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

**1. Java Persistence API (JPA)**

JPA is a Java specification for accessing, persisting, and managing data between Java objects and a relational database.

It is only an interface.

It defines concepts like Entity, EntityManager and annotations such as @Entity, @Id, etc.

JPA is implemented by tools like Hibernate.

**2) Hibernate**

Hibernate is a ORM framework.

It provides the actual logic to map Java objects to database tables and handle database operations.

It includes both JPA compliant features and additional non standard features (like caching and performance optimizations).

Developers must manually manage sessions and transactions if not using Spring.

**3) Spring Data JPA**

Spring Data JPA is a part of the Spring Framework that builds on top of JPA.

It does not implement JPA but provides an abstraction that reduces the need for writing boilerplate code.

It integrates smoothly with Spring Boot and manages transactions automatically.