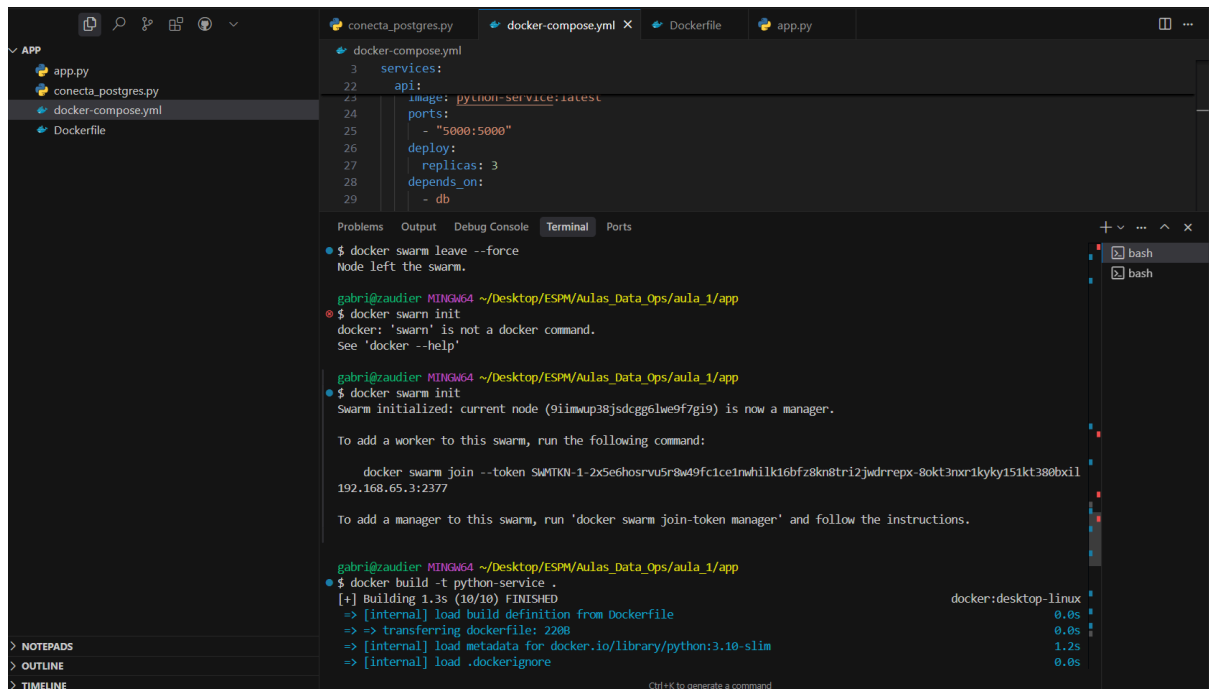


## Trabalho Data Ops 2 - Gabriel Zaude - 195503

Print 1 - docker swarm init

\$ docker build -t python-service .



```
conecta_postgres.py  docker-compose.yml  Dockerfile  app.py
APP
  app.py
  conecta_postgres.py
  docker-compose.yml
  Dockerfile
  docker-compose.yml
22  services:
23    api:
24      image: python-service:latest
25      ports:
26        - "5000:5000"
27      deploy:
28        replicas: 3
29      depends_on:
30        - db

Problems  Output  Debug Console  Terminal  Ports
$ docker swarm leave --force
Node left the swarm.

gabri@zaudier MINGW64 ~/Desktop/ESPM/Aulas_Data_Ops/aula_1/app
$ docker swarm init
docker: 'swarm' is not a docker command.
See 'docker --help'

gabri@zaudier MINGW64 ~/Desktop/ESPM/Aulas_Data_Ops/aula_1/app
$ docker swarm init
Swarm initialized: current node (9iimwup38jsg6lwe9f7gi9) is now a manager.

