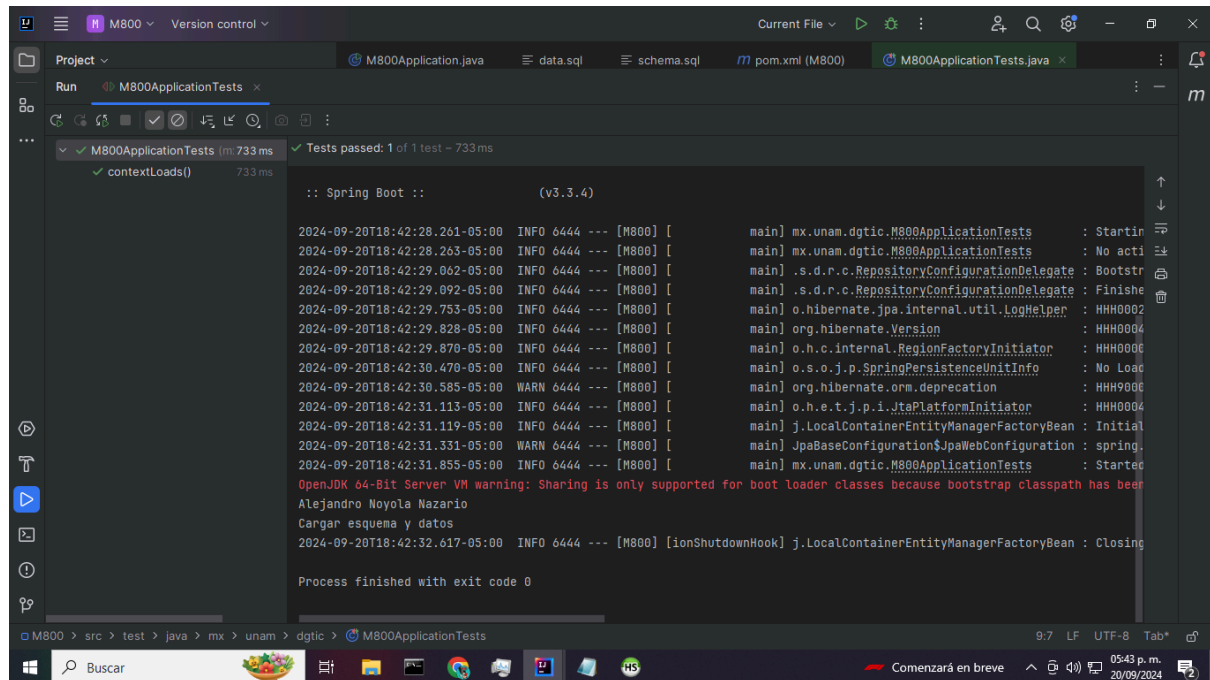


# Desarrollo de Sistemas con Tecnología Java Emisión 15

Nombre: Noyola Nazario Alejandro

## 1. Cargar esquema y Datos (M800)



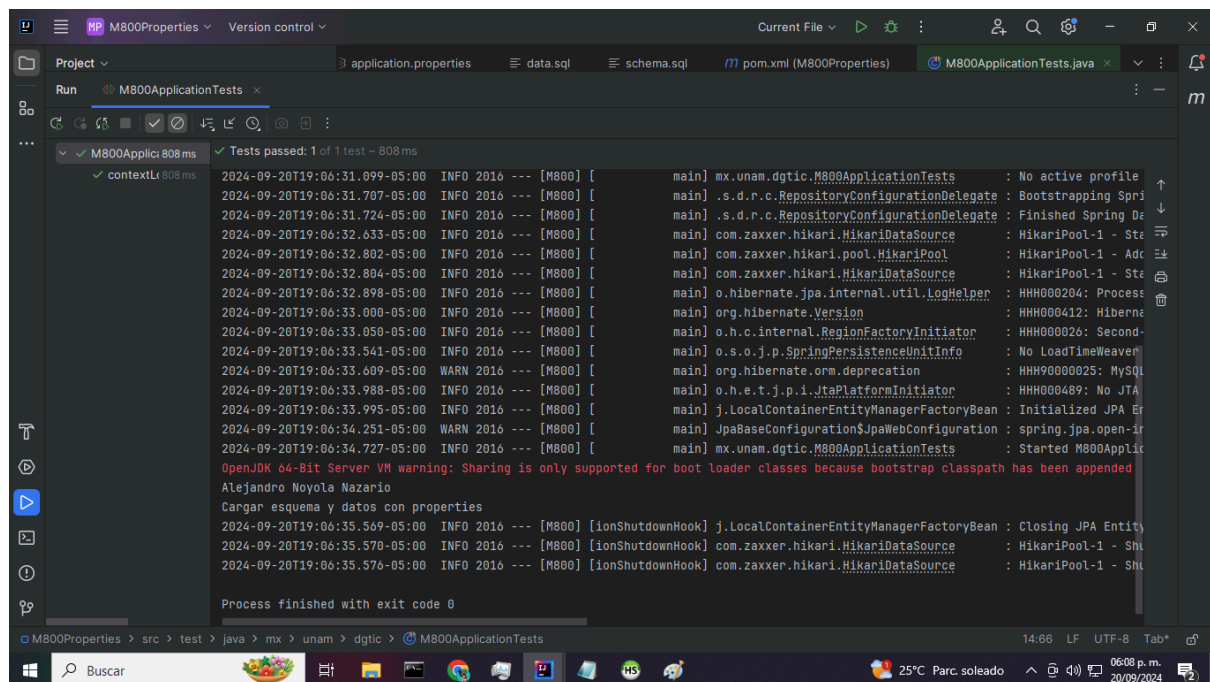
```
Run M800ApplicationTests
Tests passed: 1 of 1 test - 733ms
contextLoads() 733 ms

:: Spring Boot :: (v3.3.4)

2024-09-20T18:42:28.261-05:00 INFO 6444 --- [M800] [main] mx.unam.dgtic.M800ApplicationTests : Starting
2024-09-20T18:42:28.263-05:00 INFO 6444 --- [M800] [main] mx.unam.dgtic.M800ApplicationTests : No active profile
2024-09-20T18:42:29.062-05:00 INFO 6444 --- [M800] [main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring
2024-09-20T18:42:29.092-05:00 INFO 6444 --- [M800] [main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Da
2024-09-20T18:42:29.753-05:00 INFO 6444 --- [M800] [main] o.hibernate.jpa.internal.util.LogHelper : HHH00002: Process
2024-09-20T18:42:29.828-05:00 INFO 6444 --- [M800] [main] org.hibernate.Version : HHH00004: Hiberne
2024-09-20T18:42:29.870-05:00 INFO 6444 --- [M800] [main] o.h.c.internal.RegionFactoryInitiator : HHH00006: Second-
2024-09-20T18:42:30.470-05:00 INFO 6444 --- [M800] [main] o.s.o.j.p.SpringPersistenceUnitInfo : No LoadTimeWeaver
2024-09-20T18:42:30.585-05:00 WARN 6444 --- [M800] [main] org.hibernate.orm.deprecation : HHH90006: MySQL
2024-09-20T18:42:31.113-05:00 INFO 6444 --- [M800] [main] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000489: No JTA
2024-09-20T18:42:31.119-05:00 INFO 6444 --- [M800] [main] j.LocalContainerEntityManagerFactoryBean : Initialized JPA Er
2024-09-20T18:42:31.331-05:00 WARN 6444 --- [M800] [main] JpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in
2024-09-20T18:42:31.855-05:00 INFO 6444 --- [M800] [main] mx.unam.dgtic.M800ApplicationTests : Started M800Applic

OpenJDK 64-Bit Server VM warning: Sharing is only supported for boot loader classes because bootstrap classpath has been
Alejandro Noyola Nazario
Cargar esquema y datos
2024-09-20T18:42:32.617-05:00 INFO 6444 --- [M800] [ionShutdownHook] j.LocalContainerEntityManagerFactoryBean : Closing
Process finished with exit code 0
```

