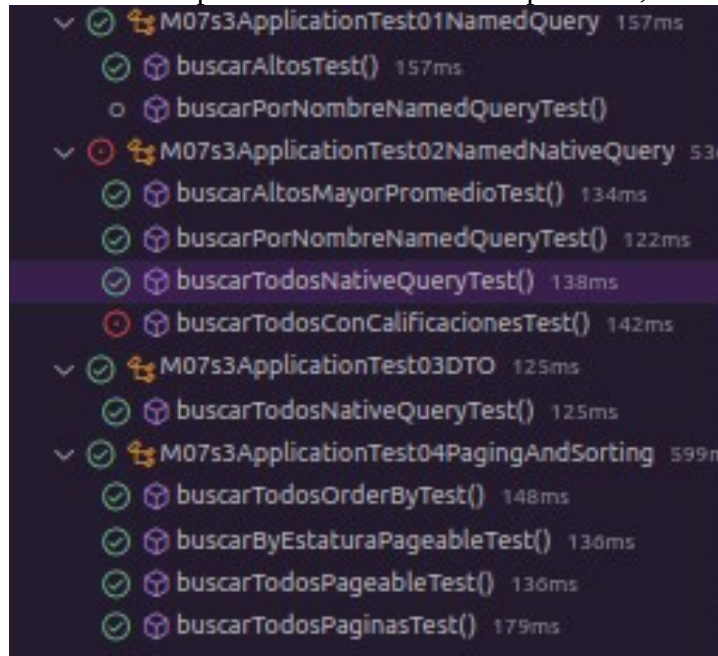


## Práctica .

Pruebas correspondientes al día 23 de septiembre, 2022.



### Pruebas individuales.

### Prueba buscarAltos():

```
@Test
void buscarAltosTest() {
    Iterable<Alumno> iterable = repositorioAlumno.buscarAltos();
    iterable.forEach(System.out::println);

    try {
        iterable = repositorioAlumno.buscarAltosConFecha(
            new SimpleDateFormat("yyyy-MM-dd").parse("2001-01-01"));
        iterable.forEach(System.out::println);
    } catch (Exception e) {
        e.printStackTrace();
    }
}
```

Salida.

[illegible]

```
@Test
void buscarAltosMayorPromedioTest() {
    double estaturaPromedio = repositorioAlumno.buscarEstaturaPromedioAlumnos();
    Iterable<Alumno> iterable = repositorioAlumno.buscarAltos();

    System.out.println("Estatura promedio: " + estaturaPromedio);
    iterable.forEach(System.out::println);
}
```

[illegible]

```
@Test
void buscarTodosConCalificacionesTest() {
    Iterable<Alumno> iterable = repositorioAlumno.buscarTodosConCalificaciones();
    iterable.forEach(System.out::println);

    for (Alumno a : iterable) {
        System.out.println(a);
        List<Calificacion> calificaciones = a.getCalificaciones();
        for (Calificacion cal : calificaciones) {
            System.out.println(cal);
        }
    }
}
```

```
org.springframework.dao.InvalidDataAccessResourceUsageException: could not extract ResultSet; SQL [n/a]; nested exception is org.hibernate.exception.SQLGrammarException: could not extract ResultSet
at org.springframework.orm.jpa.vendor.HibernateJpaDialect.convertHibernateAccessException(HibernateJpaDialect.java:259)
at org.springframework.orm.jpa.vendor.HibernateJpaDialect.translateExceptionIfPossible(HibernateJpaDialect.java:233)
at org.springframework.orm.jpa.AbstractEntityManagerFactoryBean.translateExceptionIfPossible(AbstractEntityManagerFactoryBean.java:551)
at org.springframework.dao.support.ChainedPersistenceExceptionTranslator.translateExceptionIfPossible(ChainedPersistenceExceptionTranslator.java:61)
at org.springframework.dao.support.DataAccessUtils.translateIfNecessary(DataAccessUtils.java:242)
at org.springframework.dao.support.PersistenceExceptionTranslationInterceptor.invoke(PersistenceExceptionTranslationInterceptor.java:152)
at org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(ReflectiveMethodInvocation.java:186)
at org.springframework.data.jpa.repository.support.CrudMethodMetadataPostProcessor$CrudMethodMetadataPopulatingMethodInterceptor.invoke(CrudMethodMetadataPostProcessor.java:112)
at org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(ReflectiveMethodInvocation.java:186)
at org.springframework.aop.interceptor.ExposeInvocationInterceptor.invoke(ExposeInvocationInterceptor.java:97)
at org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(ReflectiveMethodInvocation.java:186)
at org.springframework.aop.framework.JdkDynamicAopProxy.invoke(JdkDynamicAopProxy.java:215)
at jdk.proxy2/jdk.proxy2.$Proxy116.buscarTodosConCalificaciones(Unknown Source)
at mx.unam.dgtic.m07s3.M07s3ApplicationTest02NamedNativeQuery.buscarTodosConCalificacionesTest(M07s3ApplicationTest02NamedNativeQuery.java:44)
at java.base/java.util.ArrayList.forEach(Unknown Source)
at java.base/java.util.ArrayList.forEach(Unknown Source)

Caused by: org.hibernate.exception.SQLGrammarException: could not extract ResultSet
at org.hibernate.exception.internal.SQLExceptionTypeDelegate.convert(SQLExceptionTypeDelegate.java:63)
at org.hibernate.exception.internal.StandardSQLExceptionConverter.convert(StandardSQLExceptionConverter.java:37)
at org.hibernate.engine.jdbc.spi.SqlExceptionHelper.convert(SqlExceptionHelper.java:113)
```

