INSTITUTO TECNOLOGICO DEL VALLE DE OAXACA

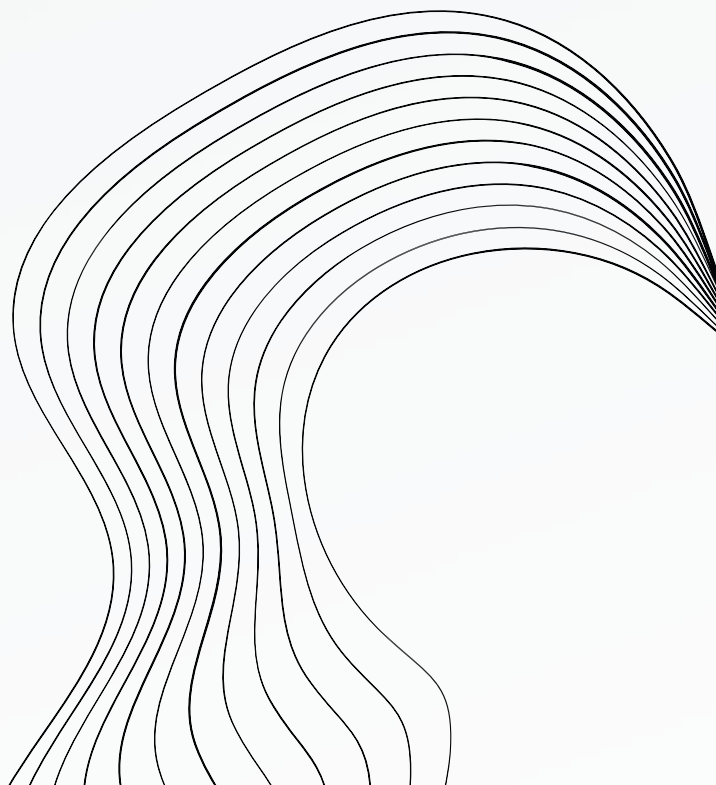**TALLER DE BASE DE DATOS**

APLICACIÓN CON CONEXIÓN A BASE DE DATOS

ALUMNO - OSCAR ELISEO SORIANO OSORIO

4 ATICS

```
eliseo@nobody:~$ docker start oracle-xe
docker ps | grep oracle-xe
oracle-xe
7504e924ed82   gvenzl/oracle-xe   "container-entrypoin…"   2 weeks ago   Up 5 hours   0.0.0.0:1521->1521/tcp, [::]:152
>1521/tcp, 0.0.0.0:8080->8080/tcp, [::]:8080->8080/tcp   oracle-xe
eliseo@nobody:~$
```

```
eliseo@nobody:~$ ls /mnt/c/Users/oscar/IdeaProjects/oracle-eliseo
lib   oracle-eliseo.iml   out   src
eliseo@nobody:~$ ls
composer-setup.php   dvdrental.zip                         instantclient-sqlplus-linuxx64.zip   respald_classicmodels.sql
dvdrental.tar        instantclient-basic-linuxx64.zip   mysql-init                            respaldo_classicmodels.sql
eliseo@nobody:~$
```

```
eliseo@nobody:~$ docker start oracle-xe
oracle-xe
eliseo@nobody:~$ curl -fsSL https://bun.sh/install | bash
######################################################################### 100.0%
