**Explain the difference between JPA, Hibernate and Spring JPA.**

1. JPA (Java Persistance API) :

* It is a specification designed by Oracle to standardize object relational mapping (ORM).
* It does not provide any implementation its just a bunch of interfaces (like @OneTooMany, @Entity)
* We use JPA annotations to connect Java tables to Databases
* Example :

import javax.persistence.\*;

import java.util.List;

@Entity

public class Author {

@Id

@GeneratedValue(strategy = GenerationType.IDENTITY)

private Long id;

private String name;

private String nationality;

@OneToMany(mappedBy = "author", cascade = CascadeType.ALL)

private List<Book> books;

}

1. Hibernate :

* It is an ORM framework and it is used for implementation of JPA.
* It can implement all JPA features and do some enhancements of its own.
* You can use Hibernate separately on its own or with JPAs.
* Example :

Session session = sessionFactory.openSession();

Book book = session.get(Book.class, 1L);

1. Spring Data JPA :

* It is a spring abstraction built on top of JPA and Hibernate.
* It removes all Boilerplate code
* It integrates strongly with Spring Boot and Spring repositories.
* There are auto-generated query methods present.
* Example :

public interface BookRepository extends JpaRepository<Book, Long> {

List<Book> findByTitle(String title);

}

* There’s no need to write any implementation here Spring data JPA does it on its own.