): Conflicto de fusión en app/_init_.py
Fusión automática falló; arregle los conflictos y luego realice un commit con el resultado.
(venv) practica@pc-14-68:~/EGC-2425$
```

Ejercicio Git

Apartado 7



The screenshot shows the Visual Studio Code interface. The main editor displays a Python file named `__init__.py` with the following code:

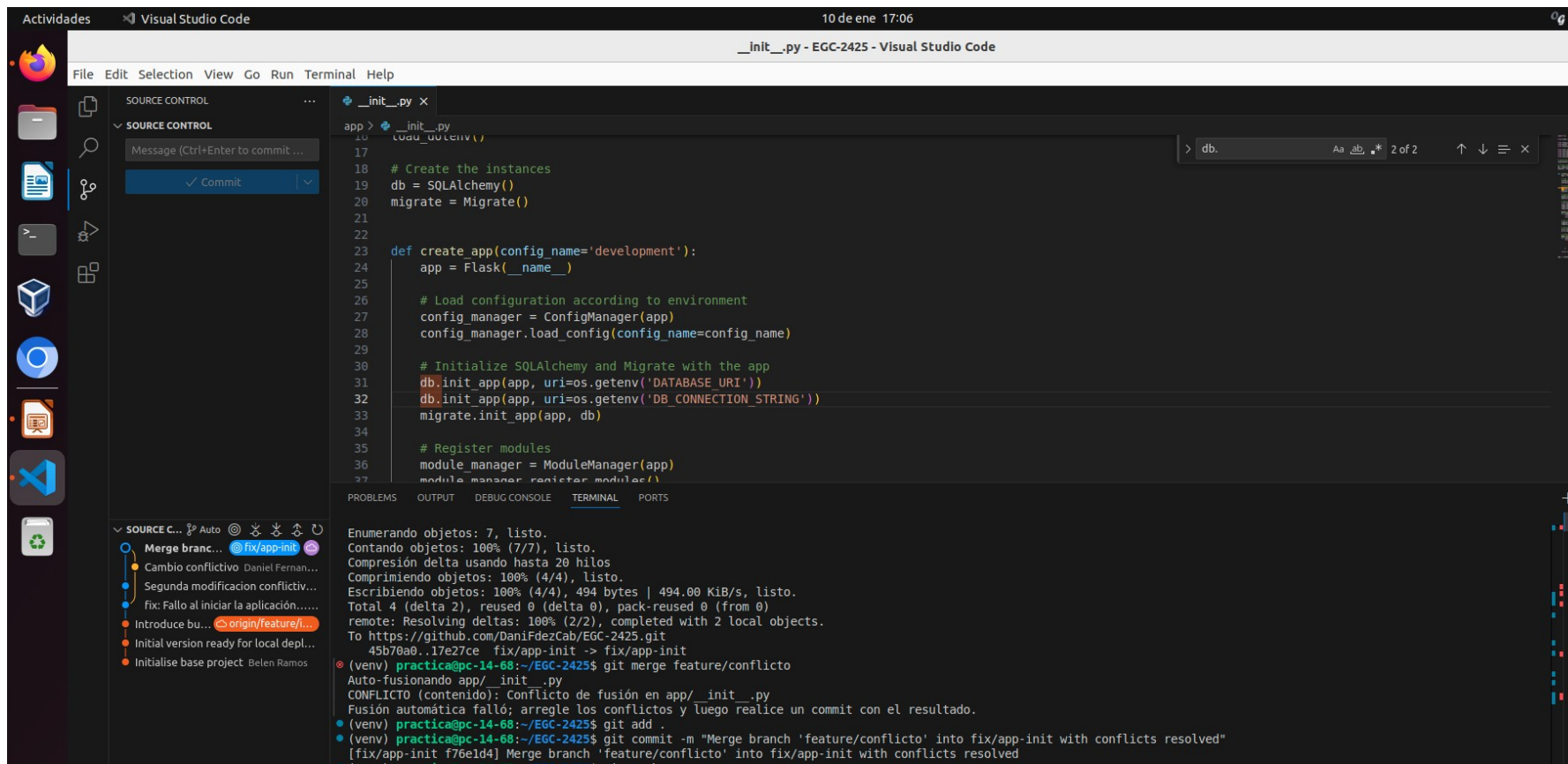
```
10 from flask import Flask
11 from flask_sqlalchemy import SQLAlchemy
12
13 # Create the instances
14 db = SQLAlchemy()
15 migrate = Migrate()
16
17 def create_app(config_name='development'):
18     app = Flask(__name__)
19
20     # Load configuration according to environment
21     config_manager = ConfigManager(app)
22     config_manager.load_config(config_name=config_name)
23
24     # Initialize SQLAlchemy and Migrate with the app
25     db.init_app(app, url=os.getenv('DATABASE_URI'))
26     migrate.init_app(app, url=os.getenv('DB_CONNECTION_STRING'))
27
28     # Register modules
29     module_manager = ModuleManager(app)
30     module_manager.register_modules()
```

The left sidebar shows the SOURCE CONTROL panel with a list of changes. The bottom panel shows the TERMINAL window with the following output:

```
To https://github.com/DaniFdezCab/EGC-2425.git
* [new branch] feature/conflicto -> feature/conflicto
rama 'feature/conflicto' configurada para rastrear 'origin/feature/conflicto'.
(venv) practica@pc-14-68:~/EGC-2425$ git checkout fix/app_init
error: ruta especificada 'fix/app_init' no concordo con ningún archivo conocido por git
(venv) practica@pc-14-68:~/EGC-2425$ git checkout fix/app_init
Cambiado a rama 'fix/app_init'
Tu rama está actualizada con 'origin/fix/app_init'.
(venv) practica@pc-14-68:~/EGC-2425$ git add .
(venv) practica@pc-14-68:~/EGC-2425$ git commit -m "Segunda modificacion conflictiva"
[fix/app-init 17e27ce] Segunda modificacion conflictiva
1 file changed, 1 insertion(+), 1 deletion(-)
(venv) practica@pc-14-68:~/EGC-2425$ git push
Enumerando objetos: 7, listo.
Contando objetos: 100% (7/7), listo.
Compresión delta usando hasta 20 hilos.
Comprimiendo objetos: 100% (4/4), listo.
Escribiendo objetos: 100% (4/4), 494 bytes | 494.00 KiB/s, listo.
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/DaniFdezCab/EGC-2425.git
45b70a0..17e27ce fix/app-init -> fix/app-init
(venv) practica@pc-14-68:~/EGC-2425$ git merge feature/conflicto
Auto-fusionando app/_init_.py
CONFLICTO (contenido): Conflicto de fusión en app/_init_.py
Fusión automática falló; arregle los conflictos y luego realice un commit con el resultado.
(venv) practica@pc-14-68:~/EGC-2425$
```

Ejercicio Git

Apartado 7



The screenshot shows the Visual Studio Code interface. The top bar indicates the file is `_init_.py` in the `EGC-2425` project. The left sidebar shows the 'SOURCE CONTROL' view with a list of commits. The main editor displays the `_init_.py` file, which contains Python code for initializing a Flask application with SQLAlchemy and Migrate. The bottom panel shows the 'TERMINAL' view with the output of a `git merge` command, indicating a successful merge of the `feature/conflicto` branch into `fix/app-init`.

```
__init__.py
10 load_config()
17
18 # Create the instances
19 db = SQLAlchemy()
20 migrate = Migrate()
21
22
23 def create_app(config_name='development'):
24     app = Flask(__name__)
25
26     # Load configuration according to environment
27     config_manager = ConfigManager(app)
28     config_manager.load_config(config_name=config_name)
29
30     # Initialize SQLAlchemy and Migrate with the app
31     db.init_app(app, uri=os.getenv('DATABASE_URI'))
32     db.init_app(app, uri=os.getenv('DB_CONNECTION_STRING'))
33     migrate.init_app(app, db)
34
35     # Register modules
36     module_manager = ModuleManager(app)
37     module_manager.register_modules()
```

Enumerando objetos: 7, listo.
Contando objetos: 100% (7/7), listo.
Compresión delta usando hasta 20 hilos
Comprimiendo objetos: 100% (4/4), listo.
Escribiendo objetos: 100% (4/4), 494 bytes | 494.00 KiB/s, listo.
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/DaniFdezCab/EGC-2425.git
45b70a0..17e27ce fix/app-init -> fix/app-init
(venv) practica@pc-14-68:~/EGC-2425\$ git merge feature/conflicto
Auto-fusionando app/ _init_.py
CONFLICTO (contenido): Conflicto de fusión en app/ _init_.py
Fusión automática falló; arregle los conflictos y luego realice un commit con el resultado.
(venv) practica@pc-14-68:~/EGC-2425\$ git add .
(venv) practica@pc-14-68:~/EGC-2425\$ git commit -m "Merge branch 'feature/conflicto' into fix/app-init with conflicts resolved"
[fix/app-init f761d4] Merge branch 'feature/conflicto' into fix/app-init with conflicts resolved
(venv) practica@pc-14-68:~/EGC-2425\$ git push

Ejercicio Git

Apartado 7

Actividades Visual Studio Code 10 de ene 17:06

__init__.py - EGC-2425 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

SOURCE CONTROL

Message (Ctrl+Enter to commit...)

Commit

app > __init__.py

```
16 from flask import Flask
17
18 # Create the instances
19 db = SQLAlchemy()
20 migrate = Migrate()
21
22
23 def create_app(config_name='development'):
24     app = Flask(__name__)
25
26     # Load configuration according to environment
27     config_manager = ConfigManager(app)
28     config_manager.load_config(config_name=config_name)
29
30     # Initialize SQLAlchemy and Migrate with the app
31     db.init_app(app, uri=os.getenv('DATABASE_URI'))
32     db.init_app(app, uri=os.getenv('DB_CONNECTION_STRING'))
33     migrate.init_app(app, db)
34
35     # Register modules
36     module_manager = ModuleManager(app)
37     module_manager.register_modules()
```

SOURCE CONTROL

- Merge branch 'feature/conflicto' into fix/app-init
- Cambio conflictivo Daniel Fernan...
- Segunda modificacion conflictiv...
- fix: Fallo al iniciar la aplicación.....
- Introduce bu... origin/feature/f...
- Initial version ready for local depl...
- Initialise base project Belen Ramos

Enumerando objetos: 7, listo.
Contando objetos: 100% (7/7), listo.
Compresión delta usando hasta 20 hilos
Comprimiendo objetos: 100% (4/4), listo.
Escribiendo objetos: 100% (4/4), 494 bytes | 494.00 KiB/s, listo.
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/DaniFdezCab/EGC-2425.git
45b70a0..17e27ce fix/app-init -> fix/app-init

(venv) practica@pc-14-68:~/EGC-2425\$ git merge feature/conflicto

Auto-fusionando app/ __init__.py
CONFLICTO (contenido): Conflicto de fusión en app/ __init__.py
Fusión automática falló; arregle los conflictos y luego realice un commit con el resultado.

(venv) practica@pc-14-68:~/EGC-2425\$ git add .

(venv) practica@pc-14-68:~/EGC-2425\$ git commit -m "Merge branch 'feature/conflicto' into fix/app-init with conflicts resolved"

[fix/app-init f76e1d4] Merge branch 'feature/conflicto' into fix/app-init with conflicts resolved

(venv) practica@pc-14-68:~/EGC-2425\$ git push

Enumerando objetos: 10, listo.
Contando objetos: 100% (10/10), listo.
Compresión delta usando hasta 20 hilos
Comprimiendo objetos: 100% (4/4), listo.
Escribiendo objetos: 100% (4/4), 538 bytes | 538.00 KiB/s, listo.
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/DaniFdezCab/EGC-2425.git
17e27ce..f76e1d4 fix/app-init -> fix/app-init

(venv) practica@pc-14-68:~/EGC-2425\$

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

bash

Ln 32, Col 60 Spaces: 4 UTF-8 LF Python

Ejercicio Git

Apartado 8