bun was installed successfully to ~/.bun/bin/bun

Added "~/.bun/bin" to $PATH in "~/.bashrc"

To get started, run:

  source /home/eliseo/.bashrc
  bun --help
eliseo@nobody:~$
```
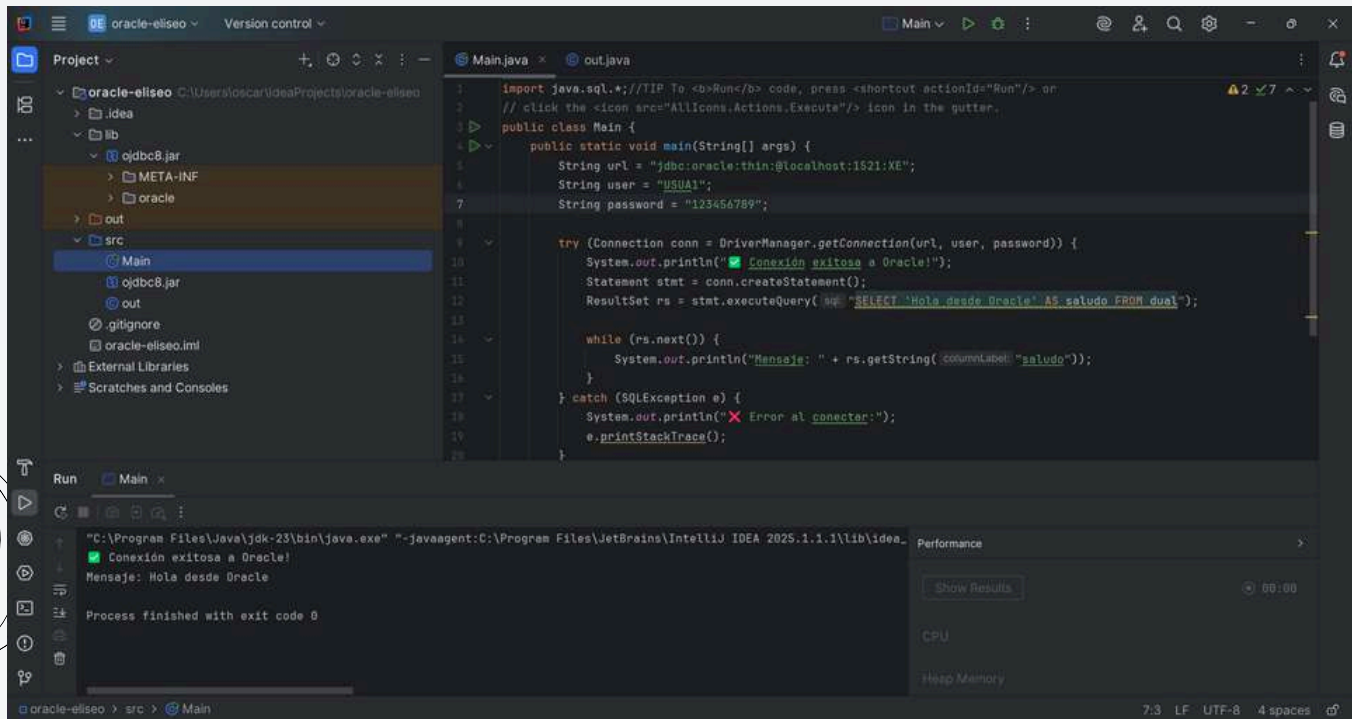
```
bash-4.4$ exit
exit
eliseo@nobody:~$ ls /mnt/c/Users/oscar/IdeaProjects/oracle-eliseo
lib   oracle-eliseo.iml   out   src
eliseo@nobody:~$
```

```
./src:
Main.java   ojdbc8.jar   out.java
eliseo@nobody:/mnt/c/Users/oscar/IdeaProjects/oracle-eliseo$ javac -cp "lib/ojdbc8.jar" -d out/ src/Main.java
eliseo@nobody:/mnt/c/Users/oscar/IdeaProjects/oracle-eliseo$ java -cp "out:lib/ojdbc8.jar" Main
✅ Conexión exitosa a Oracle!
Mensaje: Hola desde Oracle
eliseo@nobody:/mnt/c/Users/oscar/IdeaProjects/oracle-eliseo$
```

```
"C:\Program Files\Java\jdk-23\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2025.1.1\lib\ide
✅ Conexión exitosa a Oracle!
Mensaje: Hola desde Oracle

Process finished with exit code 0
```

ORACLE

POSTGRES

```
eliseo@nobody:~$ sudo -u postgres psql
psql (16.9 (Ubuntu 16.9-0ubuntu0.24.04.1))
Type "help" for help.

