

Capturas y logs:

Ejercicio 2:

```
USUARIO@DESKTOP-PCEPP9N MINGW64 ~/Desktop/lab7_20221747/GTICS_LAB7_20221747 (main)
$ docker run -d \
  --name mysql-db \
  -e MYSQL_ROOT_PASSWORD=root \
  -e MYSQL_DATABASE=trabajadores_db \
  -v $(pwd)/init.sql:/docker-entrypoint-initdb.d/init.sql \
  -p 3307:3306 \
  mysql:8.0
674cf2e0f64f24bd2e3bf6e290c2ae1144075da5b888d787d5e426edac08fe66

USUARIO@DESKTOP-PCEPP9N MINGW64 ~/Desktop/lab7_20221747/GTICS_LAB7_20221747 (main)
$ docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS                               NAMES
674cf2e0f64f   mysql:8.0   "docker-entrypoint.s..." 8 minutes ago  Up 8 minutes  0.0.0.0:3307->3306/tcp, [::]:3307->3306/tcp  mysql-db
```

```
docker run -d \
  --name mysql-db \
  -e MYSQL_ROOT_PASSWORD=root \
  -e MYSQL_DATABASE=trabajadores_db \
  -v $(pwd)/init.sql:/docker-entrypoint-initdb.d/init.sql \
  -p 3307:3306 \
  mysql:8.0
674cf2e0f64f24bd2e3bf6e290c2ae1144075da5b888d787d5e426edac08fe66
```

```
docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS                               NAMES
674cf2e0f64f   mysql:8.0   "docker-entrypoint.s..." 8 minutes ago  Up 8 minutes  0.0.0.0:3307->3306/tcp, [::]:3307->3306/tcp  mysql-db
```

parte 2 :

```
$ docker build -t miwebapp:local .
[+] Building 103.6s (8/8) FINISHED
docker:desktop-linux
=> [internal] load build definition from Dockerfile
0.1s
=> => transferring dockerfile: 200B
0.0s
=> [internal] load metadata for docker.io/library/openjdk:26-ea-17-jdk-oracle
0.5s
=> [internal] load .dockerignore
0.0s
=> => transferring context:
2B
0.0s
=> [1/3] FROM docker.io/library/openjdk:26-ea-17-jdk-oracle@sha256:193478183006a91637630ae1fa088f4f2f2728e06b8a29ebe60273928b9fc555
66.7s
=> => resolve docker.io/library/openjdk:26-ea-17-jdk-oracle@sha256:193478183006a91637630ae1fa088f4f2f2728e06b8a29ebe60273928b9fc555
0.0s
=> => sha256:3978622ba31aff71854710c68fe819e916e1ce4e21abc85be84f70fc2d4fa341
38.08MB / 38.08MB
12.0s
=> => sha256:91e26d0ee90a443892a5613a9be17fe407f9d4a263f49dc1098b67a1d493f697
225.59MB / 225.59MB
33.0s
=> => sha256:806f49275cbff8773a3d3cb9c7e11efc00cbe434b66b9896fdad5064c4cb5355
49.50MB / 49.50MB
11.7s
=> => extracting
sha256:806f49275cbff8773a3d3cb9c7e11efc00cbe434b66b9896fdad5064c4cb5355
2.5s
=> => extracting
sha256:3978622ba31aff71854710c68fe819e916e1ce4e21abc85be84f70fc2d4fa341
1.8s
```

```

=> => extracting
sha256:91e26d0ee90a443892a5613a9be17fe407f9d4a263f49dc1098b67a1d493f697
33.3s
=> [internal] load build context
5.3s
=> => transferring context: 45.34MB
5.3s
=> [2/3] WORKDIR /app
32.6s
=> [3/3] COPY target/LAB7_20221747-0.0.1-SNAPSHOT.jar app.jar
0.8s
=> exporting to image
2.5s
=> => exporting layers
2.0s
=> => exporting manifest
sha256:b13dfaf5d0208c268f2c1a1df4f58a3342bcd5407c440526be877d52de6399b9
0.0s
=> => exporting config
sha256:2675e83a41b010238c3e151504d49d1b2841b085e428c363e35fefac8807496f
0.0s
=> => exporting attestation manifest
sha256:07f5b8486a84eaeaba81eb39a3c9fc54180e27976ccecc56a86f8139fb161b9f
0.0s
=> => exporting manifest list
sha256:fb398dae7e4c0255f5d0c5643bc4b82af40b0f4ebd41dbe3f33cbbcd7bd0e453
0.0s
=> => naming to docker.io/library/miwebapp:local
0.0s
=> => unpacking to docker.io/library/miwebapp:local
0.4s