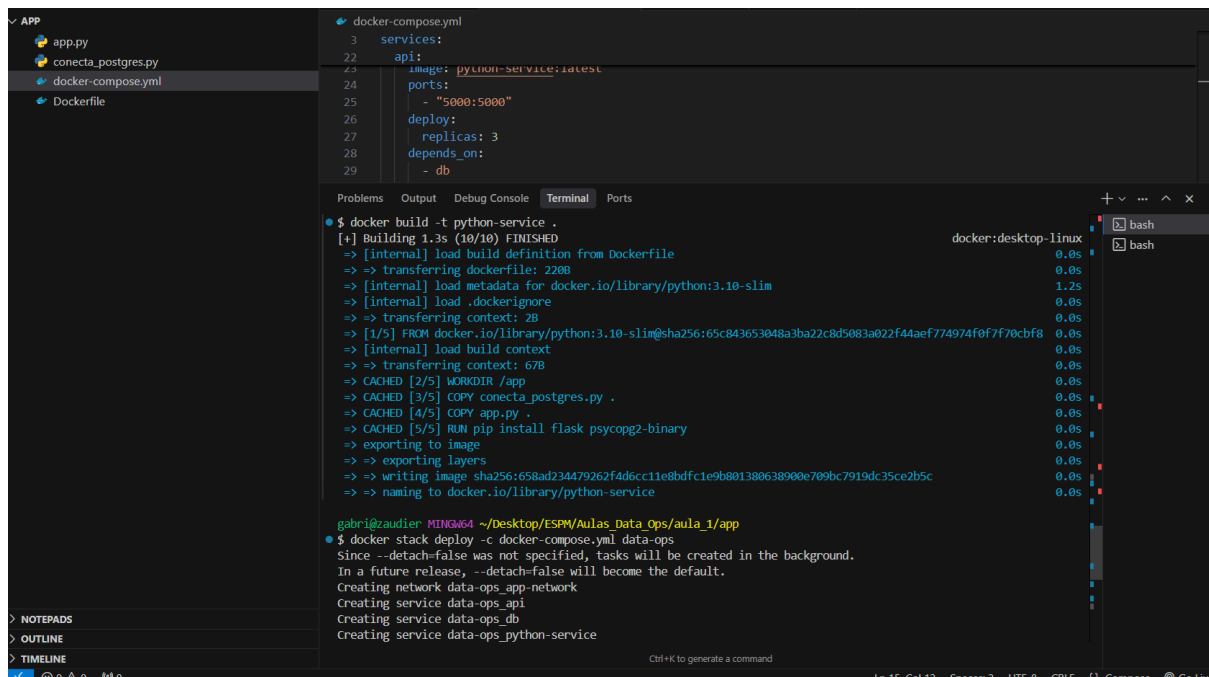
To add a worker to this swarm, run the following command:

    docker swarm join --token SWMTKN-1-2x5e6hosrvu5r8w49fc1e1nwhilk16bfz8kn8tri2jwdrrepx-8okt3nrx1kyky151kt380bxi1
    192.168.65.3:2377

To add a manager to this swarm, run 'docker swarm join-token manager' and follow the instructions.

gabri@zaudier MINGW64 ~/Desktop/ESPM/Aulas_Data_Ops/aula_1/app
$ docker build -t python-service .
[+] Building 1.3s (10/10) FINISHED                                docker:desktop-linux
=> [internal] load build definition from Dockerfile                0.0s
=> => transferring dockerfile: 220B                                0.0s
=> [internal] load metadata for docker.io/library/python:3.10-slim 1.2s
=> [internal] load .dockerignore                                    0.0s
```

Print2 - \$ docker build -t python-service . \$ docker stack deploy -c docker-compose.yml data-ops