postgres=# \l
```

```
eliseo@nobody:~$ bun --version
1.2.15
```

```
eliseo@nobody:~$ hostname -I
172.19.164.17 172.17.0.1
```

```java
public class Main {
    public static void main(String[] args) {
        String url = "jdbc:postgresql://172.19.164.17:5432/dvdrental";
        String user = "postgres";
        String password = "pinchemaluma24";
```

```
"C:\Program Files\Java\jdk-23\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2
1: Ana Gómez
2: Luis Hernández
3: María López

Process finished with exit code 0
```

```
5 packages installed [1163.66ms]
eliseo@nobody:~/projects/bun-postgres$ bun add pg
bun add v1.2.15 (df017990)

installed pg@8.16.0

14 packages installed [588.00ms]
eliseo@nobody:~/projects/bun-postgres$ nano index.ts
eliseo@nobody:~/projects/bun-postgres$ bun run index.ts
Hello via Bun!
Resultados: [
  {
    actor_id: 1,
    first_name: "Ana",
    last_name: "Gómez",
    last_update: 2025-06-01T08:09:08.370Z,
  }, {
    actor_id: 2,
    first_name: "Luis",
    last_name: "Hernández",
    last_update: 2025-06-01T08:09:08.370Z,
  }, {
    actor_id: 3,
    first_name: "María",
    last_name: "López",
    last_update: 2025-06-01T08:09:08.370Z,
  }
]
eliseo@nobody:~/projects/bun-postgres$ |
```

```
eliseo@nobody:~/projects/bun-postgres$ bun add drizzle-orm
bun add -D drizzle-kit
bun add v1.2.15 (df017990)

installed drizzle-orm@0.44.1

1 package installed [4.53s]
bun add v1.2.15 (df017990)

installed drizzle-kit@0.31.1 with binaries:
 - drizzle-kit

16 packages installed [1.71s]
eliseo@nobody:~/projects/bun-postgres$ |
```

```
eliseo@nobody:~$ mkdir -p ~/projects/bun-postgres
cd ~/projects/bun-postgres
bun init

√ Select a project template: Blank

 + .gitignore
 + index.ts
 + tsconfig.json (for editor autocomplete)
 + README.md

To get started, run:

    bun run index.ts

bun install v1.2.15 (df017990)

+ typescript@5.8.3
+ @types/bun@1.2.15

5 packages installed [1163.00ms]

eliseo@nobody:~/projects/bun-postgres$ bun add pg
bun add v1.2.15 (df017990)

installed pg@8.16.0

14 packages installed [588.00ms]
eliseo@nobody:~/projects/bun-postgres$
```

```
eliseo@nobody:~/projects/bun-postgres$ nano src/db/client.ts
eliseo@nobody:~/projects/bun-postgres$ nano src/routes/actors.ts