```

```

$ docker build -t miwebapp:local .
[+] Building 103.6s (8/8) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 200B
=> [internal] load metadata for docker.io/library/openjdk:26-ea-17-jdk-oracle
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [1/3] FROM docker.io/library/openjdk:26-ea-17-jdk-oracle@sha256:193478183006a91637630ae1fa088f4f2f2728e06b8a29ebe60273928b9fc555
=> => resolve docker.io/library/openjdk:26-ea-17-jdk-oracle@sha256:193478183006a91637630ae1fa088f4f2f2728e06b8a29ebe60273928b9fc555
=> => sha256:3978622ba31aff71854710c68fe819e916e1ce4e21abc85be84f70fc2d4fa341 38.08MB / 38.08MB
=> => sha256:91e26d0ee90a443892a5613a9be17fe407f9d4a263f49dc1098b67a1d493f697 225.59MB / 225.59MB
=> => sha256:806f49275cbff8773a3d3cb9c7e11efc00cbe434b66b9896fdad5064c4cb355 49.50MB / 49.50MB
=> => extracting sha256:806f49275cbff8773a3d3cb9c7e11efc00cbe434b66b9896fdad5064c4cb355
=> => extracting sha256:3978622ba31aff71854710c68fe819e916e1ce4e21abc85be84f70fc2d4fa341
=> => extracting sha256:91e26d0ee90a443892a5613a9be17fe407f9d4a263f49dc1098b67a1d493f697
=> [internal] load build context
=> => transferring context: 45.34MB
=> [2/3] WORKDIR /app
=> [3/3] COPY target/LAB7_20221747-0.0.1-SNAPSHOT.jar app.jar
=> exporting to image
=> => exporting layers
=> => exporting manifest sha256:b13dfaf5d0208c268f2c1a1df4f58a3342bcd5407c440526be877d52de6399b9
=> => exporting config sha256:2675e83a41b010238c3e151504d49d1b2841b085e428c363e35fefac8807496f
=> => exporting attestation manifest sha256:07f5b8486a84eaeaba81eb39a3c9fc54180e27976ccecc56a86f8139fb161b9f
=> => exporting manifest list sha256:fb398dae7e4c0255f5d0c5643bc4b82af40b0f4ebd41dbe3f33cbbcd7bd0e453
=> => naming to docker.io/library/miwebapp:local
=> => unpacking to docker.io/library/miwebapp:local

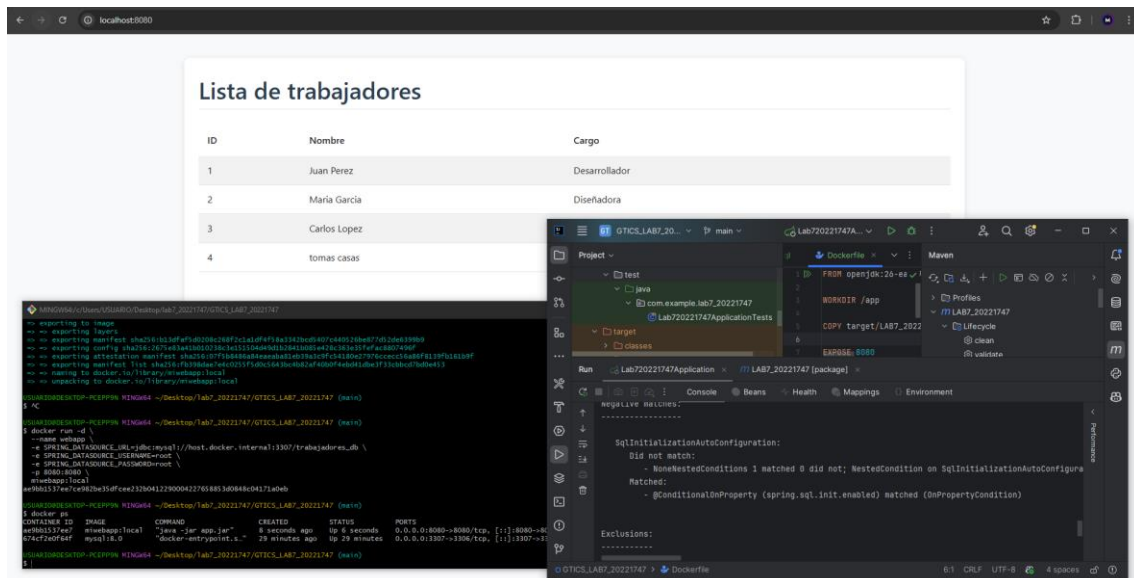
```

```

USUARIO@DESKTOP-PCEPP9N MINGW64 ~/Desktop/lab7_20221747/GTICS_LAB7_20221747 (main)
$ docker run -d \
  --name webapp \
  -e SPRING_DATASOURCE_URL=jdbc:mysql://host.docker.internal:3307/trabajadores_db \
  -e SPRING_DATASOURCE_USERNAME=root \
  -e SPRING_DATASOURCE_PASSWORD=root \
  -p 8080:8080 \
  miwebapp:local
ae9bb1537ee7ce982be35dfcee232b0412290004227658853d0848c04171a0eb

