

Spring Data JPA with Hibernate Part 1 Exercise

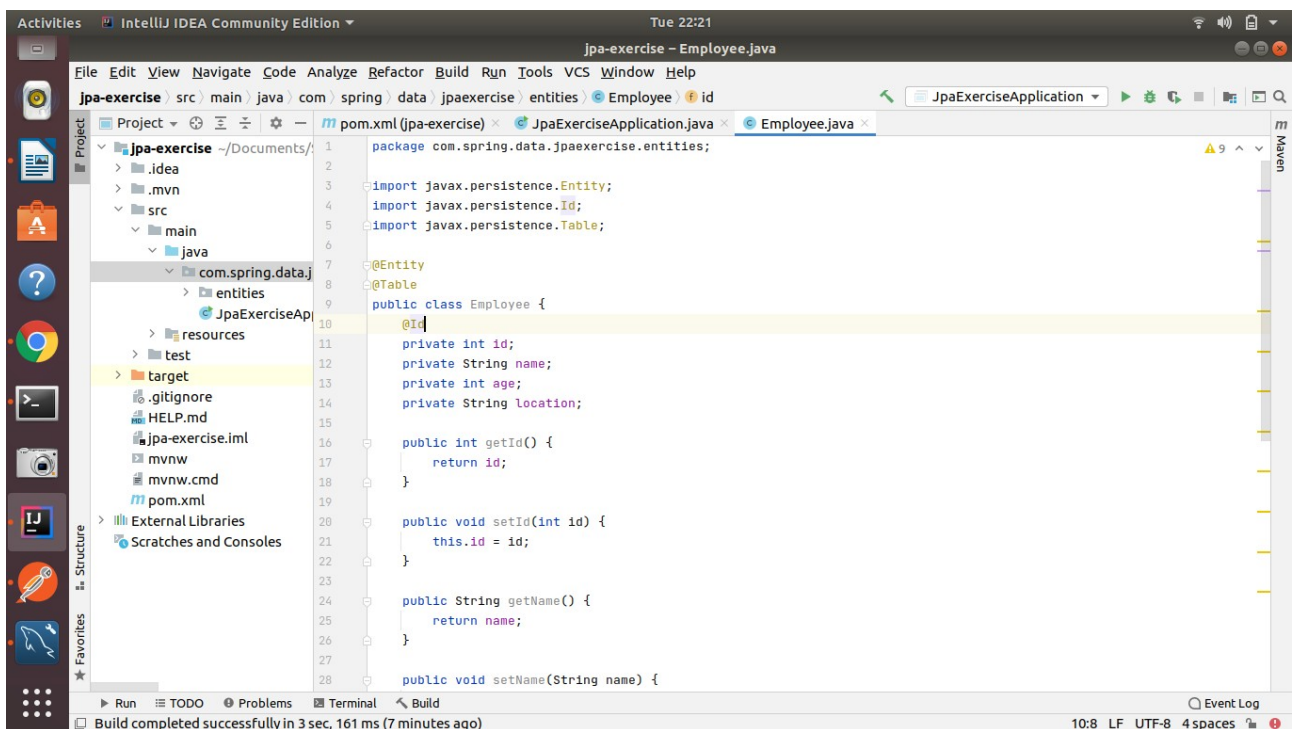