## 2. Properties (M800properties)

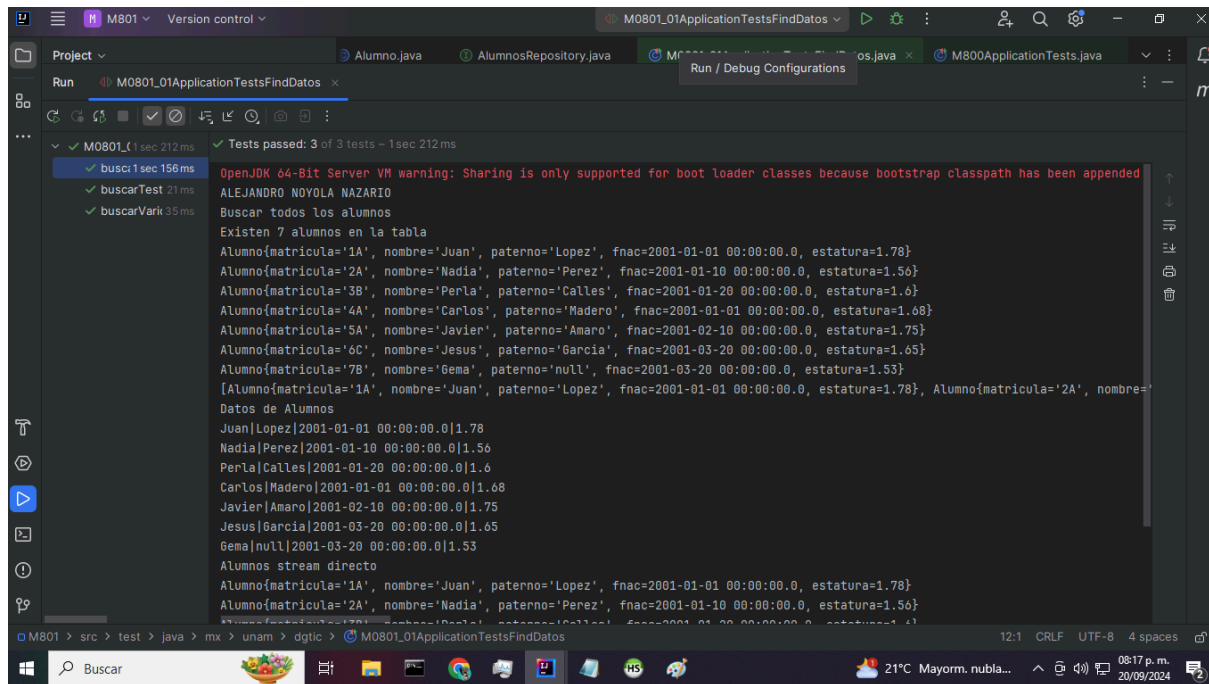


```
Run M800ApplicationTests
Tests passed: 1 of 1 test - 808ms
contextLoads() 808 ms

2024-09-20T19:06:31.099-05:00 INFO 2016 --- [M800] [main] mx.unam.dgtic.M800ApplicationTests : No active profile
2024-09-20T19:06:31.707-05:00 INFO 2016 --- [M800] [main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spr
2024-09-20T19:06:31.724-05:00 INFO 2016 --- [M800] [main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Da
2024-09-20T19:06:32.633-05:00 INFO 2016 --- [M800] [main] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Sta
2024-09-20T19:06:32.802-05:00 INFO 2016 --- [M800] [main] com.zaxxer.hikari.pool.HikariPool : HikariPool-1 - Adc
2024-09-20T19:06:32.804-05:00 INFO 2016 --- [M800] [main] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Sta
2024-09-20T19:06:32.898-05:00 INFO 2016 --- [M800] [main] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Process
2024-09-20T19:06:33.000-05:00 INFO 2016 --- [M800] [main] org.hibernate.Version : HHH000412: Hiberne
2024-09-20T19:06:33.050-05:00 INFO 2016 --- [M800] [main] o.h.c.internal.RegionFactoryInitiator : HHH000026: Second-
2024-09-20T19:06:33.541-05:00 INFO 2016 --- [M800] [main] o.s.o.j.p.SpringPersistenceUnitInfo : No LoadTimeWeaver
2024-09-20T19:06:33.609-05:00 WARN 2016 --- [M800] [main] org.hibernate.orm.deprecation : HHH90000025: MySQL
2024-09-20T19:06:33.988-05:00 INFO 2016 --- [M800] [main] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000489: No JTA
2024-09-20T19:06:33.995-05:00 INFO 2016 --- [M800] [main] j.LocalContainerEntityManagerFactoryBean : Initialized JPA Er
2024-09-20T19:06:34.251-05:00 WARN 2016 --- [M800] [main] JpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in
2024-09-20T19:06:34.727-05:00 INFO 2016 --- [M800] [main] mx.unam.dgtic.M800ApplicationTests : Started M800Applic

OpenJDK 64-Bit Server VM warning: Sharing is only supported for boot loader classes because bootstrap classpath has been appended
Alejandro Noyola Nazario
Cargar esquema y datos con properties
2024-09-20T19:06:35.569-05:00 INFO 2016 --- [M800] [ionShutdownHook] j.LocalContainerEntityManagerFactoryBean : Closing JPA Entity
2024-09-20T19:06:35.570-05:00 INFO 2016 --- [M800] [ionShutdownHook] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Shu
2024-09-20T19:06:35.576-05:00 INFO 2016 --- [M800] [ionShutdownHook] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Shu
Process finished with exit code 0
```

