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>

JPA :

POM,xml :

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

<project xmlns=*"http://maven.apache.org/POM/4.0.0"* xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"*

xsi:schemaLocation=*"http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd"*>

<modelVersion>4.0.0</modelVersion>

<groupId>br.com.fredericci.playground</groupId>

<artifactId>JPAAssociation</artifactId>

<version>0.0.1-SNAPSHOT</version>

<properties>

<project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>

<maven.compiler.source>11</maven.compiler.source>

<maven.compiler.target>11</maven.compiler.target>

</properties>

<dependencies>

<!-- JPA/Hibernate -->

<dependency>

<groupId>org.hibernate</groupId>

<artifactId>hibernate-entitymanager</artifactId>

<version>5.4.4.Final</version>

</dependency>

<!-- Database -->

<dependency>

<groupId>com.h2database</groupId>

<artifactId>h2</artifactId>

<version>1.4.199</version>

</dependency>

<dependency>

<groupId>mysql</groupId>

<artifactId>mysql-connector-java</artifactId>

<version>5.1.13</version>

</dependency>

</dependencies>

</project>

Persistence.xml :

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

<persistence xmlns=*"http://java.sun.com/xml/ns/persistence"*

xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"*

xsi:schemaLocation=*"http://java.sun.com/xml/ns/persistence http://java.sun.com/xml/ns/persistence/persistence\_2\_0.xsd"*

version=*"2.0"*>

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

<description>Hibernate EntityManager Demo</description>

<provider>org.hibernate.jpa.HibernatePersistenceProvider</provider>

<exclude-unlisted-classes>false</exclude-unlisted-classes>

<properties>

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

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

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

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

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

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

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

</properties>

</persistence-unit>

</persistence>

Entity Manager Helper :

**package** com.jd.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*("JPAAssoc");

}

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

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

}

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

*factory*.close();

}

}

Employee.java :

**package** com.jd.model;

**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="employee")

**public** **class** Employee {

@Id

@GeneratedValue(strategy=GenerationType.***AUTO***)

**private** **int** id;

@Column

**private** String fname;

@Column

**private** String lname;

**private** Address addr;

**public** Employee() {

**super**();

// **TODO** Auto-generated constructor stub

}

**public** **int** getId() {

**return** id;

}

**public** **void** setId(**int** id) {

**this**.id = id;

}

**public** String getFname() {

**return** fname;

}

**public** **void** setFname(String fname) {

**this**.fname = fname;

}

**public** String getLname() {

**return** lname;

}

**public** **void** setLname(String lname) {

**this**.lname = lname;

}

**public** Address getAddr() {

**return** addr;

}

**public** **void** setAddr(Address addr) {

**this**.addr = addr;

}

}

Address.java :

**package** com.jd.model;

**import** javax.persistence.Column;

**import** javax.persistence.Embeddable;

@Embeddable

**public** **class** Address {

@Column(name="city", nullable=**false**)

**private** String city;

@Column(name="zip", nullable=**false**)

**private** String zip;

**public** Address() {

**super**();

// **TODO** Auto-generated constructor stub

}

**public** String getCity() {

**return** city;

}

**public** **void** setCity(String city) {

**this**.city = city;

}

**public** String getZip() {

**return** zip;

}

**public** **void** setZip(String zip) {

**this**.zip = zip;

} }

Idao :

**package** com.jd.dao;

**public** **interface** IDao {

**int** createEmployee(**int** id, String fname, String lname);

**boolean** updateEmployee(**int** id, String newfname);

}

Employee Dao :

package com.jd.dao;

import javax.persistence.EntityManager;

import javax.persistence.EntityTransaction;

import com.jd.model.Address;

import com.jd.model.Employee;

import com.jd.utility.EntityManagerHelper;

public class EmployeeDao implements IDao {

public int createEmployee(int id, String fname, String lname) {

Employee e = new Employee();

// e.setId(id);

e.setFname(fname);

e.setLname(lname);

Address a = new Address("Pune", "411013");

e.setAddr(a);

EntityManager em = EntityManagerHelper.getEntityManager();