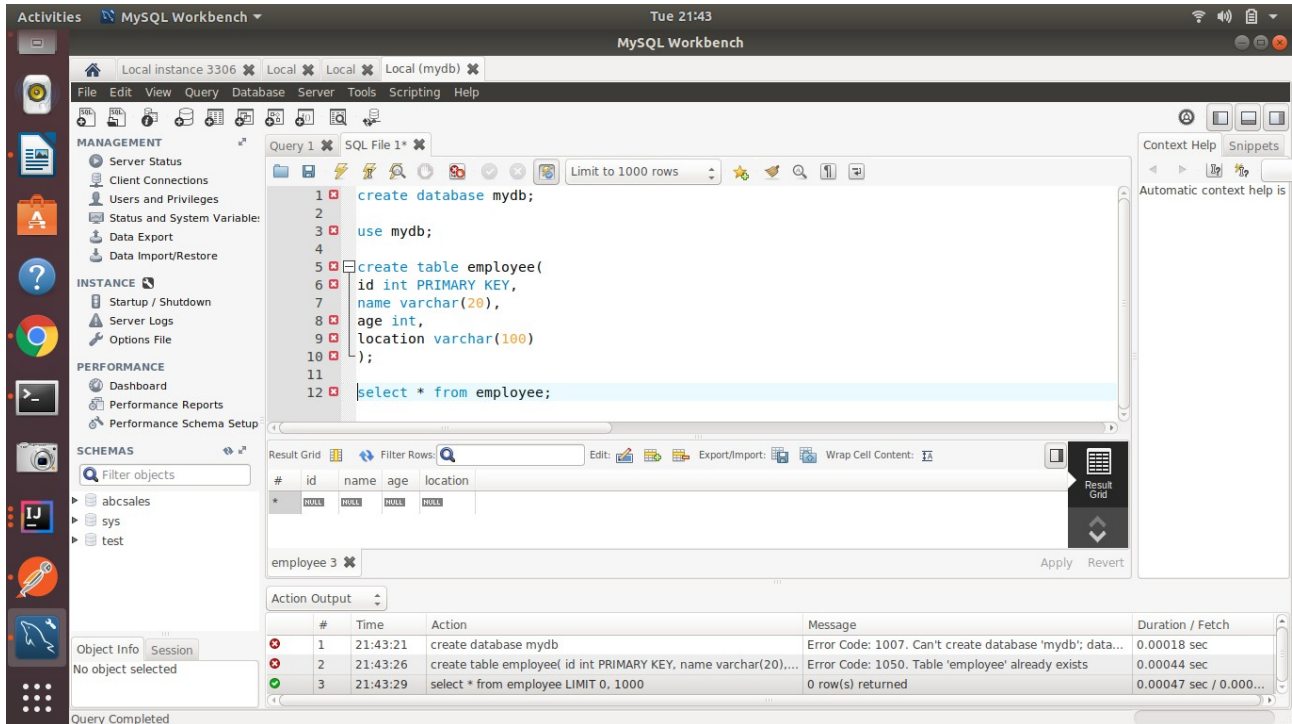
1) Create an Employee Entity which contains following fields