eliseo@nobody:~/projects/bun-postgres$ nano src/index.ts
eliseo@nobody:~/projects/bun-postgres$ bun run src/index.ts
Started development server: http://localhost:3000
```

```
eliseo@nobody:~/projects/bun-postgres$ nano src/db/client.ts
eliseo@nobody:~/projects/bun-postgres$ nano src/routes/actors.ts
eliseo@nobody:~/projects/bun-postgres$ nano src/index.ts
eliseo@nobody:~/projects/bun-postgres$
```

```typescript
  GNU nano 7.2                          index.ts *
import { Client } from "pg";

const client = new Client({
  host: "127.0.0.1",
  port: 5432,
  user: "postgres",
  password: "pinchemaluma24",
  database: "dvdrental",
});

async function main() {
  try {
    await client.connect();
    const res = await client.query("SELECT * FROM actor LIMIT 5");
    console.log("Resultados:", res.rows);
  } catch (err) {
    console.error("Error de conexión o consulta:", err);
  } finally {
    await client.end();
  }
}

main();
console.log("Hello via Bun!");


^G Help      ^O Write Out   ^W 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-6 Copy
```
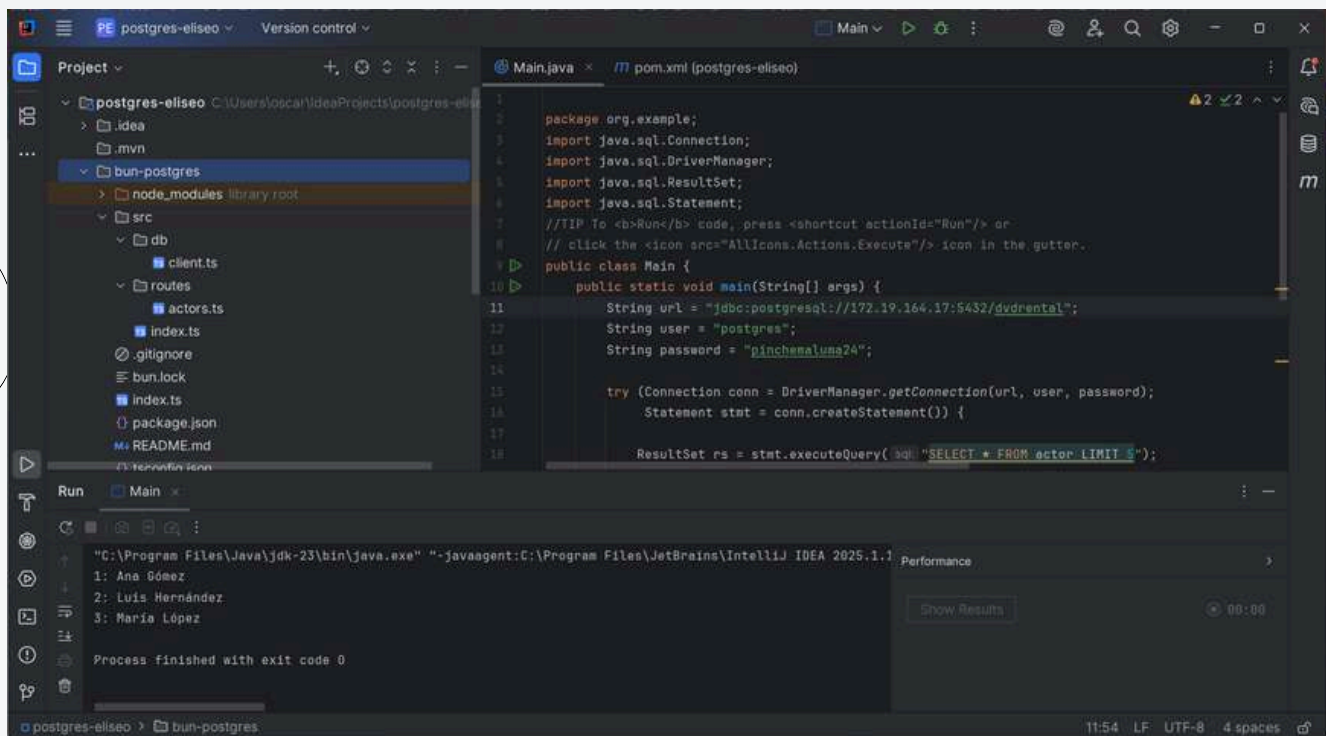
POSTGRES

MARIADB

```
eliseo@nobody:~$ docker start mariadbb
mariadbb
```

```
eliseo@nobody:~$ FROM php:8.1-apache
COPY . /var/www/html/
EXPOSE 80
FROM: command not found
COPY: command not found
EXPOSE: command not found
eliseo@nobody:~$ cd /mnt/c/Users/oscar/OneDrive/Escritorio/evaldocente-main
eliseo@nobody:/mnt/c/Users/oscar/OneDrive/Escritorio/evaldocente-main$ nano Dockerfile
eliseo@nobody:/mnt/c/Users/oscar/OneDrive/Escritorio/evaldocente-main$ |
```

```
eliseo@nobody:/mnt/c/Users/oscar/OneDrive/Escritorio/evaldocente-main$ docker network create docente-net
3407ac74a7ce2e9accfb99fc9055a15e42257e925ca8a5796404b4689b460a92
eliseo@nobody:/mnt/c/Users/oscar/OneDrive/Escritorio/evaldocente-main$ |
```

```
3407ac74a7ce2e9accfb99fc9055a15e42257e925ca8a5796404b4689b460a92
eliseo@nobody:/mnt/c/Users/oscar/OneDrive/Escritorio/evaldocente-main$ docker network connect docente-net mariadbb
eliseo@nobody:/mnt/c/Users/oscar/OneDrive/Escritorio/evaldocente-main$ |
```

```
eliseo@nobody:/mnt/c/Users/oscar/OneDrive/Escritorio/evaldocente-main$ docker build -t evaldocente-img .