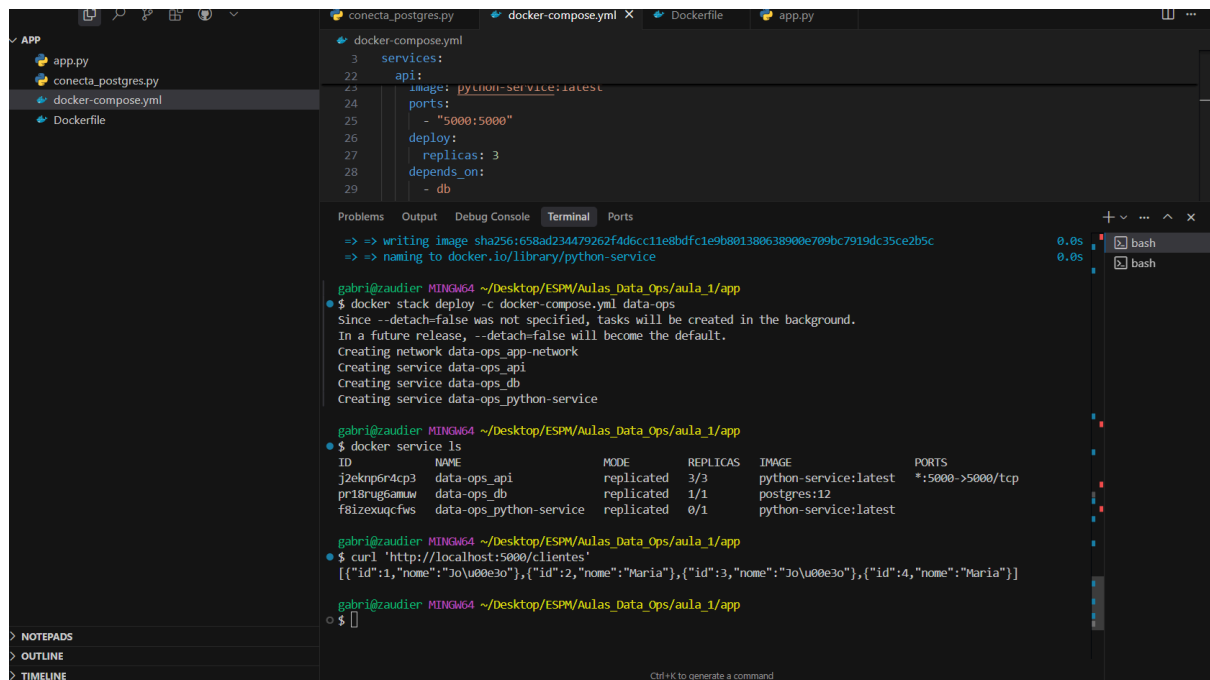


```
docker-compose.yml
APP
  app.py
  conecta_postgres.py
  docker-compose.yml
  Dockerfile
  docker-compose.yml
22  services:
23    api:
24      image: python-service:latest
25      ports:
26        - "5000:5000"
27      deploy:
28        replicas: 3
29      depends_on:
30        - db

Problems  Output  Debug Console  Terminal  Ports
$ docker build -t python-service .
[+] Building 1.3s (10/10) FINISHED                                docker:desktop-linux
=> [internal] load build definition from Dockerfile                0.0s
=> => transferring dockerfile: 220B                                0.0s
=> [internal] load metadata for docker.io/library/python:3.10-slim 1.2s
=> [internal] load .dockerignore                                    0.0s
=> => transferring context: 2B                                       0.0s
=> [1/5] FROM docker.io/library/python:3.10-slim@sha256:65c843653048a3ba22c8d5083a022f44aef774974f0f7f70cbf8 0.0s
=> [internal] load build context                                    0.0s
=> => transferring context: 67B                                       0.0s
=> CACHED [2/5] WORKDIR /app                                         0.0s
=> CACHED [3/5] COPY conecta_postgres.py .                          0.0s
=> CACHED [4/5] COPY app.py .                                        0.0s
=> CACHED [5/5] RUN pip install flask psycopg2-binary              0.0s
=> => exporting layers                                              0.0s
=> => writing image sha256:658ad234479262f4d6cc1e8bdfc1e9b801380638900e709bc7919dc35ce2b5c 0.0s
=> => naming to docker.io/library/python-service                  0.0s

gabri@zaudier MINGW64 ~/Desktop/ESPM/Aulas_Data_Ops/aula_1/app
$ docker stack deploy -c docker-compose.yml data-ops
Since --detach=false was not specified, tasks will be created in the background.
In a future release, --detach=false will become the default.
Creating network data-ops_app-network
Creating service data-ops_api
Creating service data-ops_db
Creating service data-ops_python-service
```

Print 3 - \$ docker service ls    \$ curl 'http://localhost:5000/clientes'



The screenshot shows a VS Code editor with a file explorer on the left containing `app.py`, `conecta_postgres.py`, `docker-compose.yml`, and `Dockerfile`. The main editor displays the `docker-compose.yml` file with the following content:

```
3 services:
22   api:
23     image: python-service:latest
24     ports:
25       - "5000:5000"
26     deploy:
27       replicas: 3
28     depends_on:
29       - db
```

Below the editor, the 'Terminal' tab shows the following commands and output:

```
=> => writing image sha256:658ad234479262f4d6cc11e8bdfc1e9b801380638900e709bc7919dc35ce2b5c
=> => naming to docker.io/library/python-service

gabri@zaudier MINGW64 ~/Desktop/ESPM/Aulas_Data_Ops/aula_1/app
• $ docker stack deploy -c docker-compose.yml data-ops
Since --detach=false was not specified, tasks will be created in the background.
In a future release, --detach=false will become the default.
Creating network data-ops_app-network
Creating service data-ops_api
Creating service data-ops_db
Creating service data-ops_python-service

gabri@zaudier MINGW64 ~/Desktop/ESPM/Aulas_Data_Ops/aula_1/app
• $ docker service ls
```

ID	NAME	MODE	REPLICAS	IMAGE	PORTS
j2eknp6r4cp3	data-ops_api	replicated	3/3	python-service:latest	*:5000->5000/tcp
pr18rug6amuw	data-ops_db	replicated	1/1	postgres:12	
f81zexuqcfw5	data-ops_python-service	replicated	0/1	python-service:latest	

```
gabri@zaudier MINGW64 ~/Desktop/ESPM/Aulas_Data_Ops/aula_1/app
• $ curl 'http://localhost:5000/clientes'
[{"id":1,"nome":"Jo\u00e3o"}, {"id":2,"nome":"Maria"}, {"id":3,"nome":"Jo\u00e3o"}, {"id":4,"nome":"Maria"}]

gabri@zaudier MINGW64 ~/Desktop/ESPM/Aulas_Data_Ops/aula_1/app
• $
```