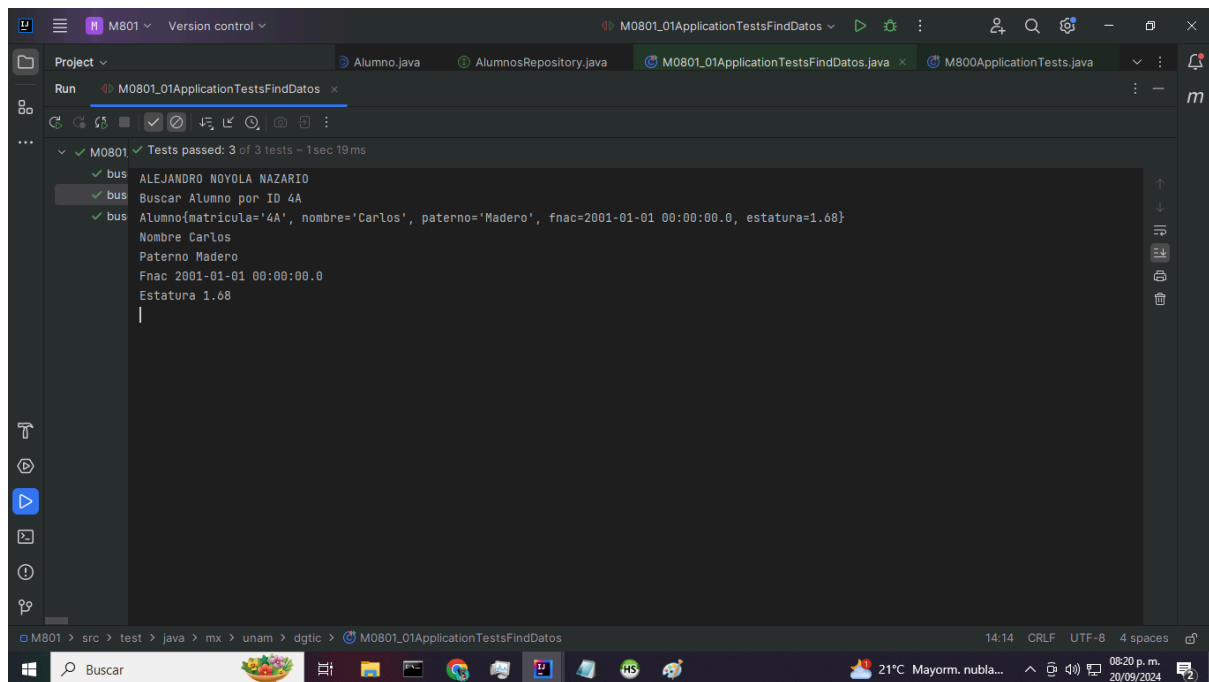
### 3. Buscar Todos Alumnos (M801)



