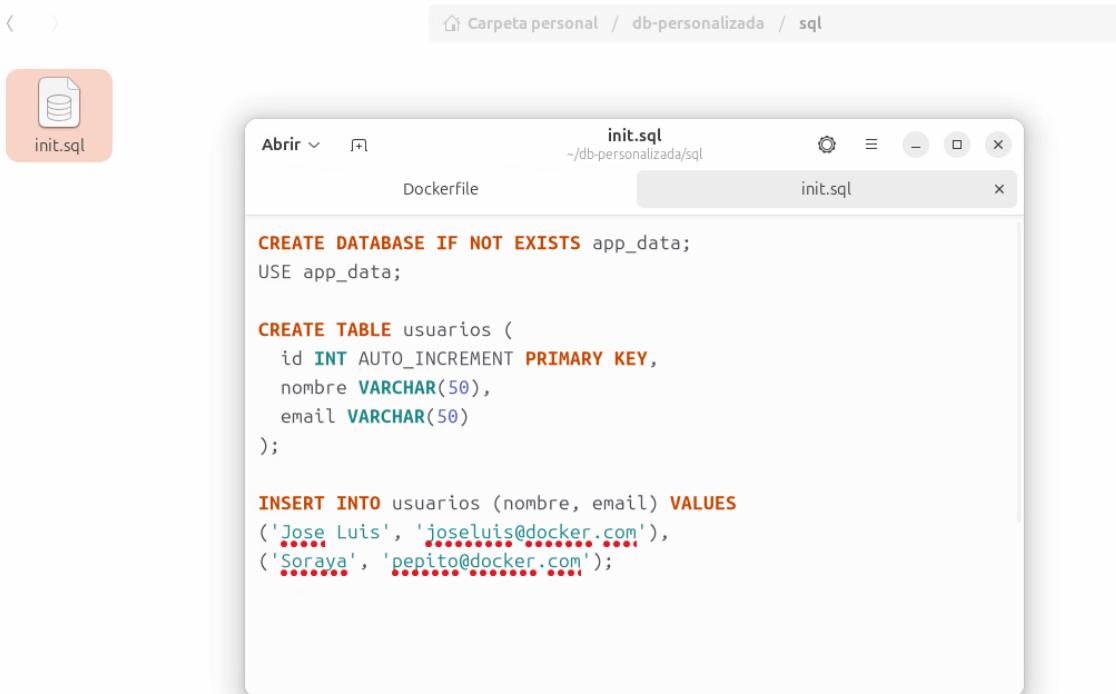


Práctica de Docker: Creación de Imagen de Base de Datos Personalizada con Inicialización y Publicación en Docker Hub

1. Estructura de Archivos

2. Definición del Script de Inicialización (sql/init.sql)

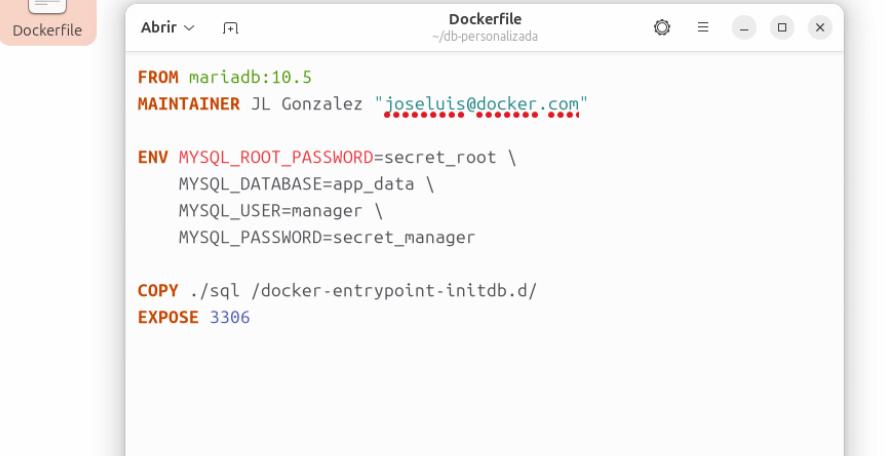


```
CREATE DATABASE IF NOT EXISTS app_data;
USE app_data;

CREATE TABLE usuarios (
    id INT AUTO_INCREMENT PRIMARY KEY,
    nombre VARCHAR(50),
    email VARCHAR(50)
);

INSERT INTO usuarios (nombre, email) VALUES
('José Luis', 'joseluis@docker.com'),
('Soraya', 'pepito@docker.com');
```

3. Creación del Dockerfile



The screenshot shows a file editor window with a Dockerfile for a MySQL database. The Dockerfile defines a base image as mariadb:10.5, sets the maintainer to JL Gonzalez, and specifies environment variables for MySQL root password, database, user, and manager. It also copies a script from the local directory to the container's /docker-entrypoint-initdb.d path and exposes port 3306.

```
FROM mariadb:10.5
MAINTAINER JL Gonzalez "joseluis@docker.com"

ENV MYSQL_ROOT_PASSWORD=secret_root \
    MYSQL_DATABASE=app_data \
    MYSQL_USER=manager \
    MYSQL_PASSWORD=secret_manager

COPY ./sql /docker-entrypoint-initdb.d/
EXPOSE 3306
```

4. Construcción de la Imagen (Build)

```
alumno@alumno-VirtualBox:~/db-personalizada$ docker build -t alumno/db-personalizada:v1 .
[+] Building 29.1s (7/7) FINISHED                                            docker:default
=> [internal] load build definition from Dockerfile                         0.1s
=> => transferring dockerfile: 283B                                         0.0s
=> [internal] load metadata for docker.io/library/mariadb:10.5               2.3s
```

5. Preparación y Publicación en Docker Hub



Congratulations, you're all set!

Your device is now connected.

```
alumno@alumno-VirtualBox:~/db-personalizada$ docker login

USING WEB-BASED LOGIN

[ Info → To sign in with credentials on the command line, use 'docker login -u <username>' ]

Your one-time device confirmation code is: FNBW-QLJH
Press ENTER to open your browser or submit your device code here: https://login.docker.com/activate

Waiting for authentication in the browser...

WARNING! Your credentials are stored unencrypted in '/home/alumno/.docker/config.json'.
Configure a credential helper to remove this warning. See
https://docs.docker.com/go/credential-store/

Login Succeeded
alumno@alumno-VirtualBox:~/db-personalizada$ █
```

```
alumno@alumno-VirtualBox:~$ docker push izanrv/db-personalizada:v1
The push refers to repository [docker.io/izanrv/db-personalizada]
263d50830087: Pushed
cf5ba55e5618: Pushed
e46ec78e7a90: Pushed
1f417368600e: Pushed
be7dc095e41c: Pushed
0208d905b9bb: Pushed
8c90bcfaf3ab: Pushed
a1a4252c8e59: Pushed
470b66ea5123: Pushed
v1: digest: sha256:7959d8f92040f26c8268d2c5882a5c08e451c4239f9c5173696f5ec66fead
74a size: 2198
```