```

<input type="checkbox"/>	Name	Container ID	Image	Port(s)
<input type="checkbox"/>	● mysql-db	674cf2e0f64f	mysql:8.0	3307:3306 ↗
<input type="checkbox"/>	● webapp	ae9bb1537ee7	miwebapp:local	8080:8080 ↗



```

USUARIO@DESKTOP-PCEPP9N MINGW64 ~/Desktop/lab7_20221747/GTICS_LAB7_20221747
(main)
$ docker run -d \
  --name webapp \
  -e \
  SPRING_DATASOURCE_URL=jdbc:mysql://host.docker.internal:3307/trabajadores_db \
  -e SPRING_DATASOURCE_USERNAME=root \
  -e SPRING_DATASOURCE_PASSWORD=root \
  -p 8080:8080 \
  miwebapp:local
ae9bb1537ee7ce982be35dfcee232b0412290004227658853d0848c04171a0eb
  
```

```

USUARIO@DESKTOP-PCEPP9N MINGW64 ~/Desktop/lab7_20221747/GTICS_LAB7_20221747
(main)
$ docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED          STATUS          PORTS
ae9bb1537ee7   miwebapp:local "java -jar app.jar"      8 seconds ago    Up 6 seconds    0.0.0.0:8080->8080/tcp, [::]:8080->[::]:8080/tcp
674cf2e0f64f   mysql:8.0      "docker-entrypoint.s..." 29 minutes ago   Up 29 minutes   0.0.0.0:3307->3306/tcp, [::]:3307->[::]:3306/tcp
  