The screenshot shows an IDE window with the 'Run' tab selected. The test 'M801\_01ApplicationTestsFindDatos' is running, and the output is displayed in the console. The output shows the results of the 'buscar' test, which is 'Buscar todos los alumnos'. The output lists 7 students and their details, including matricula, nombre, paterno, fnac, and estatura. The output is as follows:

```
OpenJDK 64-Bit Server VM warning: Sharing is only supported for boot loader classes because bootstrap classpath has been appended
ALEJANDRO NOYOLA NAZARIO
Buscar todos los alumnos
Existen 7 alumnos en la tabla
Alumno{matricula='1A', nombre='Juan', paterno='Lopez', fnac=2001-01-01 00:00:00.0, estatura=1.78}
Alumno{matricula='2A', nombre='Nadia', paterno='Perez', fnac=2001-01-10 00:00:00.0, estatura=1.56}
Alumno{matricula='3B', nombre='Perla', paterno='Calles', fnac=2001-01-20 00:00:00.0, estatura=1.6}
Alumno{matricula='4A', nombre='Carlos', paterno='Madero', fnac=2001-01-01 00:00:00.0, estatura=1.68}
Alumno{matricula='5A', nombre='Javier', paterno='Amaro', fnac=2001-02-10 00:00:00.0, estatura=1.75}
Alumno{matricula='6C', nombre='Jesus', paterno='Garcia', fnac=2001-03-20 00:00:00.0, estatura=1.65}
Alumno{matricula='7B', nombre='Gema', paterno='null', fnac=2001-03-20 00:00:00.0, estatura=1.53}
[Alumno{matricula='1A', nombre='Juan', paterno='Lopez', fnac=2001-01-01 00:00:00.0, estatura=1.78}, Alumno{matricula='2A', nombre='Nadia', paterno='Perez', fnac=2001-01-10 00:00:00.0, estatura=1.56}, Alumno{matricula='3B', nombre='Perla', paterno='Calles', fnac=2001-01-20 00:00:00.0, estatura=1.6}, Alumno{matricula='4A', nombre='Carlos', paterno='Madero', fnac=2001-01-01 00:00:00.0, estatura=1.68}, Alumno{matricula='5A', nombre='Javier', paterno='Amaro', fnac=2001-02-10 00:00:00.0, estatura=1.75}, Alumno{matricula='6C', nombre='Jesus', paterno='Garcia', fnac=2001-03-20 00:00:00.0, estatura=1.65}, Alumno{matricula='7B', nombre='Gema', paterno='null', fnac=2001-03-20 00:00:00.0, estatura=1.53}]
Datos de Alumnos
Juan|Lopez|2001-01-01 00:00:00.0|1.78
Nadia|Perez|2001-01-10 00:00:00.0|1.56
Perla|Calles|2001-01-20 00:00:00.0|1.6
Carlos|Madero|2001-01-01 00:00:00.0|1.68
Javier|Amaro|2001-02-10 00:00:00.0|1.75
Jesus|Garcia|2001-03-20 00:00:00.0|1.65
Gema|null|2001-03-20 00:00:00.0|1.53
Alumnos stream directo
Alumno{matricula='1A', nombre='Juan', paterno='Lopez', fnac=2001-01-01 00:00:00.0, estatura=1.78}
Alumno{matricula='2A', nombre='Nadia', paterno='Perez', fnac=2001-01-10 00:00:00.0, estatura=1.56}
Alumno{matricula='3B', nombre='Perla', paterno='Calles', fnac=2001-01-20 00:00:00.0, estatura=1.6}
Alumno{matricula='4A', nombre='Carlos', paterno='Madero', fnac=2001-01-01 00:00:00.0, estatura=1.68}
Alumno{matricula='5A', nombre='Javier', paterno='Amaro', fnac=2001-02-10 00:00:00.0, estatura=1.75}
Alumno{matricula='6C', nombre='Jesus', paterno='Garcia', fnac=2001-03-20 00:00:00.0, estatura=1.65}
Alumno{matricula='7B', nombre='Gema', paterno='null', fnac=2001-03-20 00:00:00.0, estatura=1.53}
```

