SOLUTION CLASS:

```
package org.main;
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
import java.util.List;
import javax.persistence.Query;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
import org.hibernate.cfg.Configuration;
import org.model.Item;
import org.model.User;
public class Solution {
       public static void main(String[] args) throws IOException {
               BufferedReader cons = new BufferedReader(new InputStreamReader(System.in));
               User user = new User();
               user.setUsername("admin");
               user.setPassword("admin@123");
               SessionFactory sf = new Configuration().configure().buildSessionFactory();
               Session session = sf.openSession();
               session.beginTransaction();
               //session.save(user);
               session.getTransaction().commit();
               Query query=session.createQuery("from User");
```

```
User user1=(User) query.getSingleResult();
               System.out.print("Username :");
               String username=cons.readLine();
               System.out.print("Password :");
               String password=cons.readLine();
               if (user1.getUsername().equals(username) &&
user1.getPassword().equals(password)){
                       System.out.println("Login Success");
                       boolean flag = false;
                       while (true) {
                               System.out.print("1.Create 2.Retrieve 3.Update 4.Delete 5.View
All\n Choice:");
                                switch (Integer.parseInt(cons.readLine())) {
                               case 1:
                                       Item item = new Item();
                                       System.out.print("Enter the item id:");
                                        item.setId(Integer.parseInt(cons.readLine()));
                                        System.out.println("Enter the item name:");
                                        item.setName(cons.readLine());
                                        System.out.println("Enter the item prize:");
                                        item.setPrice(Double.parseDouble(cons.readLine()));
                                        session.beginTransaction();
                                        session.save(item);
                                        session.getTransaction().commit();
                                       break;
                               case 2:
                                        System.out.println("Enter the itemid to Retreview");
                                       String id=cons.readLine();
                                        query=session.createQuery("from Item where id=:id");
```

```
Item item_ret=(Item)query.getSingleResult();
                                        if(item_ret.getId()==Integer.parseInt(id))
                                  {
                                       System.out.println("item id is: "+item_ret.getId());
                                        System.out.println("item name is: "+item_ret.getName());
                                        System.out.println("item prize is: "+item_ret.getPrice());
                                  }
                                        else
                                                System.out.println("Item Not found with this id #" +
id);
                                       break;
                               case 3:
                                       System.out.println("Enter the itemid to update");
                                       String id1=cons.readLine();
                                        query=session.createQuery("from Item where id=:id");
                                        query.setParameter("id",Integer.parseInt(id1));
                                  Item item1=(Item)query.getSingleResult();
                                  if(item1.getId()==Integer.parseInt(id1))
                                  {
                                        System.out.println("Enter the item name:");
                                        Item item2 = new Item();
                                               item1.setName(cons.readLine());
                                        System.out.println("Enter the item prize:");
                                        item1.setPrice(Double.parseDouble(cons.readLine()));
                                        query=session.createQuery("UPDATE Item item SET
item.name=:name_up,item.prize=:prize_up WHERE item.id=:id");
                                       query.setParameter("id",Integer.parseInt(id1));
                                        query.setParameter("name_up", item2.getName());
                                        query.setParameter("prize_up",item2.getPrice());
```

query.setParameter("id",Integer.parseInt(id));

```
session.beginTransaction();
                                        session.save(item1);
                                        session.getTransaction().commit();
                                        System.out.println("Item updated");
                                  }
                                  else
                                  {
                                                        System.out.println("Item Not found with
this id #" + id1);
                                  }
                                  break;
                                case 4:
                                        System.out.println("Enter the itemid to Delete");
                                        String id4=cons.readLine();
                                        session.beginTransaction();
                                        query=session.createQuery("DELETE FROM Item item
WHERE item.id=:id");
                                query.setParameter("id",Integer.parseInt(id4));
                                query.executeUpdate();
                               //Item item_del=(Item)query.getSingleResult();
                               //session.save(item_del);
                               session.getTransaction().commit();
                                        break;
                                case 5:
                                        query=session.createQuery("from Item");
                                  List<Item> item_all=(List<Item>)query.getResultList();
                                  for(Item each:item_all)
                                  {
                                        System.out.println("item id is: "+each.getId());
```

```
System.out.println("item name is:
"+each.getName());
                                                 System.out.println("item prize is:
"+each.getPrice());
                                                 System.out.println("\n");
                                                 break;
                                   }
                                 default:
                                         flag = true;
                                         break;
                                 }
                                 if(flag)
                                         break;
                        }
                } else {
                        System.out.println("Invalid Login Details");
                }
                session.close();
        }
}
```

ITEM CLASS

```
package org.model;
import javax.persistence.Entity;
import javax.persistence.Id;
import javax.persistence.NamedQuery;
@Entity
```

```
@NamedQuery(name = "User.getByuserid", query = "select username,password from User where
id=:id")
public class Item {
        @Id
        private Integer id;
        private String name;
        private double price;
        public Integer getId() {
                return id;
        }
        public void setId(Integer id) {
                this.id = id;
        }
        public String getName() {
                return name;
        }
        public void setName(String name) {
                this.name = name;
        }
        public double getPrice() {
                return price;
        }
        public void setPrice(double price) {
                this.price = price;
        }
```

```
public Item(Integer id, String name, double price) {
               super();
               this.id = id;
               this.name = name;
               this.price = price;
       }
        public Item() {
               super();
       }
                                       USER CLASS
package org.model;
import javax.persistence.Entity;
import javax.persistence.ld;
@Entity
public class User {
        @Id
        private String username;
        private String password;
        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;
        }
       public User(String username, String password) {
               super();
               this.username = username;
               this.password = password;
       }
       public User() {
               super();
       }
}
```