```
(venv) practica@pc-14-68:~/EGC-2425$ git checkout hotfix/bug-critical
rama 'hotfix/bug-critical' configurada para rastrear 'origin/hotfix/bug-critical'.
Cambiado a nueva rama 'hotfix/bug-critical'
(venv) practica@pc-14-68:~/EGC-2425$ git log
commit 678e7dc6853fblblb64c5116e6b44e4a5054ab (HEAD -> hotfix/bug-critical, origin/hotfix/bug-critical)
Author: Belen Ramos <brgutierrez@us.es>
Date: Wed Jan 8 09:29:03 2025 +0100
```

Fix the bug in the view_dataset card by uncommenting the card section, restoring the dataset view functionality

```
commit 7260a34ef4f445bc39c57aad9b8aecb4de15fd39 (origin/main, origin/HEAD, main)
Author: Belen Ramos <brgutierrez@us.es>
Date: Wed Jan 8 09:17:58 2025 +0100
```

Introduce a bug in the view_dataset card for the exam by commenting out the card section to simulate an error

```
commit 546eea4205ef86c27030f720ac6521d7495c3452
Author: Belen Ramos <brgutierrez@us.es>
Date: Wed Jan 8 09:16:01 2025 +0100
```

Initialise base project

```
(venv) practica@pc-14-68:~/EGC-2425$
```

Ejercicio Git

Apartado 9

```
• (venv) practica@pc-14-68:~/EGC-2425$ git checkout main
Cambiado a rama 'main'
Tu rama está actualizada con 'origin/main'.
• (venv) practica@pc-14-68:~/EGC-2425$ git cherry-pick 678e7dc6853fb1e1b1b64c5116e6b44e4a5054ab
[main 53efeaf] Fix the bug in the view_dataset card by uncommenting the card section, restoring the dataset view functionality
Author: Belen Ramos <brgutierrez@us.es>
Date: Wed Jan 8 09:29:03 2025 +0100
2 files changed, 3 insertions(+), 2 deletions(-)
• (venv) practica@pc-14-68:~/EGC-2425$ git push
Enumerando objetos: 17, listo.
Contando objetos: 100% (17/17), listo.
Compresión delta usando hasta 20 hilos
Comprimiendo objetos: 100% (6/6), listo.
Escribiendo objetos: 100% (9/9), 734 bytes | 734.00 KiB/s, listo.
Total 9 (delta 6), reused 3 (delta 1), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (6/6), completed with 6 local objects.
To https://github.com/DaniFdezCab/EGC-2425.git
7260a34..53efeaf main -> main
• (venv) practica@pc-14-68:~/EGC-2425$
```


Ejercicio GitHub Actions

Apartado 1

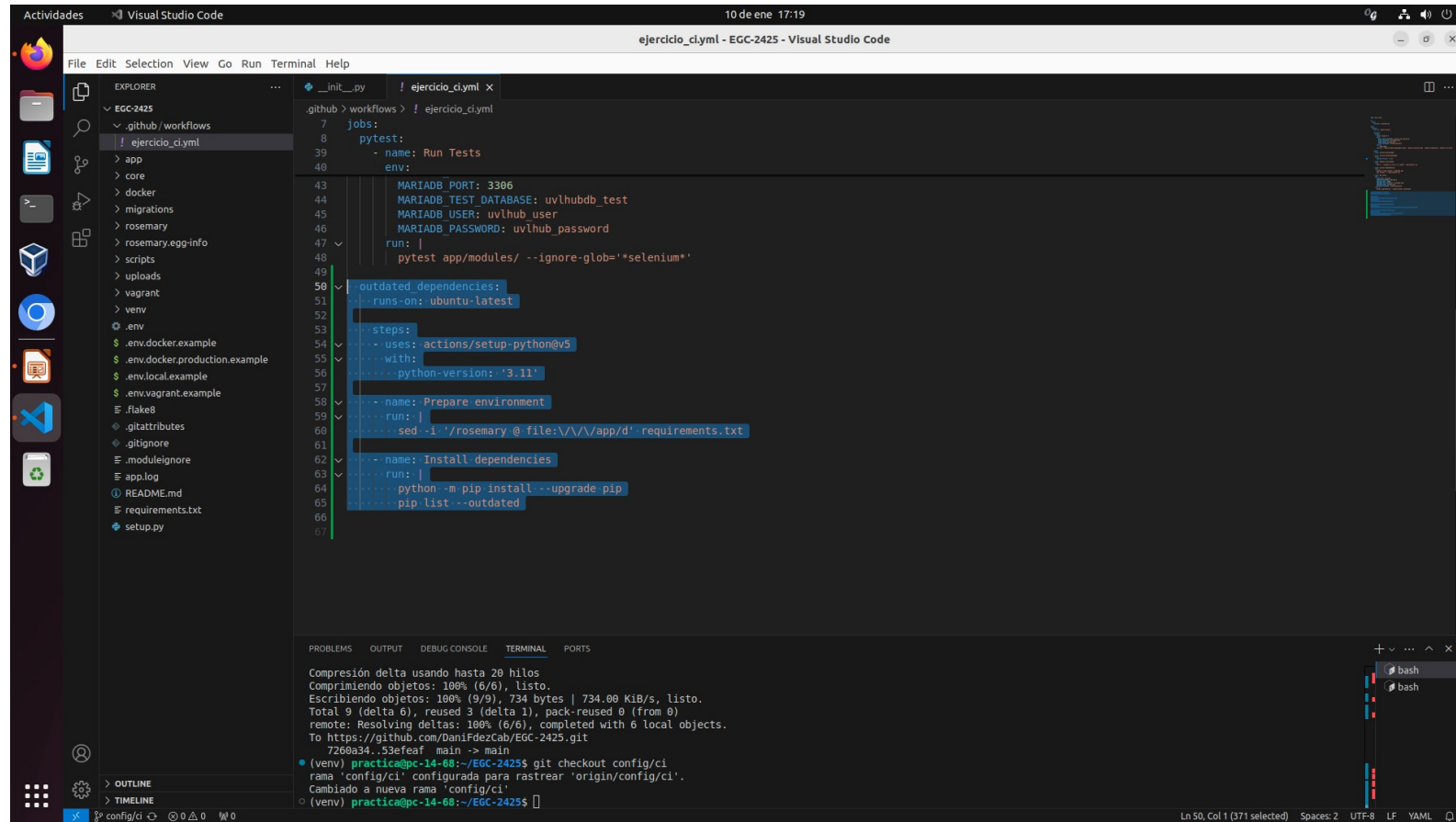
The screenshot shows the Visual Studio Code interface with the following components:

- EXPLORER:** Displays the file structure of the 'ejercicio_ci.yml' project, including folders like 'app', 'core', 'docker', 'migrations', 'rosemary', 'scripts', 'uploads', 'vagrant', 'venv', and files like '.env', '.env.docker.example', '.env.local.example', '.env.vagrant.example', '.flake8', '.gitattributes', '.gitignore', '.moduleignore', 'app.log', 'README.md', 'requirements.txt', and 'setup.py'.
- EDITOR:** Shows the 'ejercicio_ci.yml' workflow file with the following content:

```
github > workflows > ! ejercicio_ci.yml
7 jobs:
8   pytest:
11     services:
12       mysql:
13         options: --health-check=mysqladmin ping --health-interval=10s --health-timeout=5s --health-retries=3
22
23     steps:
24       - uses: actions/checkout@v4
25
26       - uses: actions/setup-python@v5
27         with:
28           python-version: '3.11'
29
30       - name: Prepare environment
31         run: |
32           sed -i '/rosemary @ file:\V/V/app/d' requirements.txt
33
34       - name: Install dependencies
35         run: |
36           python -m pip install --upgrade pip
37           pip install -r requirements.txt
38
```
- TERMINAL:** Displays the commit history and build logs for the workflow.
 - Commit 546eea4205ef86c27030f720ac6521d7495c3452 by Belen Ramos <brgutierrez@us.es> on Wed Jan 8 09:16:01 2025 +0100.
 - Initialise base project
 - (venv) practica@pc-14-68:~/EGC-2425\$ git checkout main
 - Cambiado a rama 'main'
 - Tu rama está actualizada con 'origin/main'.
 - (venv) practica@pc-14-68:~/EGC-2425\$ git cherry-pick 678e7dc6853fbl1b1b64c5116e6b44e4a5054ab
 - [main 53feaf] Fix the bug in the view dataset card by uncommenting the card section, restoring the dataset view functionality
 - Author: Belen Ramos <brgutierrez@us.es>
 - Date: Wed Jan 8 09:29:03 2025 +0100
 - 2 files changed, 3 insertions(+), 2 deletions(-)
 - (venv) practica@pc-14-68:~/EGC-2425\$ git push
 - Enumerando objetos: 17, listo.
 - Contando objetos: 100% (17/17), listo.
 - Compresión delta usando hasta 20 hilos.
 - Comprimiendo objetos: 100% (6/6), listo.
 - Escribiendo objetos: 100% (9/9), 734 bytes | 734.00 KiB/s, listo.
 - Total 9 (delta 6), reused 3 (delta 1), pack-reused 0 (from 0)
 - remote: Resolving deltas: 100% (6/6), completed with 6 local objects.
 - To https://github.com/DaniFdezCab/EGC-2425.git
 - 7260a34..53feaf main -> main
 - (venv) practica@pc-14-68:~/EGC-2425\$ git checkout config/ci
 - rama 'config/ci' configurada para rastrear 'origin/config/ci'.
 - Cambiado a nueva rama 'config/ci'
 - (venv) practica@pc-14-68:~/EGC-2425\$

Ejercicio GitHub Actions

Apartado 2



The screenshot shows the Visual Studio Code interface with a file explorer on the left and a code editor in the center. The file explorer shows a project structure for 'EGC-2425' with a '.github/workflows' directory containing 'ejercicio_ci.yml'. The code editor displays the content of 'ejercicio_ci.yml', which is a GitHub Actions workflow for running tests. The workflow includes a job named 'pytest' with a name 'Run Tests' and an environment configuration. The steps include setting up the environment, installing dependencies, and running the tests. The terminal at the bottom shows the output of the workflow, including the checkout of the repository and the execution of the tests.