EntityTransaction tx = em.getTransaction();

em.getTransaction().begin();

em.persist(e);

System.out.println("Employee added with empId" +id);

em.getTransaction().commit();

em.close();

/\* em.flush();

tx.commit();

em.close();\*/

return id;

}

public boolean updateEmployee(int id, String newfname) {

// TODO Auto-generated method stub

return false;

}

}

Main :

import com.jd.dao.EmployeeDao;

import com.jd.dao.IDao;

public class Main {

public static void main(String[] args) {

IDao dao = new EmployeeDao();

dao.createEmployee(6, "Saleel", "Prabhu");

}

}

One to One classes :

Employee ;

package onetoone;

import javax.persistence.CascadeType;

import javax.persistence.Column;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.JoinColumn;

import javax.persistence.OneToOne;

import org.hibernate.annotations.Cascade;

@Entity(name="EMPL1")

public class Employee {

@Id

@GeneratedValue(strategy=GenerationType.AUTO)

private int id;

@Column(name="FIRSTNAME")

private String fname;

@Column(name="LASTNAME")

private String lname;

@OneToOne(cascade=CascadeType.ALL)

@JoinColumn

private Address addr;

public Employee() {

super();

// TODO Auto-generated constructor stub

}

public int getId() {

return id;

}

public void setId(int id) {

this.id = id;

}

public String getFname() {

return fname;

}

public void setFname(String fname) {

this.fname = fname;

}

public String getLname() {

return lname;

}

public void setLname(String lname) {

this.lname = lname;

}

public Address getAddr() {

return addr;

}

public void setAddr(Address addr) {

this.addr = addr;

}

}

Address:

package onetoone;

import javax.persistence.Column;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.JoinColumn;

@Entity(name="ADDR1")

public class Address {

@Id

@GeneratedValue(strategy=GenerationType.AUTO)

private int id;

@Column

private String city;

@Column

private String zip;

@javax.persistence.OneToOne(mappedBy="addr")

private Employee emp;

public Address() {

super();

// TODO Auto-generated constructor stub

}

public Address(String city, String zip) {

super();

this.city = city;

this.zip = zip;

}

public int getId() {

return id;

}

public void setId(int id) {

this.id = id;

}

public String getCity() {

return city;

}

public void setCity(String city) {

this.city = city;

}

public String getZip() {

return zip;

}

public void setZip(String zip) {

this.zip = zip;

}

public Employee getEmp() {

return emp;

}

public void setEmp(Employee emp) {

this.emp = emp;

}

}

Employee Dao :

package onetoone;

import javax.persistence.EntityManager;

import javax.persistence.EntityTransaction;

import com.jd.utility.EntityManagerHelper;

public class EmployeeDao {

public int createEmployee(int id, String fname, String lname) {

Employee e = new Employee();

// e.setId(id);

e.setFname(fname);

e.setLname(lname);

Address a = new Address("Pune", "411013");

e.setAddr(a);

EntityManager em = EntityManagerHelper.getEntityManager();

EntityTransaction tx = em.getTransaction();

em.getTransaction().begin();

em.persist(e);

System.out.println("Employee added with empId" +id);

em.getTransaction().commit();

em.close();

/\* em.flush();

tx.commit();

em.close();\*/

return id;

}

public boolean updateEmployee(int id, String newfname) {

// TODO Auto-generated method stub

return false;

}

}

Main :

**package** onetoone;

**import** onetoone.Employee;

**public** **class** Main\_onetoone {

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

EmployeeDao e = **new** EmployeeDao();

e.createEmployee(1, "Gaurav", "Jain");

}

}

One to Many:

Employee:

package onetomany;

import javax.persistence.CascadeType;

import javax.persistence.Column;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.JoinColumn;

import javax.persistence.ManyToOne;

import javax.persistence.OneToOne;

import onetoone.Address;

@Entity(name="EMPL2")

public class Employee {

@Id

@GeneratedValue(strategy=GenerationType.AUTO)

private int id;

@Column(name="FIRSTNAME")

private String fname;

