**package** hibernate\_proj;

**import** java.util.Arrays;

**import** java.util.Iterator;

**import** java.util.List;

**import** java.util.Scanner;

**import** javax.persistence.Query;

**import** org.hibernate.Session;

**import** org.hibernate.SessionFactory;

**import** org.hibernate.Transaction;

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

**public** **class** myhibernate {

SessionFactory sc1 = **new** Configuration().configure().buildSessionFactory();

Session session = sc1.openSession();

Transaction t1 = session.beginTransaction();

**public** **void** insert(**int** rl, String n1) {

student\_table st1 = **new** student\_table();

st1.setRollno(rl);

st1.setName(n1);

**Session s=sc1.openSession();**

**Transaction t1= s.beginTransaction();**

s.save(st1);

t1.commit();

//Commit will make the database commit.

//The changes to persistent object will be written to database

}

**public** **void** delete(**int** n2) {

student\_table st1 = **new** student\_table();

st1.setRollno(n2);

**Session s=sc1.openSession();**

**Transaction t1= s.beginTransaction();**

s.delete(st1);

t1.commit();

// Query query=session.createQuery("delete from student\_table where Rollno=111");

// query.executeUpdate();

}

**public** **void** update(**int** rr, String nn) {

student\_table st1 = **new** student\_table();

st1.setRollno(rr);

st1.setName(nn);

//session.persist(st1); // Hibernate persist is similar to save (with transaction)

//and it adds the entity object to the persistent context,

//so any further changes are tracked.

Session s=sc1.openSession();

Transaction t1= s.beginTransaction();

s.saveOrUpdate(st1);

t1.commit();

// session.update(st1); //if data exists in database

// session.save(st1);//if data not exists

}

**public** **void** display() {

Session s=sc1.openSession();

Transaction t1= s.beginTransaction();

Query q = s.createQuery("from student\_table");

List l = q.getResultList();

//Execute a SELECT query and return the query results as an untyped List.

Iterator it = l.iterator();

System.***out***.println("List of students:");

**while** (it.hasNext()) {

student\_table stud = (student\_table) it.next();

System.***out***.println(stud.toString());

//System.out.println(it.next().toString());

}

t1.commit();

}

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

{

myhibernate sm1 = **new** myhibernate();

Scanner sc11 = **new** Scanner(System.***in***);

lp: **while** (**true**)

{

System.***out***.println("1: Insert");

System.***out***.println("2: Display");

System.***out***.println("3: delete");

System.***out***.println("4: update");

System.***out***.println("5: exit");

System.***out***.print("Make your choice: ");

**int** ch = sc11.nextInt(); // reading user's choice

**switch** (ch) {

**case** 1:

System.***out***.print("Enter the student Details to insert \n");

System.***out***.print("Enter the roll no \n");

**int** rl = sc11.nextInt();

System.***out***.print("Enter the student name \n");

String n1 = sc11.next();

sm1.insert(rl,n1);

**break**;

**case** 2:

sm1.display();

**break**;

**case** 3:

System.***out***.print("Enter the roll no \n");

**int** n2 = sc11.nextInt();

sm1.delete(n2);

**break**;

**case** 4:

System.***out***.print("Enter the roll no \n");

**int** rr = sc11.nextInt();

System.***out***.print("Enter the student name \n");

String nn = sc11.next();

sm1.update(rr,nn);

**break**;

**case** 5:

**break** lp;

**default**:

System.***out***.println("Invalid choice! Please make a valid choice. \n\n");

}

}

}

}