```
ejercicio_ci.yml - EGC-2425 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER
EGC-2425
  .github/workflows
    ! ejercicio_ci.yml
  > app
  > core
  > docker
  > migrations
  > rosemary
  > rosemary.egg-info
  > scripts
  > uploads
  > vagrant
  > venv
  .env
  .env.docker.example
  .env.docker.production.example
  .env.local.example
  .env.vagrant.example
  .flake8
  .gitattributes
  .gitignore
  .moduleignore
  app.log
  README.md
  requirements.txt
  setup.py

.github/workflows > ! ejercicio_ci.yml
7 jobs:
8   pytest:
39     - name: Run Tests
40       env:
43         MARIADB_PORT: 3306
44         MARIADB_TEST_DATABASE: uvlhubdb_test
45         MARIADB_USER: uvlhub user
46         MARIADB_PASSWORD: uvlhub_password
47       run: |
48         pytest app/modules/ --ignore-glob='*selenium*'
49
50     outdated_dependencies:
51       runs-on: ubuntu-latest
52
53     steps:
54       - uses: actions/setup-python@v5
55       with:
56         python-version: '3.11'
57
58       - name: Prepare environment
59       run: |
60         sed -i 's/rosemary @ file:V\:\/\/\app\d/ requirements.txt
61
62       - name: Install dependencies
63       run: |
64         python -m pip install --upgrade pip
65         pip list --outdated
66
67

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

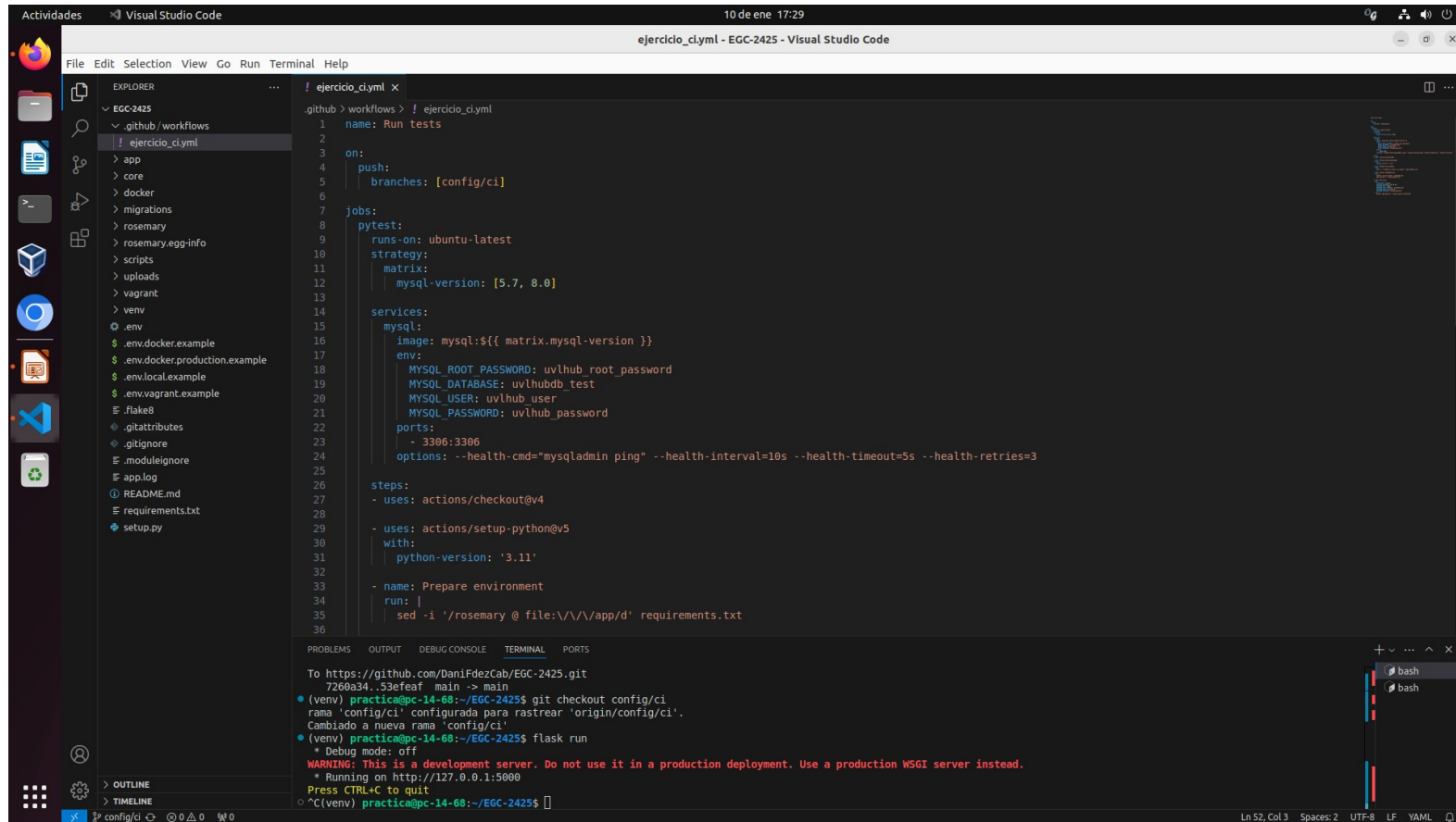
Compresión delta usando hasta 20 hilos.
Comprimiendo objetos: 100% (6/6), listo.
Escribiendo objetos: 100% (9/9), 734 bytes | 734.00 KiB/s, listo.
Total 9 (delta 6), reused 3 (delta 1), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (6/6), completed with 6 local objects.
To https://github.com/DaniFdezCab/EGC-2425.git
7200a34..53efef main -> main
• (venv) practica@pc-14-68:~/EGC-2425$ git checkout config/ci
rama 'config/ci' configurada para rastrear 'origin/config/ci'.
Cambiado a nueva rama 'config/ci'
• (venv) practica@pc-14-68:~/EGC-2425$
```

Ejercicio GitHub Actions

Apartado 3

Ejercicio GitHub Actions

Apartado 4



The screenshot displays the Visual Studio Code interface with the file `ejercicio_ci.yml` open in the editor. The file is a GitHub Actions workflow for running tests. The left sidebar shows the Explorer view with the file structure of the project, including a `.github/workflows` directory. The bottom panel shows the Terminal view with a bash shell running commands to checkout the repository, set up the environment, and run tests.

