**Difference between JPA, Hibernate and Spring Data JPA**

**JPA**

JPA is a Java specification that defines how to manage relational data in Java applications.

It’s just an interface. It defines a standard API for ORM (Object Relational Mapping).

JPA includes annotations and methods for CRUD operations, entity relationships, querying.

@Entity, @Id, @Table and @Column, etc.

JPQL (Java Persistence Query Language)

**Hibernate**

Hibernate is an implementation of the JPA specification – It’s a JPA provider.

Hibernate was created before JPA and later adapted to support the JPA standard.

**Spring Data JPA**

Part of the Spring Data family, simplifies JPA usage in Spring.

It builds on top of JPA and eliminates a lot of boilerplate code.

It extends **JpaRepository or CrudRepository.**

It automatically generated queries from method names.

Easily integrates with Spring Boot.

Adding custom query capabilities using @Query.

Use JPA if you want a vendor-independent ORM abstraction.

Use Hibernate if you want more control or advanced features.

Use Spring Data JPA if you are building a Spring application and want rapid development with minimal boilerplate.