#### What is ORM?

It stands for Object Relational Mapping.

The process of linking DB tables with java classes(BO) and DB table column names with properties of classes and

having synchronization b/w them is called "OR-Mapping".

### Synchronization

The modification done in the Object of java classes will reflect to DB table records and vice versa.

ORM tools ===> hibernate, ibatis, eclipselink, .....

## SpringORM

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- => It is not another ORM-Framework
- => It is a SpringModule which provides abstraction on multiple orm frameworks like hibernate, ibatis etc
- => It is available to simplify objects based on O-R mapping persistence logic.
- => It provides multiple template classes like "HibernateTemplate" which is given to avoid boiler plate code
  - of O-R mapping persistence logic.

#### Plain hibernate

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- Create a Configuration Object(To activate hibernate s/w)
- 2. Create a Session Factory Object
- 3. Create a Session Object
- 4. Begin Transaction
- Perform persistence operation [ApplicationLogic]
- 6. use commit/rollback operation
- 7. close session/sessionfactory objects

In the above steps 1,2,3,4,6 and 7 is a common operation which is referred as "Boiler plate code".

Using SpringORM all the "Boiler plate code" steps will be taken care by a Template class called "HibernateTemplate".

## Spring ORM Code(Integration with hibernate)

- 1. Create an Inject Hibernate Template class object
- 2. Perform Persistence operation

Note: boiler plate problem is avoided.

# Advantages of Spring ORM

- Avoids boiler plate code by suppling Template classes
- Common Exception handling(we need to just handler ORM specification exception==> DataAccessException)
- 3. Persistence logic is portable across multiple DB S/w and Entity classes are also portable across multiple ORM Frameworks.
- 4. Common Transaction Management Support
- 5. Common Single Row Operation(given by JPA) and Common JPQL(Java Persistence Query Language)