@Column(name="LASTNAME")

private String lname;

//@ManyToOne

//private Department department;

public Employee() {

super();

// TODO Auto-generated constructor stub

} // Many employees can have single dept.

public Employee(int id, String fname, String lname, Department department) {

super();

this.id = id;

this.fname = fname;

this.lname = lname;

//this.department = department;

}

public int getId() {

return id;

}

public void setId(int id) {

this.id = id;

}

public String getFname() {

return fname;

}

public void setFname(String fname) {

this.fname = fname;

}

public String getLname() {

return lname;

}

public void setLname(String lname) {

this.lname = lname;

}

/\* public Department getDepartment() {

return department;

}

public void setDepartment(Department department) {

this.department = department;

}

\*/

}

Dept.:

package onetomany;

import java.util.List;

import javax.persistence.CascadeType;

import javax.persistence.Column;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.JoinColumn;

import javax.persistence.OneToMany;

@Entity(name="DEPT2")

public class Department {

@Id

@GeneratedValue(strategy=GenerationType.AUTO)

private int id;

@Column(name="dname")

private String name;

//@OneToMany(targetEntity=Employee.class, mappedBy="department")

@OneToMany(targetEntity=Employee.class,cascade=CascadeType.ALL)

@JoinColumn(name="deptid")

private List<Employee> employees;

public Department() {

super();

// TODO Auto-generated constructor stub

}

public Department(int id, String name, List<Employee> employees) {

super();

this.id = id;

this.name = name;

this.employees = employees;

}

public int getId() {

return id;

}

public void setId(int id) {

this.id = id;

}

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

public List<Employee> getEmployees() {

return employees;

}

public void setEmployees(List<Employee> employees) {

this.employees = employees;

}

}

EmployeeDao :

package onetomany;

import java.util.ArrayList;

import java.util.List;

import javax.persistence.EntityManager;

import javax.persistence.EntityTransaction;

import com.jd.utility.EntityManagerHelper;

public class EmployeeDao {

public void createEmployee() {

Employee e1 = new Employee();

//e1.setId(1);

e1.setFname("Dipti");

e1.setLname("Jain");

Employee e2 = new Employee();

//e2.setId(2);

e2.setFname("Saleel");

e2.setLname("Prabhu");

Department d1 = new Department();

d1.setName("IT");

/\*e1.setDepartment(d1);

e2.setDepartment(d1);\*/

List<Employee> li = new ArrayList<Employee>();

li.add(e1);

li.add(e2);

d1.setEmployees(li);

EntityManager em = EntityManagerHelper.getEntityManager();

EntityTransaction tx = em.getTransaction();

tx.begin();

em.persist(d1);

// System.out.println("Employee added with empId" +id);

tx.commit();

em.close();

//return id;

}

}

Main :

**package** onetomany;

**public** **class** MainOnetoMany {

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

EmployeeDao e = **new** EmployeeDao();

e.createEmployee();

}

}

Many to One :

Employee:

package manytoone;

import javax.persistence.Column;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.ManyToOne;

@Entity(name="EMPL3")

public class Employee {

@Id

@GeneratedValue(strategy=GenerationType.AUTO)

private int id;

@Column(name="FIRSTNAME")

private String fname;

@Column(name="LASTNAME")

private String lname;

@ManyToOne

private Department department;

public Employee() {

super();

// TODO Auto-generated constructor stub

}

public int getId() {

return id;

}

public void setId(int id) {

this.id = id;

}

public String getFname() {

return fname;

}

public void setFname(String fname) {

this.fname = fname;

}

public String getLname() {

return lname;

}

public void setLname(String lname) {

this.lname = lname;

}

public Department getDepartment() {

return department;

}

public void setDepartment(Department department) {

this.department = department;

}

}

Dept:

package manytoone;

import javax.persistence.Column;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

@Entity(name="DEPT3")

public class Department {

@Id

@GeneratedValue(strategy=GenerationType.AUTO)

private int id;

@Column(name="dname")

private String name;

public int getId() {

return id;

}

public void setId(int id) {

this.id = id;