Name

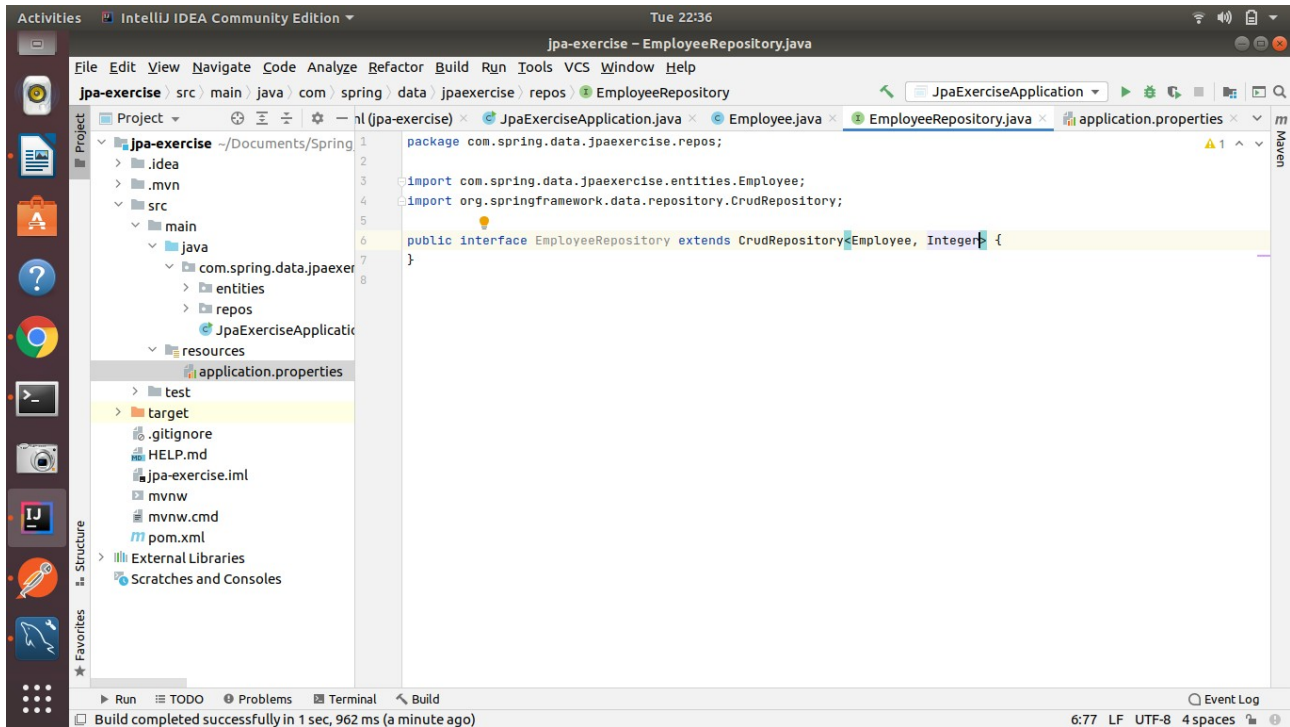
Id

Age

Location

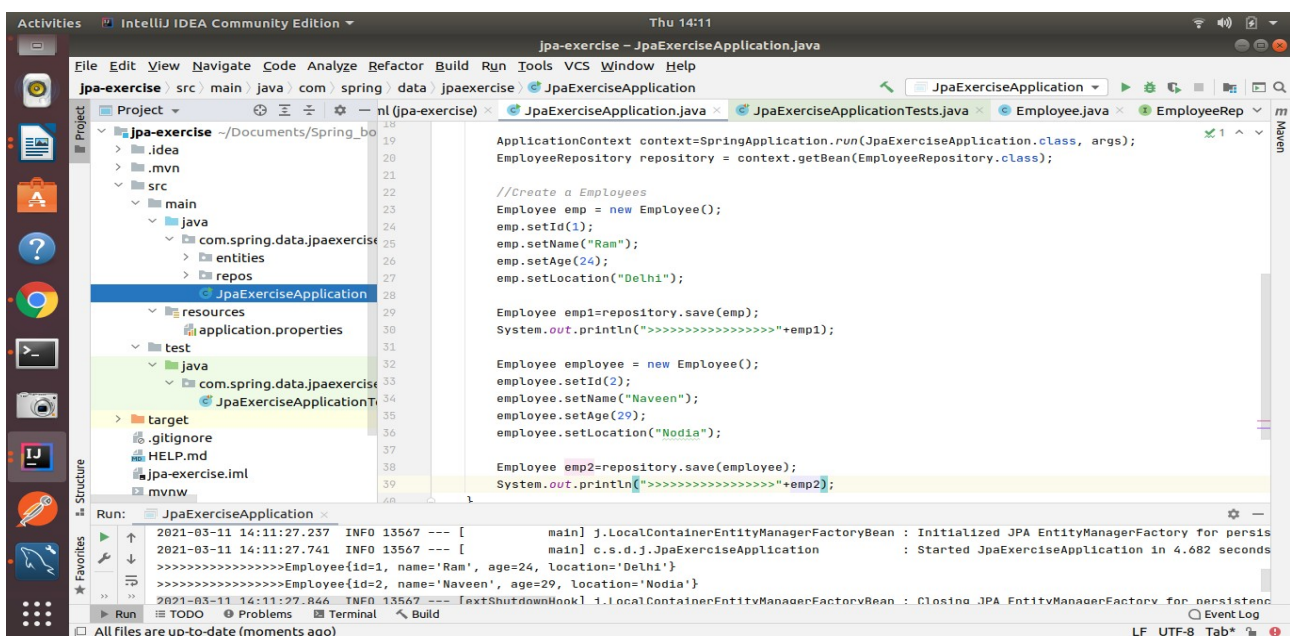


(2) Set up EmployeeRepository with Spring Data JPA



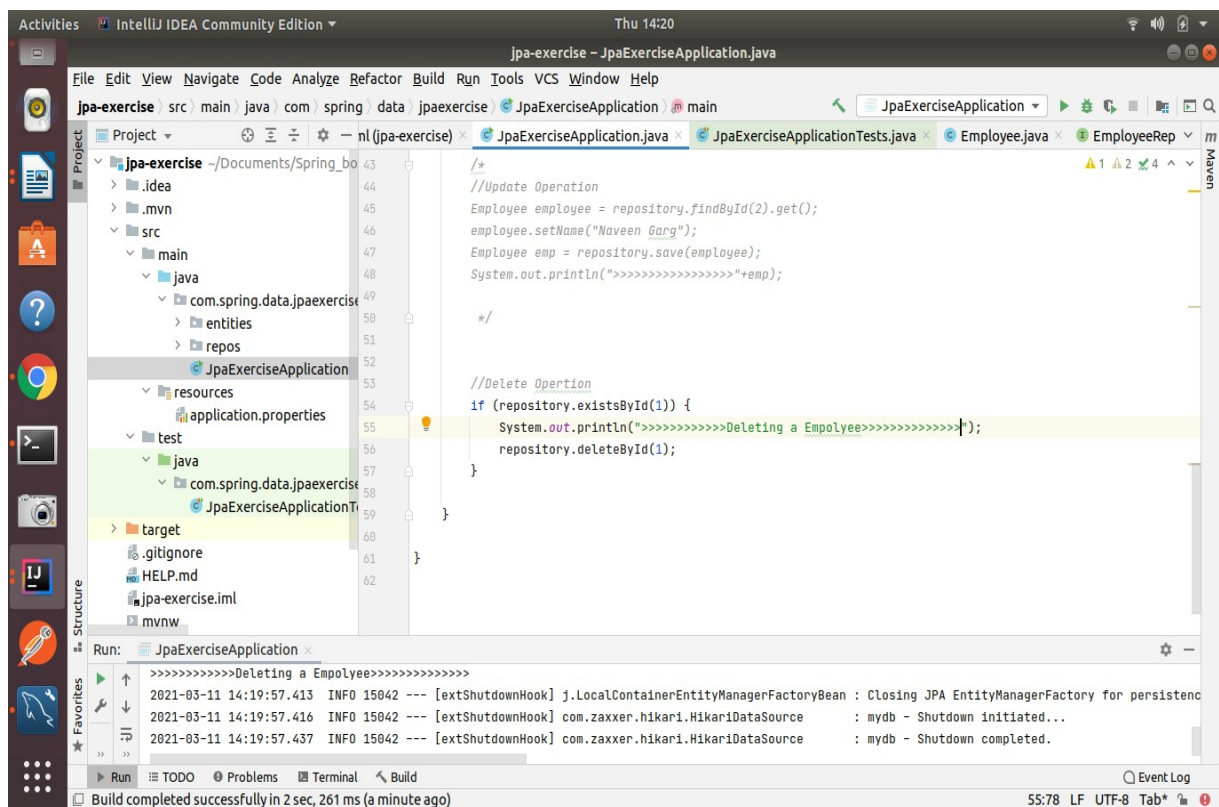
```
spring.datasource.name=mydb
spring.datasource.url=jdbc:mysql://localhost:3306/mydb?serverTimezone=UTC
spring.datasource.username=root
#spring.datasource.password=ttn
spring.datasource.driver-class-name=com.mysql.cj.jdbc.Driver
spring.jpa.properties.hibernate.dialect=org.hibernate.dialect.MySQL5Dialect
spring.jpa.hibernate.ddl-auto=update
spring.jpa.show.sql=true
```

(3) Perform Create Operation on Entity using Spring Data JPA



Result Grid		Filter Rows:		Edit:			
#	id	name	age	location			
1	1	Ram	24	Delhi			
2	2	Naveen Garg	29	Nodia			
3	3	Ankit	28	MP			
*	NULL	NULL	NULL	NULL			