```
github > workflows > ! ejercicio_ci.yml
1 name: Run tests
2
3 on:
4   push:
5     branches: [config/ci]
6
7 jobs:
8   pytest:
9     runs-on: ubuntu-latest
10    strategy:
11      matrix:
12        mysql-version: [5.7, 8.0]
13
14    services:
15      mysql:
16        image: mysql:${{ matrix.mysql-version }}
17        env:
18          MYSQL_ROOT_PASSWORD: uvhub_root_password
19          MYSQL_DATABASE: uvhubdb_test
20          MYSQL_USER: uvhub_user
21          MYSQL_PASSWORD: uvhub_password
22        ports:
23          - 3306:3306
24        options: --health-cmd="mysqladmin ping" --health-interval=10s --health-timeout=5s --health-retries=3
25
26    steps:
27      - uses: actions/checkout@v4
28
29      - uses: actions/setup-python@v5
30        with:
31          python-version: '3.11'
32
33      - name: Prepare environment
34        run: |
35          sed -i '/rosemary @ file:V\\V\\app/d' requirements.txt
36
```

Terminal output:

```
To https://github.com/DaniFdezCab/EGC-2425.git
7269a34..53efef main -> main
• (venv) practica@pc-14-68:~/EGC-2425$ git checkout config/ci
rama 'config/ci' configurada para rastrear 'origin/config/ci'.
Cambiado a nueva rama 'config/ci'
• (venv) practica@pc-14-68:~/EGC-2425$ flask run
 * Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on http://127.0.0.1:5000
Press CTRL+C to quit
^C(venv) practica@pc-14-68:~/EGC-2425$
```

Ejercicio GitHub Actions

Apartado 5

Ejercicio Docker

Apartado 1

```
• (venv) practica@pc-14-68:~/EGC-2425$ docker compose -f docker/docker-compose.dev.yml up -d
[+] Running 4/4
 ✓ Network docker_uvlhub_network      Created                                0.1s
 ✓ Container mariadb_container        Started                             0.3s
 ✓ Container web_app_container        Started                             0.4s
 ✓ Container nginx_web_server_container Started                             0.6s
• (venv) practica@pc-14-68:~/EGC-2425$ docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
41bc83e6dbf7	nginx:latest	"/docker-entrypoint..."	5 seconds ago	Up 4 seconds	0.0.0.0:80->80/tcp, :::80->80/tcp	nginx_web_server_container
bc4ee8a1bcf2	drorganvidez/uvlhub:dev	"sh -c 'sh /app/dock..."	6 seconds ago	Up 4 seconds	5000/tcp	web_app_container
263e3623cd3b	docker-db	"docker-entrypoint.s..."	6 seconds ago	Up 5 seconds	0.0.0.0:3306->3306/tcp, :::3306->3306/tcp	mariadb_container

```
• (venv) practica@pc-14-68:~/EGC-2425$
```