```

ejercicio 3:

```
a20221747@instance-20251027-004009:~$ docker --version
Docker version 20.10.24+dfsg1, build 297e128
a20221747@instance-20251027-004009:~$ docker info
Client:
 Context:    default
 Debug Mode: false
 Plugins:
  buildx: Docker Buildx (Docker Inc., v0.29.1)
  compose: Docker Compose (Docker Inc., v2.40.2)
  model: Docker Model Runner (Docker Inc., v0.1.44)

Server:
 Containers: 0
  Running: 0
  Paused: 0
  Stopped: 0
 Images: 0
 Server Version: 20.10.24+dfsg1
 Storage Driver: overlay2
  Backing Filesystem: extfs
  Supports d_type: true
  Native Overlay Diff: true
  userxattr: false
 Logging Driver: json-file
 Cgroup Driver: systemd
 Cgroup Version: 2
 Plugins:
  Volume: local
  Network: bridge host ipvlan macvlan null overlay
  Log: awslogs fluentd gcplogs gelf journald json-file local logentries splunk syslog
 Swarm: inactive
 Runtimes: runc io.containerd.runc.v2 io.containerd.runtime.v1.linux
 Default Runtime: runc
 Init Binary: docker-init
 containerd version: 1.6.20~ds1-1+deb12u1
 runc version: 1.1.5+ds1-1+deb12u1
 init version:
 Security Options:
  apparmor
  seccomp
   Profile: default
 cgroupns
 Kernel Version: 6.1.0-40-cloud-amd64
 Operating System: Debian GNU/Linux 12 (bookworm)
 OSType: linux
 Architecture: x86_64
 CPUs: 2
 Total Memory: 1.93GiB
 Name: instance-20251027-004009
 ID: JGRG:Q5IP:6W3N:T7FR:BW4S:3XF7:TQQO:VWZ7:6K4M:BNOJ:OLJM:KU3P
 Docker Root Dir: /var/lib/docker
 Debug Mode: false
 Registry: https://index.docker.io/v1/
```

docker ps:

```
a20221747@instance-20251027-004009:~$ docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS
f0c1b65ffice  mysql:8.0     "docker-entrypoint.s..." 6 seconds ago  Up 3 seconds  0.0.0.0:3306->3306/tcp, :::3306->3306/tcp, 3306/tcp
60/tcp        mysql-db-remote
```

Name: ☐ Allow multiple instances ☐ Store as project file

Server: DockerRemotoGCP

Build [Modify options](#) Alt+M

Dockerfile:

Image tag:

Run [Modify](#)

Container name:

Bind ports:

Environment variables:

SSH Configurations

a20221747@34.41.65.46:

Host: Port:

Username:

Authentication type:

Private key file:

Password: ☐ Save passphrase

☒ Parse config file ~/.ssh/config

Test Connection

Connection to a20221747@34.41.65.46:22

Successfully connected!

> Cor

> HT

Construccion:

[+] Building 2.9s (9/9) FINISHED

docker:default

=> [internal] load build definition from Dockerfile

0.5s

```

=> => transferring dockerfile: 32B
0.5s

=> [internal] load .dockerignore
0.5s

=> => transferring context: 2B
0.5s

=> [internal] load metadata for docker.io/library/openjdk:26-ea-17-jdk-oracle
1.1s

=> [auth] library/openjdk:pull token for registry-1.docker.io
0.0s

=> [1/3] FROM docker.io/library/openjdk:26-ea-17-jdk-
oracle@sha256:193478183006a91637630ae1fa088f4f2f2728e06b8a29ebe60273928b9fc555
0.0s

=> [internal] load build context
0.5s

=> => transferring context: 89B
0.5s

=> CACHED [2/3] WORKDIR /app
0.0s

=> CACHED [3/3] COPY target/LAB7_20221747-0.0.1-SNAPSHOT.jar app.jar
0.0s

=> exporting to image
0.0s

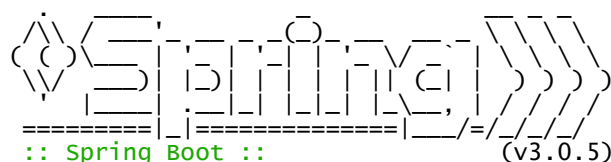
=> => exporting layers
0.0s

=> => writing image
sha256:e63cf1c24da370ed05ad9ff248a9d8d02fabbf2c3675a8c9d67e2813eecbf672
0.0s

=> => naming to docker.io/library/miwebapp:remote