(5) Perform Delete Operation on Entity using Spring Data JPA



(6) Get the total count of the number of Employees

The screenshot shows the IntelliJ IDEA Community Edition interface. The main editor displays the `JpaExerciseApplication.java` file. The code includes a `count()` operation that prints the total number of employees. The Run console at the bottom shows the output of the application, indicating that the total number of employees is 5.

```
/*
 * Delete Operation
 */
if (repository.existsById(1)) {
    System.out.println("====>>>>Deleting a Employee====>>>>");
    repository.deleteById(1);
}

/*
 * Read Operation
 */
Employee employee = repository.findById(2).get();
System.out.println("====>>>>Name of Employee: "+employee.getName());

/*
 * Count Operation
 */
System.out.println("Total number of employees:====>>>>"+ repository.count());
}
```

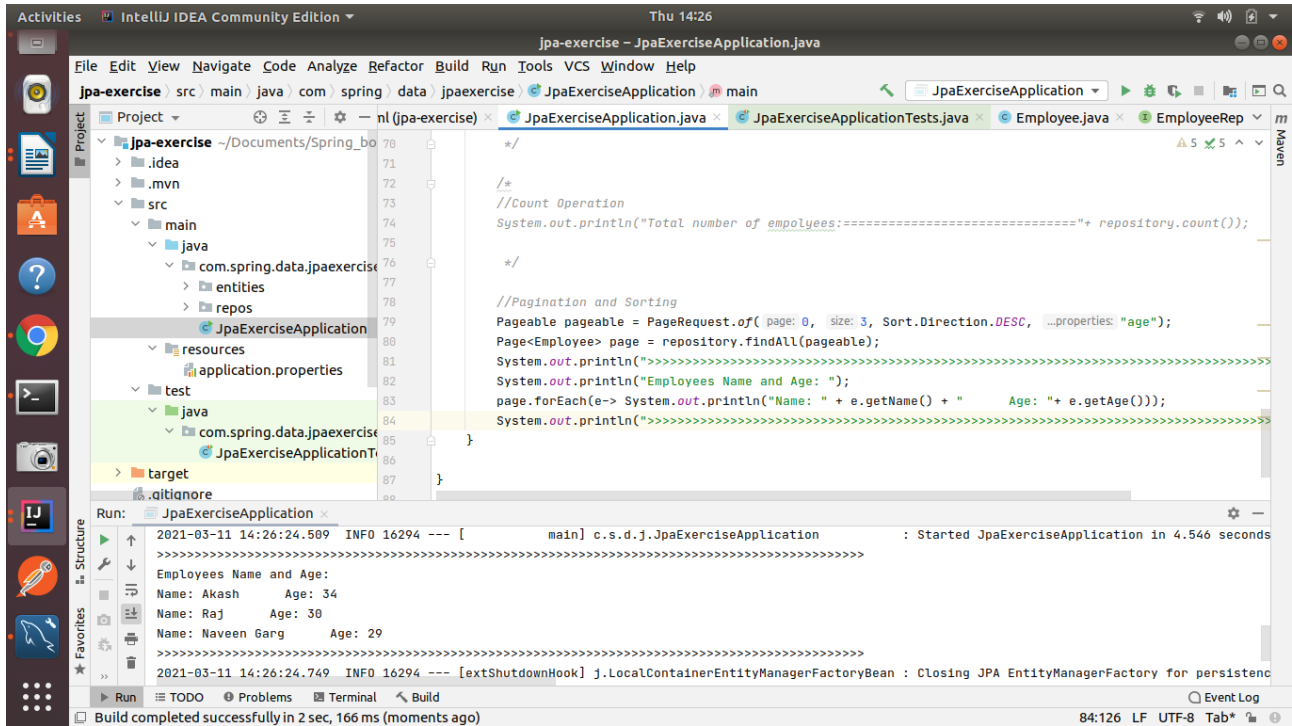
Run: JpaExerciseApplication

```
Total number of employees:====>>>>5
2021-03-11 14:24:33.218 INFO 15908 --- [extShutdownHook] j.LocalContainerEntityManagerFactoryBean : Closing JPA EntityManagerFactory for persistence
2021-03-11 14:24:33.221 INFO 15908 --- [extShutdownHook] com.zaxxer.hikari.HikariDataSource : mydb - Shutdown initiated...
2021-03-11 14:24:33.229 INFO 15908 --- [extShutdownHook] com.zaxxer.hikari.HikariDataSource : mydb - Shutdown completed.
```

