Hibernate :

Main :

**package** com.softra;

**import** java.util.List;

**import** javax.persistence.EntityManager;

**import** javax.persistence.EntityManagerFactory;

**import** javax.persistence.Persistence;

**import** javax.persistence.Query;

**import** org.hibernate.Session;

**import** org.hibernate.SessionFactory;

**import** org.hibernate.Transaction;

**import** org.hibernate.cfg.Configuration;

**import** com.softra.utility.EntityManagerHelper;

**public** **class** Main {

**static** EntityManager *em* = EntityManagerHelper.*getEntityManager*();

/\*

private static final String PERSISTENCE\_UNIT\_NAME = "JPAProj";

private static EntityManagerFactory factory;

\*/

**public** **static** **void** create() {

Configuration configuration = **new** Configuration();

configuration.configure("hibernate.cfg.xml");

SessionFactory factory = configuration.buildSessionFactory();

Session session = factory.openSession();

Transaction transaction = session.beginTransaction();

User user = **new** User("nag","nagnath");

session.saveOrUpdate(user);

session.flush();

transaction.commit();

session.close();

factory.close(); //If factory is closed then only thread completes.

}

**public** **static** **void** retrieve() {

Configuration configuration = **new** Configuration();

configuration.configure("hibernate.cfg.xml");

SessionFactory factory = configuration.buildSessionFactory();

Session session = factory.openSession();

Transaction transaction = session.beginTransaction();

User user =(User)session.get(User.**class**, "nag");// get will do eager loading and instead of get if we use load it will do lazy loading

//System.out.println("password is : " + user.getPassword());

session.flush();

transaction.commit();

session.close();

factory.close(); //If factory is closed then only thread completes.

}

**public** **static** **void** update() {

Configuration configuration = **new** Configuration();

configuration.configure("hibernate.cfg.xml");

SessionFactory factory = configuration.buildSessionFactory();

Session session = factory.openSession();

Transaction transaction = session.beginTransaction();

User user = **new** User("nag","nagmani");

session.saveOrUpdate(user);

session.flush();

transaction.commit();

session.close();

factory.close(); //If factory is closed then only thread completes.

}

**public** **static** **void** delete() {

Configuration configuration = **new** Configuration();

configuration.configure("hibernate.cfg.xml");

SessionFactory factory = configuration.buildSessionFactory();

Session session = factory.openSession();

Transaction transaction = session.beginTransaction();

User user =(User)session.get(User.**class**, "nag");

session.delete(user);

session.flush();

transaction.commit();

session.close();

factory.close(); //If factory is closed then only thread completes.

}

**public** **static** **void** createJPA() {

*em*.getTransaction().begin();

User user = **new** User();

user.setUsername("Golu");

user.setPassword("Golu");

*em*.persist(user);

*em*.getTransaction().commit();

*em*.close();

}

**public** **static** **void** RetrieveJPA() {

User user =*em*.find(User.**class**,"Dipti");

System.***out***.println(user.getPassword());

}

**public** **static** **void** updateJPA() {

*em*.getTransaction().begin();

User user = **new** User("Dipti","Ujjain");

*em*.merge(user);

*em*.getTransaction().commit();

*em*.close();

}

**public** **static** **void** deleteJPA() {

*em*.getTransaction().begin();

User user =*em*.find(User.**class**,"Golu");

*em*.remove(user);

*em*.getTransaction().commit();

*em*.close();

}

**public** **static** **void** main(String[] args) {

/\*RetrieveJPA();\*/

*deleteJPA*();

//updateJPA();

//createJPA();

/\*create();

retrieve();

update();

delete();\*/

EntityManagerHelper.*closeFactory*();

}

}

User :

**package** com.softra;

**import** javax.persistence.Column;

**import** javax.persistence.Entity;

**import** javax.persistence.GeneratedValue;

**import** javax.persistence.GenerationType;

**import** javax.persistence.Id;

**import** javax.persistence.Table;

@Entity

@Table(name="users")

**public** **class** User {

@Id

@Column(name="username1")

**private** String username;

//@Column(name="password")

@Column

**private** String password;

**public** User() {

}

**public** User(String uname,String pwd) {

**this**.username = uname;

**this**.password = pwd;

}

**public** String getUsername() {

**return** username;

}

**public** **void** setUsername(String username) {

**this**.username = username;

}

**public** String getPassword() {

**return** password;

}

**public** **void** setPassword(String password) {

**this**.password = password;

}

}

User.hbm.xml

<?xml version=*"1.0"*?>

<!DOCTYPE hibernate-mapping PUBLIC "-//Hibernate/Hibernate Mapping DTD 3.0//EN"

"http://hibernate.sourceforge.net/hibernate-mapping-3.0.dtd">

<!-- Generated Jan 9, 2018 7:23:05 PM by Hibernate Tools 3.5.0.Final -->

<hibernate-mapping>

<class name=*"com.softra.User"* table=*"USERS"*>

<id name=*"username"* type=*"java.lang.String"*>

<column name=*"USERNAME"* />

<generator class=*"assigned"* />

</id>

<property name=*"password"* type=*"java.lang.String"*>

<column name=*"PASSWORD"* />

</property>

</class>

</hibernate-mapping>

Entity Manager Helper :

**package** com.softra.utility;

**import** javax.persistence.EntityManager;

**import** javax.persistence.EntityManagerFactory;

**import** javax.persistence.Persistence;

**public** **class** EntityManagerHelper {

**private** **static** EntityManagerFactory *factory* = **null**;

//private EntityManager entitymanager = null;

**static** {

*factory* = Persistence.*createEntityManagerFactory*("JPAProj");

}

**public** **static** EntityManager getEntityManager() {

**return** *factory*.createEntityManager();

}

**public** **static** **void** closeFactory() {

*factory*.close();

}

}

Persistence.xml :

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<persistence version=*"2.1"* xmlns=*"http://xmlns.jcp.org/xml/ns/persistence"* xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xsi:schemaLocation=*"http://xmlns.jcp.org/xml/ns/persistence http://xmlns.jcp.org/xml/ns/persistence/persistence\_2\_1.xsd"*>

<persistence-unit name=*"JPAProj"* transaction-type=*"RESOURCE\_LOCAL"*>

<class>com.softra.User</class>

<!-- <class>com.softra.manytomany.Employee</class>

<class>com.softra.manytomany.TechSkill</class> -->

<!-- <class>com.softra.manytomany.Employee</class>

<class>com.softra.manytomany.TechSkill</class> -->

<!-- <class>com.softra.manytoone.Department</class>

<class>com.softra.manytoone.Employee</class> -->

<properties>

<property name=*"javax.persistence.jdbc.url"* value=*"jdbc:mysql://localhost:3306/login"*/>

<property name=*"javax.persistence.jdbc.user"* value=*"root"*/>

<property name=*"javax.persistence.jdbc.password"* value=*"root"*/>

<property name=*"javax.persistence.jdbc.driver"* value=*"com.mysql.jdbc.Driver"*/>

<property name=*"hibernate.dialect"* value=*"org.hibernate.dialect.MySQL5Dialect"* />

<property name=*"hibernate.hbm2ddl.auto"* value=*"update"* />

<property name=*"hibernate.show\_sql"* value=*"true"* />

</properties>

</persistence-unit>

</persistence>