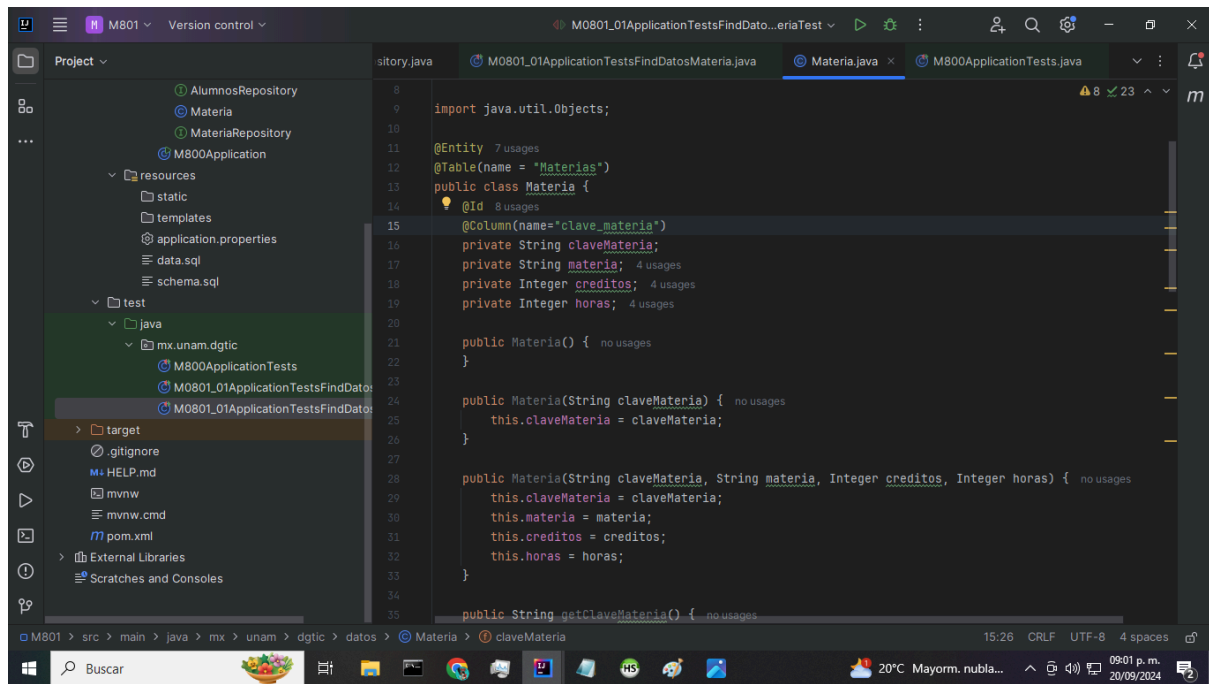
### 4. Buscar uno (M801)



The screenshot shows an IDE window with the 'Run' tab selected. The test 'M801\_01ApplicationTestsFindDatos' is running, and the output is displayed in the console. The output shows the results of the 'bus' test, which is 'Buscar Alumno por ID 4A'. The output lists the details of the student with ID 4A, including matricula, nombre, paterno, fnac, and estatura. The output is as follows:

```
ALEJANDRO NOYOLA NAZARIO
Buscar Alumno por ID 4A
Alumno{matricula='4A', nombre='Carlos', paterno='Madero', fnac=2001-01-01 00:00:00.0, estatura=1.68}
Nombre Carlos
Paterno Madero
Fnac 2001-01-01 00:00:00.0
Estatura 1.68
```