Result Grid Filter Rows: Edit:

#	id	name	age	location
1	2	Naveen Garg	29	Nodia
2	3	Ankit	28	MP
3	4	Rahul	25	Mumbai
4	5	Raj	30	UP
5	6	Akash	34	Delhi
*	NULL	NULL	NULL	NULL

(7) Implement Pagination and Sorting on the bases of Employee Age



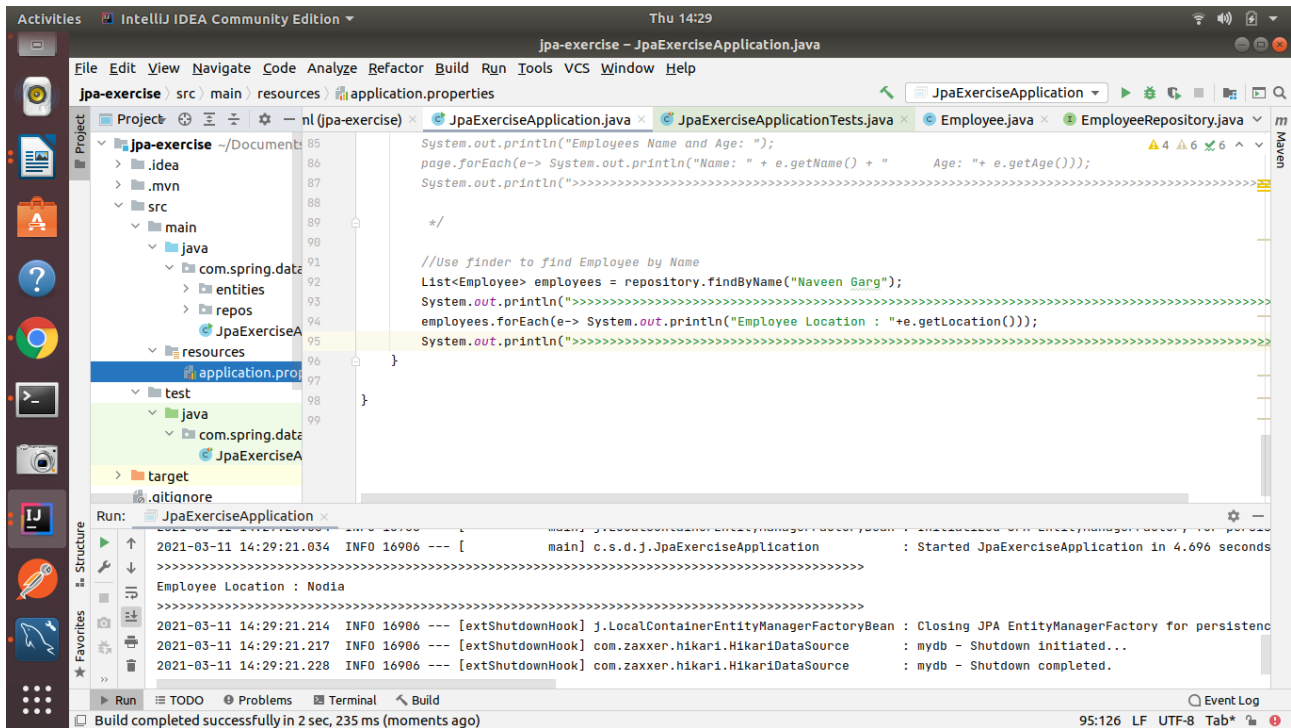
(8) Create and use finder to find Employee by Name

```
package com.spring.data.jpalexercise.repos;

import com.spring.data.jpalexercise.entities.Employee;
import org.springframework.data.repository.CrudRepository;

import java.util.List;

public interface EmployeeRepository extends CrudRepository<Employee, Integer> {
    List<Employee> findByName(String name);
}
```