```

Ejecucion:



```

2025-10-27T02:08:22.675Z INFO 1 --- [main]
c.e.l.Lab720221747Application : Starting Lab720221747Application
v0.0.1-SNAPSHOT using Java 26-ea with PID 1 (/app/app.jar started by root in
/app)
2025-10-27T02:08:22.679Z INFO 1 --- [main]
c.e.l.Lab720221747Application : No active profile set, falling back
to 1 default profile: "default"
2025-10-27T02:08:24.049Z INFO 1 --- [main]
.s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA
repositories in DEFAULT mode.
2025-10-27T02:08:24.202Z INFO 1 --- [main]
.s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository
scanning in 105 ms. Found 1 JPA repository interfaces.
WARNING: A restricted method in java.lang.System has been called
WARNING: java.lang.System::load has been called by
org.apache.tomcat.jni.Library in an unnamed module
(jar:file:/app/app.jar!/BOOT-INF/lib/tomcat-embed-core-10.1.7.jar!/)
WARNING: Use --enable-native-access=ALL-UNNAMED to avoid a warning for callers
in this module
WARNING: Restricted methods will be blocked in a future release unless native
access is enabled

2025-10-27T02:08:25.018Z INFO 1 --- [main]
o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s):
8080 (http)
2025-10-27T02:08:25.034Z INFO 1 --- [main]
o.apache.catalina.core.StandardService : Starting service [Tomcat]
2025-10-27T02:08:25.035Z INFO 1 --- [main]
o.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache
Tomcat/10.1.7]
2025-10-27T02:08:25.143Z INFO 1 --- [main]
o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embedded
webApplicationContext
2025-10-27T02:08:25.144Z INFO 1 --- [main]
w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext:
initialization completed in 2370 ms
2025-10-27T02:08:25.353Z INFO 1 --- [main]
o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing
PersistenceUnitInfo [name: default]
2025-10-27T02:08:25.424Z INFO 1 --- [main] org.hibernate.Version
: HHH000412: Hibernate ORM core version 6.1.7.Final
2025-10-27T02:08:25.746Z INFO 1 --- [main]
com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...
2025-10-27T02:08:27.844Z INFO 1 --- [main]
com.zaxxer.hikari.pool.HikariPool : HikariPool-1 - Added connection
com.mysql.cj.jdbc.ConnectionImpl@3cc20577
2025-10-27T02:08:27.857Z INFO 1 --- [main]
com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start completed.
2025-10-27T02:08:28.236Z INFO 1 --- [main] SQL dialect
: HHH000400: Using dialect: org.hibernate.dialect.MySQLDialect
Hibernate: drop table if exists trabajadores
Hibernate: create table trabajadores (id integer not null auto_increment,
cargo varchar(255), nombre varchar(255), primary key (id)) engine=InnoDB
2025-10-27T02:08:29.712Z INFO 1 --- [main]
o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000490: Using JtaPlatform
implementation:
[org.hibernate.engine.transaction.jta.platform.internal.NoJtaPlatform]
2025-10-27T02:08:29.732Z INFO 1 --- [main]
j.LocalContainerEntityManagerFactoryBean : Initialized JPA
EntityManagerFactory for persistence unit 'default'
2025-10-27T02:08:30.205Z WARN 1 --- [main]
JpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in-view is enabled
by default. Therefore, database queries may be performed during view
rendering.
Explicitly configure spring.jpa.open-in-view to disable this warning
2025-10-27T02:08:31.689Z INFO 1 --- [main]
o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8080
(http) with context path ''
2025-10-27T02:08:31.725Z INFO 1 --- [main]
c.e.l.Lab720221747Application : Started Lab720221747Application in
9.592 seconds (process running for 10.475)

2025-10-27T02:14:49.130Z INFO 1 --- [ionShutdownHook]
j.LocalContainerEntityManagerFactoryBean : Closing JPA EntityManagerFactory
for persistence unit 'default'

```

```

2025-10-27T02:14:49.138Z INFO 1 --- [ionShutdownHook]
com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Shutdown
initiated...
2025-10-27T02:14:50.578Z INFO 1 --- [ionShutdownHook]
com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Shutdown completed.