## 5. Entitiy Materia

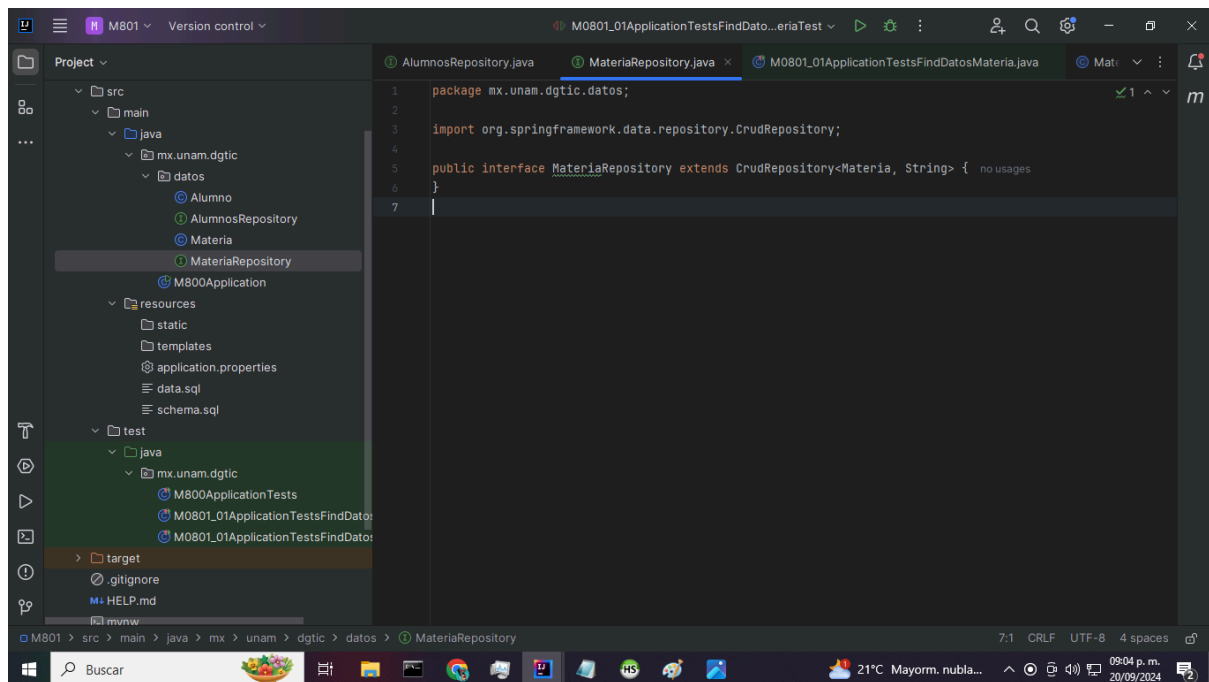


The screenshot shows an IDE with the 'Materia.java' file open. The left sidebar displays the project structure, including 'src/main/java/mx/unam/dgtic/datos' and 'test/java/mx/unam/dgtic'. The main editor area contains the following Java code:

```
8
9 import java.util.Objects;
10
11 @Entity 7 usages
12 @Table(name = "Materias")
13 public class Materia {
14     @Id 8 usages
15     @Column(name="clave_materia")
16     private String claveMateria;
17     private String materia; 4 usages
18     private Integer credits; 4 usages
19     private Integer horas; 4 usages
20
21     public Materia() { no usages
22     }
23
24     public Materia(String claveMateria) { no usages
25         this.claveMateria = claveMateria;
26     }
27
28     public Materia(String claveMateria, String materia, Integer credits, Integer horas) { no usages
29         this.claveMateria = claveMateria;
30         this.materia = materia;
31         this.credits = credits;
32         this.horas = horas;
33     }
34
35     public String getClaveMateria() { no usages
```

The status bar at the bottom indicates the file is 'Materia.java' in the 'claveMateria' package, with 15:26, CRLF, UTF-8, and 4 spaces.

