1**)configuaration file:**

It is used to provide all details related to **db** and **hibernate and It will store data in key value format.**

Hibernate.cfg.xml file contain

**There are three types of mapping commands information**

a)**Connection properties;**

**driver\_class, ur l, username, password**

b**) hibernate command mapping**

**1. Dialect-it is a predefined class in hibernate and It will convert hql query to sql query according to database .**

Database to database dialect also changes.

**2. show\_sql**:- it is a Boolean property default value is false. To see generated SQL on Console make value as true.

3**. format\_sql**:- it is a Boolean property default value is false. It will display sql clause by clause (part by part)

c**) mapping resources**

**Mapping File**

Mapping file contains mapping from a pojo class name to a table name in db.

pojo class variable names to table column names.

Mapping can be done using two ways, using XML & using Annotations



**There are three way to develop hibernate application**

* **.XML Based Approach**

**This approach contain following files**

**1 ) All hibernate Jars**

**2 ) Hibernate.cfg.xml(configuration file)**

**3 ) Student.hbm.xml(mapping file)**

**4) Student(pojo class)**

**5) Test**

* **.Annotation Based Approach:**

**This approach contain following files**

**1 ) All hibernate Jars**

**2 ) Hibernate.cfg.xml(configuration file)**

**3) Student(pojo class)(Annoation)**

**4) Test**

* **.Java Based Approach:**

**This approach contain following files**

**1 ) All hibernate Jars**

**2 ) HibernateUtil (class)(java based configuration)**

**3) Student(pojo class)**

**4) Test**

XML BASED EXAMPLE:

1)Pojo class:

User.java



2) **User.hbm.xml**



3)Hibernate.cfg.xml:



5)Test:



**Core component of hibernate**:

**Configuration**:

Configuration Is a class is available in org.hibernate.package.it load the cfg from classpath.

Configuration class is reading all the information of hibernate.cfg.xml file

**Session Factory –**Session Factory is an interface available in org.hibernate package which provides factory methods to get session object. We can get Session Factory using the Configuration object and session factory hold second level cache

Configuration configuration = new Configuration().configure("hibernate.cfg.xml");

SessionFactory sessionFactory = configuration.buildSessionFactory();

**Session –**Session is an interface available in org.hibernate package which provides different API to communicate java application to hibernate. We can get Session reference using SessionFactory.

Session hold first level cache.

Session session = sessionFactory.openSession();

**Transaction –**Transaction is an interface available in or.hibernate package. We can get a Transaction reference using the session object. The transaction is an optional element.

Transaction tx = session.beginTransaction();