Prueba findAlumnoCalificacionDTO():

```
@Test
void buscarTodosNativeQueryTest() {
    Iterable<AlumnoCalificacionDTO> iterable = repositorioAlumno.findAlumnoCalificacionDTO();

    iterable.forEach(System.out::println);
}
```

Salida.

```
2022-09-23 20:43:25.992 INFO 126123 --- [main] m.u.d.m07s3.M07s3ApplicationTest030TO : Starting M07s3ApplicationTest030TO using Java 17.0.4 on mila with
2022-09-23 20:43:25.992 INFO 126123 --- [main] m.u.d.m07s3.M07s3ApplicationTest030TO : No active profile set, falling back to 1 default profile: "default"
2022-09-23 20:43:26.328 INFO 126123 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in DEFAULT mode.
2022-09-23 20:43:26.354 INFO 126123 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 22 ms. Found 3 JPA re
2022-09-23 20:43:26.651 INFO 126123 --- [main] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing PersistenceUnitInfo [name: default]
2022-09-23 20:43:26.681 INFO 126123 --- [main] org.hibernate.Version : HHH000412: Hibernate ORM core version 5.6.10.Final
2022-09-23 20:43:26.765 INFO 126123 --- [main] o.hibernate.annotations.common.Version : HCANN000001: Hibernate Commons Annotations {5.1.2.Final}
2022-09-23 20:43:26.841 INFO 126123 --- [main] org.hibernate.dialect.Dialect : HHH000400: Using dialect: org.hibernate.dialect.MariaDBDialect
2022-09-23 20:43:27.140 INFO 126123 --- [main] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000490: Using JtaPlatform implementation: [org.hibernate.engine
2022-09-23 20:43:27.199 INFO 126123 --- [main] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityManagerFactory for persistence unit 'default'
2022-09-23 20:43:27.342 WARN 126123 --- [main] JpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in-view is enabled by default. Therefore, databas
2022-09-23 20:43:28.017 INFO 126123 --- [main] m.u.d.m07s3.M07s3ApplicationTest030TO : Started M07s3ApplicationTest030TO in 2.177 seconds (JVM running f
AlumnoCalificacionDTO [calificacion=10, materia=BD, nombre=Nadia, paterno=Perez]
AlumnoCalificacionDTO [calificacion=9, materia=P00, nombre=Nadia, paterno=Perez]
AlumnoCalificacionDTO [calificacion=10, materia=SI, nombre=Nadia, paterno=Perez]
AlumnoCalificacionDTO [calificacion=8, materia=BDII, nombre=Nadia, paterno=Perez]
AlumnoCalificacionDTO [calificacion=9, materia=BD, nombre=Perla, paterno=Calles]
AlumnoCalificacionDTO [calificacion=5, materia=P00, nombre=Perla, paterno=Calles]
AlumnoCalificacionDTO [calificacion=8, materia=BDII, nombre=Gena, paterno=null]
AlumnoCalificacionDTO [calificacion=5, materia=P00, nombre=Gena, paterno=null]
AlumnoCalificacionDTO [calificacion=7, materia=SI, nombre=Jesus, paterno=Garcia]
AlumnoCalificacionDTO [calificacion=5, materia=P00, nombre=Jesus, paterno=Garcia]
2022-09-23 20:43:28.146 INFO 126123 --- [ionShutdownHook] j.LocalContainerEntityManagerFactoryBean : Closing JPA EntityManagerFactory for persistence unit 'default'
```

Prueba findOrderByNombre():

```
@Test
void buscarTodosOrderByTest() {
    Iterable<Alumno> iterable = repositorioAlumno.findOrderByNombre();
    iterable.forEach(System.out::println);

    iterable = repositorioAlumno.findOrderByNombreDescPaternoDesc();
    iterable.forEach(System.out::println);
}
```