[+] Building 27.2s (7/7) FINISHED                                                    docker:default
 => [internal] load build definition from Dockerfile                                           0.1s
 => => transferring dockerfile: 89B                                                            0.0s
 => [internal] load metadata for docker.io/library/php:8.1-apache                              1.0s
 => [internal] load .dockerignore                                                              0.1s
 => => transferring context: 2B                                                                0.0s
 => [internal] load build context                                                              0.4s
 => => transferring context: 33.90kB                                                           0.3s
 => [1/2] FROM docker.io/library/php:8.1-apache@sha256:0ff33d39a6b0d0b54f60a17ab633f1f708a6e825992eb39ac122322a8  24.7s
 => => resolve docker.io/library/php:8.1-apache@sha256:0ff33d39a6b0d0b54f60a17ab633f1f708a6e825992eb39ac122322a8c  0.0s
 => => sha256:c7bf743e420dec12c8b400eb620dab997d6ca7361aec7b55ac5a8ef493a65db1 3.64kB / 3.64kB                    0.0s
 => => sha256:61320b01ae5e0798393ef25f2dc72faf43703e60ba089b07d7170acbabbf8f62 28.23MB / 28.23MB                  11.2s
 => => sha256:0ff33d39a6b0d0b54f60a17ab633f1f708a6e825992eb39ac122322a0c9d43d5 10.40kB / 10.40kB                  0.0s
 => => sha256:7d81a31c6df8cb0a9861c9f8b95fda59934f614af92b9a687360b2d5b105bcf1 104.33MB / 104.33MB                19.6s
 => => sha256:a02e9a8f0ad8cf43f218ed586272f81244576249f699ebdeeef50d95bd4bbc08 225B / 225B                        0.7s
 => => sha256:14c0090a534062f257b5491165452535e0f482342ebd97d623b8a466c6d07921a 11.40kB / 11.40kB                 0.0s
 => => sha256:242a1499e9e5358a482f61054361ea4b4ac511f8798369b5701132688693f050 224B / 224B                        1.1s
 => => sha256:0fd9a253033d976d87e86745fef828713f7a11ccef93fab596e09bb5f55afadc 20.12MB / 20.12MB                  9.1s
 => => sha256:c4c29fd6aefae509ab61934ebe2bd2757fee97684dd6a0ec3ef7aed1ab0ed000 420B / 420B                        9.3s
 => => sha256:3a1b9727c020c3e27ebaa01eaaa784ed1a979a7eb522b4e543f8840a19dc67d5 481B / 481B                        9.4s
 => => sha256:1665af7a6d8722b1b9b511ecac20f9112d853589f51c675e0a153f2ac24136ae 12.02MB / 12.02MB                  13.2s
 => => sha256:7bf9fc1698310731f698810e99b2d7565d83e39197272c4d0d0e7a3d76293828 488B / 488B                        11.4s
 => => extracting sha256:61320b01ae5e0798393ef25f2dc72faf43703e60ba089b07d7170acbabbf8f62                         1.6s
 => => sha256:0fa4fd079d10ff787222efaafa197cd56b5f1187888475196fe41c2ae88889ae 11.16MB / 11.16MB                  15.7s
 => => extracting sha256:a02e9a8f0ad8cf43f218ed586272f81244576249f699ebdeeef50d95bd4bbc08                         0.0s
```

```
eliseo@nobody:/mnt/c/Users/oscar/OneDrive/Escritorio/evaldocente-main$ docker run -d \
  --name evaldocente-container \
  --network docente-net \
  -p 8080:80 \
  evaldocente-img
6b1565681e51cf9fa18342e9bf5a73eaca36f00fc7323d01d88d070fb51cb11e
eliseo@nobody:/mnt/c/Users/oscar/OneDrive/Escritorio/evaldocente-main$ |
```

```
 eliseo@nobody: /mnt/c/Us  ×    +  ∨
  GNU nano 7.2                        Dockerfile *
FROM php:8.1-apache
COPY . /var/www/html/
EXPOSE 80
```