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Spring Boot 9AM

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ORM : Spring Data JPA

ORM : Object Relational Mapping (Theory)

=> Perform Database Operations(Insert,Update,delete,Select)  
using Object Format only.

=> SQL Query is generated by ORM Concept.

=> Mapping Rule (Must be followed by Programmer)

- a. one table - map with- one class (Entity class/Model class).
- b. one Column - map with - one variable

ToDo mapping, we can use JPA(Java Persistency API) Anntations.

=> Difference: JDBC, JPA, Hibernate, Spring Data JPA.

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API: Set of classes,interface,enum,annotation.

Thread API : Runnable, Thread...

String API : String, StringBuilder...

Collection API: List,Set,....

Servlets API : Dynamic Web pages

JDBC API : TODO Database Operations

JDBC: API --> Database Operations -> Programmer has to define  
SQLs (Creating table, insert, delete, select...)

Database Operations ---OOPs --class/objects

\*)JPA is specification (rules and guidelines) ,  
Hibernate is a implementation of JPA (full code for Operations).

\*) Hibernate -- code is lengthy -- manul configuration.  
In Data JPA(Spring Data JPA) is reducing your application coding  
lines.

--Hibernate----

Configuarion/Service Register

SessionFactory

Session

beginTransaction

save(obj)

commitTx

close ses

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Spring Data JPA

```
repo.save(obj);
```

Q) What is JDBC,JPA,Hibernate, Spring Data JPA?

A) JDBC is basic API in Java todo DB operations using SQL Queries.

JPA is spcification performing Database operations using ORM concept.

But using only JPA we can not do coding, we must use any one Vendor(JPA impl), ie Hibernate.

Spring Data JPA is a simplified API for Hibernate with JPA. It reduces coding lines by programmer.