## 6. MateriaRepository

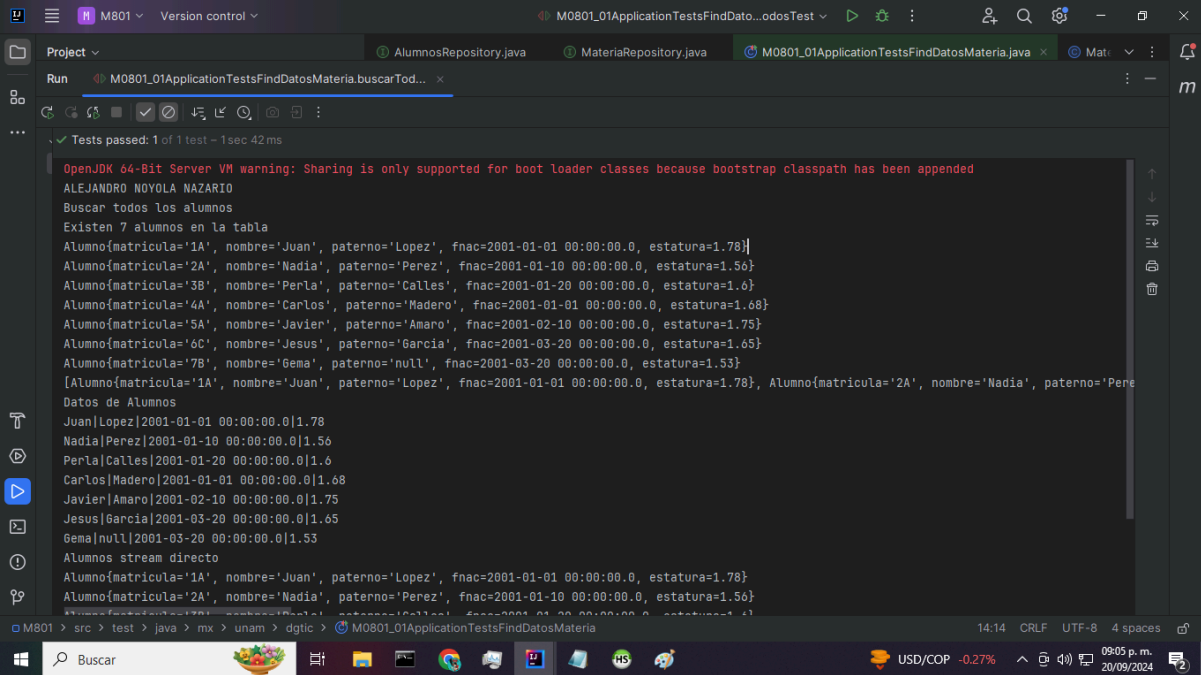


The screenshot shows an IDE with the 'MateriaRepository.java' file open. The left sidebar displays the project structure, including 'src/main/java/mx/unam/dgtic/datos' and 'test/java/mx/unam/dgtic'. The main editor area contains the following Java code:

```
1 package mx.unam.dgtic.datos;
2
3 import org.springframework.data.repository.CrudRepository;
4
5 public interface MateriaRepository extends CrudRepository<Materia, String> { no usages
6 }
7
```

The status bar at the bottom indicates the file is 'MateriaRepository.java' in the 'MateriaRepository' package, with 7:1, CRLF, UTF-8, and 4 spaces.

## 7. Listar todas las materias



```
Run M0801_01ApplicationTestsFindDatosMateria.buscarTod... x
Tests passed: 1 of 1 test - 1sec 42ms
OpenJDK 64-Bit Server VM warning: Sharing is only supported for boot loader classes because bootstrap classpath has been appended
ALEJANDRO NOYOLA NAZARIO
Buscar todos los alumnos
Existen 7 alumnos en la tabla
Alumno{matricula='1A', nombre='Juan', paterno='Lopez', fnac=2001-01-01 00:00:00.0, estatura=1.78}
Alumno{matricula='2A', nombre='Nadia', paterno='Perez', fnac=2001-01-10 00:00:00.0, estatura=1.56}
Alumno{matricula='3B', nombre='Perla', paterno='Calles', fnac=2001-01-20 00:00:00.0, estatura=1.6}
Alumno{matricula='4A', nombre='Carlos', paterno='Madero', fnac=2001-01-01 00:00:00.0, estatura=1.68}
Alumno{matricula='5A', nombre='Javier', paterno='Amaro', fnac=2001-02-10 00:00:00.0, estatura=1.75}
Alumno{matricula='6C', nombre='Jesus', paterno='Garcia', fnac=2001-03-20 00:00:00.0, estatura=1.65}
Alumno{matricula='7B', nombre='Gema', paterno='null', fnac=2001-03-20 00:00:00.0, estatura=1.53}
[Alumno{matricula='1A', nombre='Juan', paterno='Lopez', fnac=2001-01-01 00:00:00.0, estatura=1.78}, Alumno{matricula='2A', nombre='Nadia', paterno='Pere
Datos de Alumnos
Juan|Lopez|2001-01-01 00:00:00.0|1.78
Nadia|Perez|2001-01-10 00:00:00.0|1.56
Perla|Calles|2001-01-20 00:00:00.0|1.6
Carlos|Madero|2001-01-01 00:00:00.0|1.68
Javier|Amaro|2001-02-10 00:00:00.0|1.75
Jesus|Garcia|2001-03-20 00:00:00.0|1.65
Gema|null|2001-03-20 00:00:00.0|1.53
Alumnos stream directo
Alumno{matricula='1A', nombre='Juan', paterno='Lopez', fnac=2001-01-01 00:00:00.0, estatura=1.78}
Alumno{matricula='2A', nombre='Nadia', paterno='Perez', fnac=2001-01-10 00:00:00.0, estatura=1.56}
Alumno{matricula='3B', nombre='Perla', paterno='Calles', fnac=2001-01-20 00:00:00.0, estatura=1.6}
Alumno{matricula='4A', nombre='Carlos', paterno='Madero', fnac=2001-01-01 00:00:00.0, estatura=1.68}
Alumno{matricula='5A', nombre='Javier', paterno='Amaro', fnac=2001-02-10 00:00:00.0, estatura=1.75}
Alumno{matricula='6C', nombre='Jesus', paterno='Garcia', fnac=2001-03-20 00:00:00.0, estatura=1.65}
Alumno{matricula='7B', nombre='Gema', paterno='null', fnac=2001-03-20 00:00:00.0, estatura=1.53}
M0801 > src > test > java > mx > unam > dgtic > M0801_01ApplicationTestsFindDatosMateria 14:14 CRLF UTF-8 4 spaces
```