}

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

}

Main :

package manytoone;

import javax.persistence.EntityManager;

import javax.persistence.EntityTransaction;

import com.jd.utility.EntityManagerHelper;

public class Main {

public static void main(String[] args) {

EntityManager em = EntityManagerHelper.getEntityManager();

EntityTransaction tx = em.getTransaction();

tx.begin();

Department d = new Department();

d.setName("Finance");

em.persist(d);

Employee e1 = new Employee();

e1.setFname("Gaurav");

e1.setLname("Jain");

e1.setDepartment(d);

Employee e2 = new Employee();

e2.setFname("Golu");

e2.setLname("Jain");

e2.setDepartment(d);

Employee e3 = new Employee();

e3.setFname("Ranu");

e3.setLname("Jain");

e3.setDepartment(d);

em.persist(e1);

em.persist(e2);

em.persist(e3);

tx.commit();

em.close();

}

}

Many to Many:

package manytomany;

import java.util.List;

import javax.persistence.Column;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.ManyToMany;

@Entity(name="EMPL4")

public class Employee {

@Id

@GeneratedValue(strategy=GenerationType.AUTO)

private int id;

@Column(name="FIRSTNAME")

private String fname;

@Column(name="LASTNAME")

private String lname;

@ManyToMany(targetEntity=TechSkills.class)

private List<TechSkills> techskills;

public Employee() {

super();

// TODO Auto-generated constructor stub

}

public int getId() {

return id;

}

public void setId(int id) {

this.id = id;

}

public String getFname() {

return fname;

}

public void setFname(String fname) {

this.fname = fname;

}

public String getLname() {

return lname;

}

public void setLname(String lname) {

this.lname = lname;

}

public List<TechSkills> getTechskills() {

return techskills;

}

public void setTechskills(List<TechSkills> techskills) {

this.techskills = techskills;

}

}

Tech skils:

package manytomany;

import java.util.List;

import javax.persistence.Column;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.GenerationType;

import javax.persistence.Id;

import javax.persistence.ManyToMany;

@Entity(name="TECH4")

public class TechSkills {

@Id

@GeneratedValue(strategy=GenerationType.AUTO)

private int id;

@Column(name="skillname")

private String skillname;

@ManyToMany(targetEntity=Employee.class)

private List<Employee> employees;

public TechSkills() {

super();

// TODO Auto-generated constructor stub

}

public int getId() {

return id;

}

public void setId(int id) {

this.id = id;

}

public String getSkillname() {

return skillname;

}

public void setSkillname(String skillname) {

this.skillname = skillname;

}

public List<Employee> getEmployees() {

return employees;

}

public void setEmployees(List<Employee> employees) {

this.employees = employees;

}

}

Main :

**package** manytomany;

**import** java.util.ArrayList;

**import** java.util.List;

**import** javax.persistence.EntityManager;

**import** javax.persistence.EntityTransaction;

**import** com.jd.utility.EntityManagerHelper;

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

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

EntityManager em = EntityManagerHelper.*getEntityManager*();

EntityTransaction tx = em.getTransaction();

tx.begin();

Employee e1 = **new** Employee();

e1.setFname("Dipti");

e1.setLname("Jain");

Employee e2 = **new** Employee();

e2.setFname("Ayansh");

e2.setLname("Tiwari");

TechSkills ts1 = **new** TechSkills();

ts1.setSkillname("Java");

TechSkills ts2 = **new** TechSkills();

ts2.setSkillname("Selenium");

TechSkills ts3 = **new** TechSkills();

ts2.setSkillname("Python");

List<TechSkills> list1 = **new** ArrayList<TechSkills>();

list1.add(ts1);

list1.add(ts2);

e1.setTechskills(list1);

e2.setTechskills(list1);

List<Employee> list2 = **new** ArrayList<Employee>();

list2.add(e1);

list2.add(e2);

ts1.setEmployees(list2);

ts2.setEmployees(list2);

em.persist(e1);

em.persist(ts1);

em.persist(e2);

em.persist(ts2);

tx.commit();

em.close();

}

}