Ejercicio Docker

Apartado 2

The screenshot shows the Visual Studio Code interface with a project named 'EGC-2425'. The Explorer sidebar on the left shows a directory structure with files like 'app', 'core', 'docker', 'entrypoints', 'images', and various Dockerfile and compose files. The main editor displays the 'development_entrypoint.sh' script, which is a shell script for a Docker container. The script includes comments and commands for database initialization, migration, and running the Flask application. The terminal at the bottom shows the execution of 'docker compose up' and 'docker ps' commands, along with their output.

```
development_entrypoint.sh - EGC-2425 - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER
EGC-2425
├── app
├── core
├── docker
├── entrypoints
│   ├── development_entrypoint.sh
│   ├── production_entrypoint.sh
│   └── render_entrypoint.sh
├── images
├── .dockerignore
├── Dockerfile.dev
├── Dockerfile.locust
├── Dockerfile.mariadb
├── Dockerfile.prod
├── Dockerfile.render
├── Dockerfile.webhook
├── letsencrypt
├── nginx
├── public
├── docker-compose.dev.yml
├── docker-compose.prod.ssl.yml
├── docker-compose.prod.webhook.yml
├── docker-compose.prod.yml
├── migrations
├── rosemary
├── rosemary.egg-info
├── scripts
├── uploads
├── vagrant
├── venv
├── .env
├── .env.docker.example
├── .env.docker.production.example
├── .env.local.example
├── .env.vagrant.example
├── .flake8
├── .gitattributes
├── .gitignore
├── .moduleignore
├── app.log
├── ...
└── ...

$ development_entrypoint.sh M X

docker > entrypoints > $ development_entrypoint.sh
35 if [ $(mariadb -u $MARIADB_USER -p$MARIADB_PASSWORD -h $MARIADB_HOSTNAME -P $MARIADB_PORT -D $MARIADB_DATABASE -sse "SELECT COUNT(*) FROM information_schema.tables") = 0 ]; then
42     echo "Latest revision: $LATEST_REVISION"
43
44     # Run the migration process to apply all database schema changes
45     flask db upgrade
46
47     # Seed the database with initial data
48     rosemary db:seed -y
49
50 else
51     echo "Database already initialized, updating migrations..."
52
53     # Get the current revision to avoid duplicate stamp
54     CURRENT_REVISION=$(mariadb -u $MARIADB_USER -p$MARIADB_PASSWORD -h $MARIADB_HOSTNAME -P $MARIADB_PORT -D $MARIADB_DATABASE -sse "SELECT version_num FROM alembic_version")
55
56     if [ -z "$CURRENT_REVISION" ]; then
57         # If no current revision, stamp with the latest revision
58         flask db stamp head
59     fi
60
61     # Run the migration process to apply all database schema changes
62     flask db upgrade
63
64 fi
65
66 # Start the Flask application with specified host and port, enabling reload and debug mode
67 exec flask run --host=0.0.0.0 --port=5000 --reload
68

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

• (venv) practica@pc-14-68:~/EGC-2425$ docker compose -f docker/docker-compose.dev.yml up -d
[+] Running 4/4
✓ Network docker_vulhub_network Created 0.1s
✓ Container mariadb container Started 0.3s
✓ Container web_app container Started 0.4s
✓ Container nginx_web_server container Started 0.6s

• (venv) practica@pc-14-68:~/EGC-2425$ docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
41bc83e6dbf7 nginx:latest "/docker-entrypoint..." 5 seconds ago Up 4 seconds 0.0.0.0:80->80/tcp, :::80->80/tcp nginx_web_server_container
bc4ee8a1bcf2 drorgandeviz/vulhub:dev "sh -c 'sh /app/dock..." 6 seconds ago Up 4 seconds 5000/tcp web_app_container
263e3623cd3b docker-db "docker-entrypoint.s..." 6 seconds ago Up 5 seconds 0.0.0.0:3306->3306/tcp, :::3306->3306/tcp mariadb_container

Ln 65, Col 1 (143 selected) Spaces: 4 UTF-8 LF Shell Script
```

Ejercicio Docker

Apartado 3

The screenshot displays a Docker development environment. On the left, a terminal window shows the command prompt with the user 'Daniel Fernandez' and the current directory 'chore/docker'. The terminal output indicates that the Docker development environment is set up and ready for use. Below the terminal, a file explorer shows the contents of the 'chore/docker' directory, including files like 'Dockerfile', 'docker-compose.yml', and 'README.md'. The main part of the screenshot shows a web browser displaying the 'uvlhub.io' website. The website features a sidebar with navigation links (Home, Explore, Team, Login, Sign Up) and a main content area titled 'Latest datasets'. This area lists three sample datasets, each with a title, date, description, author information, and download links. The right sidebar contains 'Hub statistics' (4 datasets, 12 feature models, 0 datasets viewed, 0 feature models viewed, 0 datasets downloaded, 0 feature models downloaded) and a 'Related publication' section with a link to a paper by David Romero-Organvitez et al. at the bottom, there is a 'Let's get started!' section with a 'Sign up' button.