```



```

2025-10-27T02:45:29.883Z INFO 1 --- [main]
c.e.l.Lab720221747Application : Starting Lab720221747Application
v0.0.1-SNAPSHOT using Java 26-ea with PID 1 (/app/app.jar started by root in
/app)
2025-10-27T02:45:29.887Z INFO 1 --- [main]
c.e.l.Lab720221747Application : No active profile set, falling back
to 1 default profile: "default"
2025-10-27T02:45:30.854Z INFO 1 --- [main]
.s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA
repositories in DEFAULT mode.
2025-10-27T02:45:30.932Z INFO 1 --- [main]
.s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository
scanning in 62 ms. Found 1 JPA repository interfaces.
WARNING: A restricted method in java.lang.System has been called
WARNING: java.lang.System::load has been called by
org.apache.tomcat.jni.Library in an unnamed module
(jar:file:/app/app.jar!/BOOT-INF/lib/tomcat-embed-core-10.1.7.jar!)
WARNING: Use --enable-native-access=ALL-UNNAMED to avoid a warning for callers
in this module
WARNING: Restricted methods will be blocked in a future release unless native
access is enabled

2025-10-27T02:45:31.561Z INFO 1 --- [main]
o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s):
8080 (http)
2025-10-27T02:45:31.575Z INFO 1 --- [main]
o.apache.catalina.core.StandardService : Starting service [Tomcat]
2025-10-27T02:45:31.575Z INFO 1 --- [main]
o.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache
Tomcat/10.1.7]
2025-10-27T02:45:31.673Z INFO 1 --- [main]
o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embedded
webApplicationContext
2025-10-27T02:45:31.674Z INFO 1 --- [main]
w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext:
initialization completed in 1704 ms
2025-10-27T02:45:31.858Z INFO 1 --- [main]
o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing
PersistenceUnitInfo [name: default]
2025-10-27T02:45:31.933Z INFO 1 --- [main] org.hibernate.Version
: HHH000412: Hibernate ORM core version 6.1.7.Final
2025-10-27T02:45:32.273Z INFO 1 --- [main]
com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...
2025-10-27T02:45:34.220Z INFO 1 --- [main]
com.zaxxer.hikari.pool.HikariPool : HikariPool-1 - Added connection
com.mysql.cj.jdbc.ConnectionImpl@775594f2
2025-10-27T02:45:34.224Z INFO 1 --- [main]
com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start completed.
2025-10-27T02:45:34.571Z INFO 1 --- [main] SQL dialect
: HHH000400: Using dialect: org.hibernate.dialect.MySQLDialect
Hibernate: drop table if exists trabajadores
Hibernate: create table trabajadores (id integer not null auto_increment,
cargo varchar(255), nombre varchar(255), primary key (id)) engine=InnoDB
2025-10-27T02:45:36.156Z INFO 1 --- [main]
o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000490: Using JtaPlatform
implementation:
[org.hibernate.engine.transaction.jta.platform.internal.NoJtaPlatform]
2025-10-27T02:45:36.167Z INFO 1 --- [main]
j.LocalContainerEntityManagerFactoryBean : Initialized JPA
EntityManagerFactory for persistence unit 'default'
2025-10-27T02:45:36.654Z WARN 1 --- [main]
JpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in-view is enabled

```


by default. Therefore, database queries may be performed during view rendering.
Explicitly configure `spring.jpa.open-in-view` to disable this warning
2025-10-27T02:45:37.922Z INFO 1 --- [main]
`o.s.b.w.embedded.tomcat.TomcatWebServer` : Tomcat started on port(s): 8080
(http) with context path ''
2025-10-27T02:45:37.965Z INFO 1 --- [main]
`c.e.l.Lab720221747Application` : Started Lab720221747Application in
8.617 seconds (process running for 9.405)