(9) Create and use finder to find Employees starting with A character

```
package com.spring.data.jpaexercise.repos;

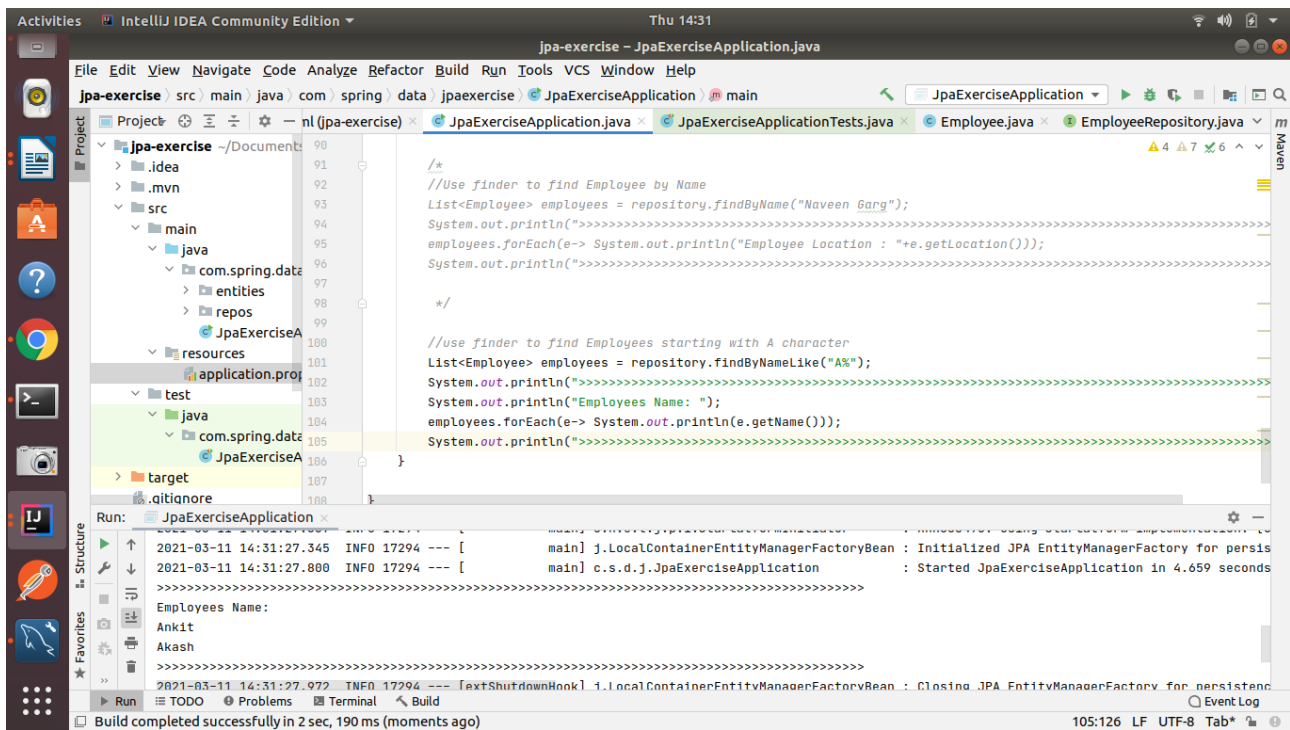
import com.spring.data.jpaexercise.entities.Employee;
import org.springframework.data.repository.CrudRepository;

import java.util.List;

public interface EmployeeRepository extends CrudRepository<Employee, Integer> {
    List<Employee> findByName(String name);

    List<Employee> findByAgeBetween(int age1, int age2);

    List<Employee> findByNameLike(String name);
}
```

(10) Create and use finder to find Employees Between the age of 28 to 32

```
package com.spring.data.jpaexercise.repos;

import com.spring.data.jpaexercise.entities.Employee;
import org.springframework.data.repository.CrudRepository;
import java.util.List;

public interface EmployeeRepository extends CrudRepository<Employee, Integer> {
    List<Employee> findByName(String name);

    List<Employee> findByAgeBetween(int age1, int age2);
}
```