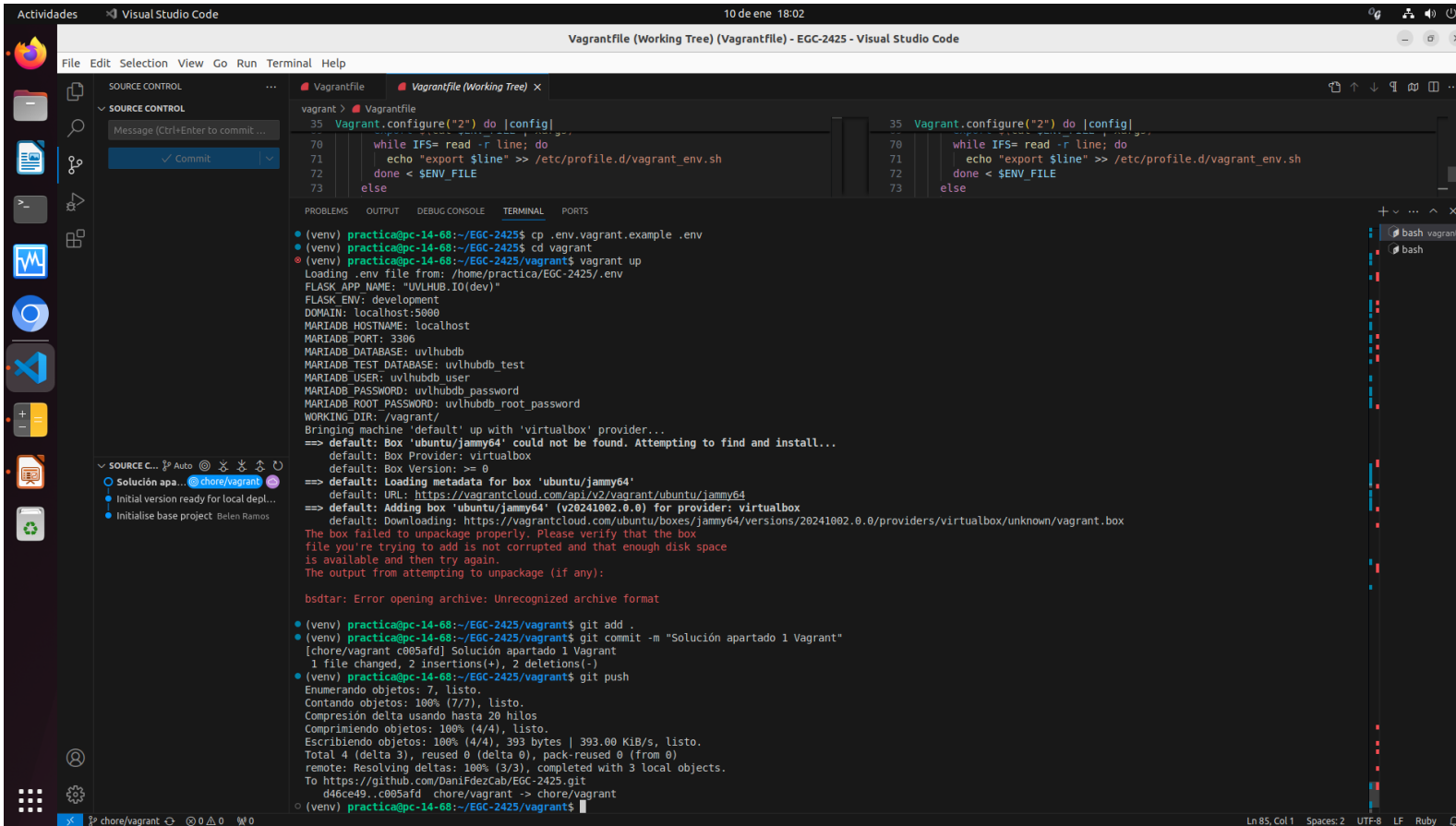
Ejercicio Vagrant

Apartado 1

```
Vagrantfile M x requirements.txt
vagrant > Vagrantfile
35 Vagrant.configure("2") do |config|
48   config.vm.provision "ansible" do |ansible|
50     ansible.extra_vars = {
60       mariadb_root_password: ENV['MARIADB_ROOT_PASSWORD'],
61       working_dir: ENV['WORKING_DIR']
62     }
63   end
64
65   # Load environment variables on vagrant ssh
66   config.vm.provision "shell", inline: <<-SHELL
67     ENV_FILE="/vagrant/.env"
68     if [ -f $ENV_FILE ]; then
69       export $(cat $ENV_FILE | xargs)
70       while IFS= read -r line; do
71         echo "export $line" >> /etc/profile.d/vagrant_env.sh
72       done < $ENV_FILE
73     else
74       echo "Env file not found: $ENV_FILE"
75       exit 1
76     fi
77   SHELL
78
79   config.vm.provision "shell", run: "always", inline: <<-SHELL
80     echo 'source /etc/profile.d/vagrant_env.sh' >> /home/vagrant/.bashrc
81   SHELL
82
83   # Provider configuration
84   config.vm.provider "virtualbox" do |vb|
85     vb.memory = "4096"
86     vb.cpus = 6
87   end
88 end
89
```

Ejercicio Vagrant

Apartado 2



The screenshot shows the Visual Studio Code interface with a Vagrantfile (Working Tree) open. The Vagrantfile contains a `Vagrant.configure("2")` block with a `do |config|` section. The terminal output shows the following commands and their results:

```
(venv) practica@pc-14-68:~/EGC-2425$ cp .env.vagrant.example .env
(venv) practica@pc-14-68:~/EGC-2425$ cd vagrant
(venv) practica@pc-14-68:~/EGC-2425/vagrant$ vagrant up
Loading .env file from: /home/practica/EGC-2425/.env
FLASK_APP_NAME: "UUVHUB.IO(dev)"
FLASK_ENV: development
DOMAIN: localhost:5000
MARIADB_HOSTNAME: localhost
MARIADB_PORT: 3306
MARIADB_DATABASE: uvlhubdb
MARIADB_TEST_DATABASE: uvlhubdb_test
MARIADB_USER: uvlhubdb user
MARIADB_PASSWORD: uvlhubdb password
MARIADB_ROOT_PASSWORD: uvlhubdb_root_password
WORKING_DIR: /vagrant/
Bringing machine 'default' up with 'virtualbox' provider...
==> default: Box 'ubuntu/jammy64' could not be found. Attempting to find and install...
default: Box Provider: virtualbox
default: Box Version: >= 0
==> default: Loading metadata for box 'ubuntu/jammy64'
default: URL: https://vagrantcloud.com/api/v2/vagrant/ubuntu/jammy64
==> default: Adding box 'ubuntu/jammy64' (v20241002.0.0) for provider: virtualbox
default: Downloading: https://vagrantcloud.com/ubuntu/boxes/jammy64/versions/20241002.0.0/providers/virtualbox/unknown/vagrant.box
The box failed to unpack properly. Please verify that the box
file you're trying to add is not corrupted and that enough disk space
is available and then try again.
The output from attempting to unpack (if any):

bsdtar: Error opening archive: Unrecognized archive format

(venv) practica@pc-14-68:~/EGC-2425/vagrant$ git add .
(venv) practica@pc-14-68:~/EGC-2425/vagrant$ git commit -m "Solución apartado 1 Vagrant"
[chore/vagrant c805afd] Solución apartado 1 Vagrant
1 file changed, 2 insertions(+), 2 deletions(-)
(venv) practica@pc-14-68:~/EGC-2425/vagrant$ git push
Enumerando objetos: 7, listo.
Contando objetos: 100% (7/7), listo.
Compresión delta usando hasta 20 hilos.
Comprimiendo objetos: 100% (4/4), listo.
Escribiendo objetos: 100% (4/4), 393 bytes | 393.00 KiB/s, listo.
Total 4 (delta 3), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (3/3), completed with 3 local objects.
To https://github.com/DaniFdezcab/EGC-2425.git
d46ce49..c805afd chore/vagrant -> chore/vagrant
(venv) practica@pc-14-68:~/EGC-2425/vagrant$
```