Salida.

```
2022-09-23 20:45:26.026 INFO 127594 --- [main] o.hibernate.annotations.common.Version : HCANN000001: Hibernate Commons Annotations {5.1.2.Final}
2022-09-23 20:45:26.100 INFO 127594 --- [main] org.hibernate.dialect.Dialect : HHH000400: Using dialect: org.hibernate.dialect.MariaDBDialect
2022-09-23 20:45:26.391 INFO 127594 --- [main] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000490: Using JtaPlatform implementation: [org.hibernate.engine
2022-09-23 20:45:26.443 INFO 127594 --- [main] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityManagerFactory for persistence unit 'default'
2022-09-23 20:45:26.588 WARN 127594 --- [main] JpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in-view is enabled by default. Therefore, databas
2022-09-23 20:45:27.228 INFO 127594 --- [main] m.M07s3ApplicationTest04PagingAndSorting : Started M07s3ApplicationTest04PagingAndSorting in 2.072 seconds (
Alumno [estatura=1.68, fnac=2001-01-01 00:00:00.0, matricula=4A, nombre=Carlos, paterno=Madero]
Alumno [estatura=1.53, fnac=2001-03-20 00:00:00.0, matricula=7B, nombre=Gena, paterno=null]
Alumno [estatura=1.75, fnac=2001-02-10 00:00:00.0, matricula=5A, nombre=Javier, paterno=Anaro]
Alumno [estatura=1.65, fnac=2001-03-20 00:00:00.0, matricula=6C, nombre=Jesus, paterno=Garcia]
Alumno [estatura=1.78, fnac=2001-01-01 00:00:00.0, matricula=1A, nombre=Juan, paterno=Lopez]
Alumno [estatura=1.56, fnac=2001-01-10 00:00:00.0, matricula=2A, nombre=Nadia, paterno=Perez]
z Alumno [estatura=1.6, fnac=2001-01-20 00:00:00.0, matricula=3B, nombre=Perla, paterno=Calles]
Alumno [estatura=1.56, fnac=2001-01-10 00:00:00.0, matricula=2A, nombre=Nadia, paterno=Perez]
Alumno [estatura=1.78, fnac=2001-01-01 00:00:00.0, matricula=1A, nombre=Juan, paterno=Lopez]
Alumno [estatura=1.65, fnac=2001-03-20 00:00:00.0, matricula=6C, nombre=Jesus, paterno=Garcia]
Alumno [estatura=1.75, fnac=2001-02-10 00:00:00.0, matricula=5A, nombre=Javier, paterno=Anaro]
Alumno [estatura=1.53, fnac=2001-03-20 00:00:00.0, matricula=7B, nombre=Gena, paterno=null]
Alumno [estatura=1.68, fnac=2001-01-01 00:00:00.0, matricula=4A, nombre=Carlos, paterno=Madero]
2022-09-23 20:45:27.379 INFO 127594 --- [ionShutdownHook] j.LocalContainerEntityManagerFactoryBean : Closing JPA EntityManagerFactory for persistence unit 'default'
```



Prueba buscarTodosPaginas():

```
@Test
void buscarTodosPaginasTest() {
    Pageable pagina;
    Iterable<Alumno> iterable;

    for (int i = 0; i <= 4; i++) {
        System.out.println("Página " + i);
        pagina = PageRequest.of(i, size: 5, Sort.by(...properties: "nombre").descending());

        iterable = repositorioAlumno.findAll(pagina);
        iterable.forEach(System.out::println);
    }
}
```

Salida.

```
Página 0
Alumno [estatura=1.6, fnac=2001-01-20 00:00:00.0, matricula=3B, nombre=Perla, paterno=Calles]
Alumno [estatura=1.56, fnac=2001-01-10 00:00:00.0, matricula=2A, nombre=Nadia, paterno=Perez]
Alumno [estatura=1.78, fnac=2001-01-01 00:00:00.0, matricula=1A, nombre=Juan, paterno=Lopez]
Alumno [estatura=1.65, fnac=2001-03-20 00:00:00.0, matricula=6C, nombre=Jesus, paterno=Garcia]
Alumno [estatura=1.75, fnac=2001-02-10 00:00:00.0, matricula=5A, nombre=Javier, paterno=Anaro]
Página 1
Alumno [estatura=1.53, fnac=2001-03-20 00:00:00.0, matricula=7B, nombre=Gema, paterno=null]
Alumno [estatura=1.68, fnac=2001-01-01 00:00:00.0, matricula=4A, nombre=Carlos, paterno=Madero]
Página 2
Página 3
Página 4
2022-09-23 20:46:53.409 INFO 128623 --- [ionShutdownHook] j.LocalContainerEntityManagerFactoryBean : Closing JPA EntityManagerFactory for persistence unit 'default'
```