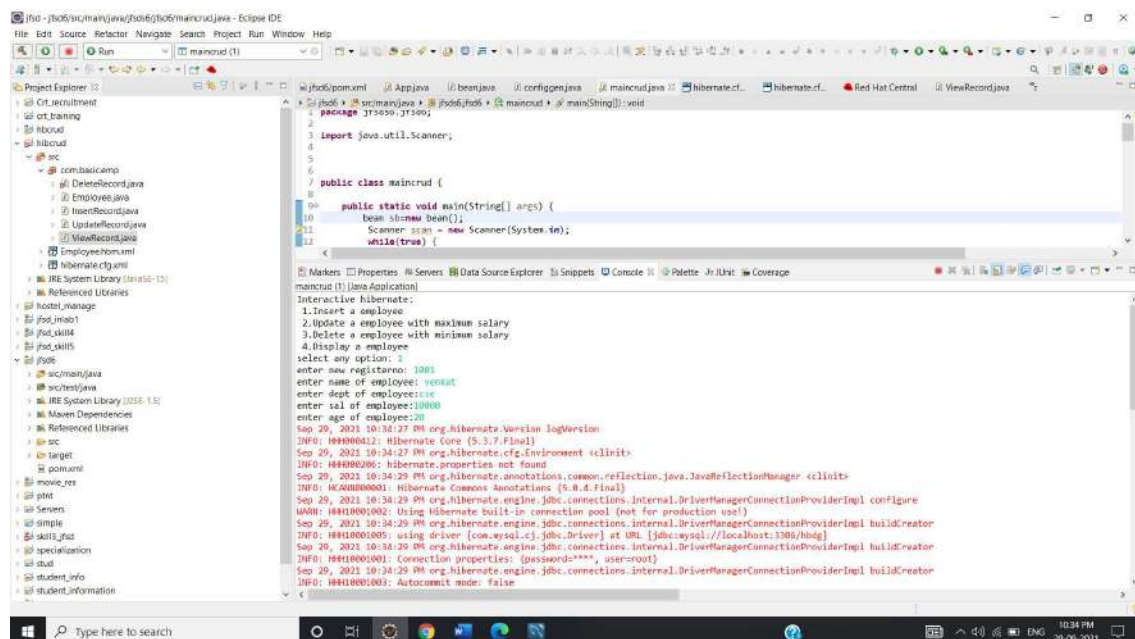
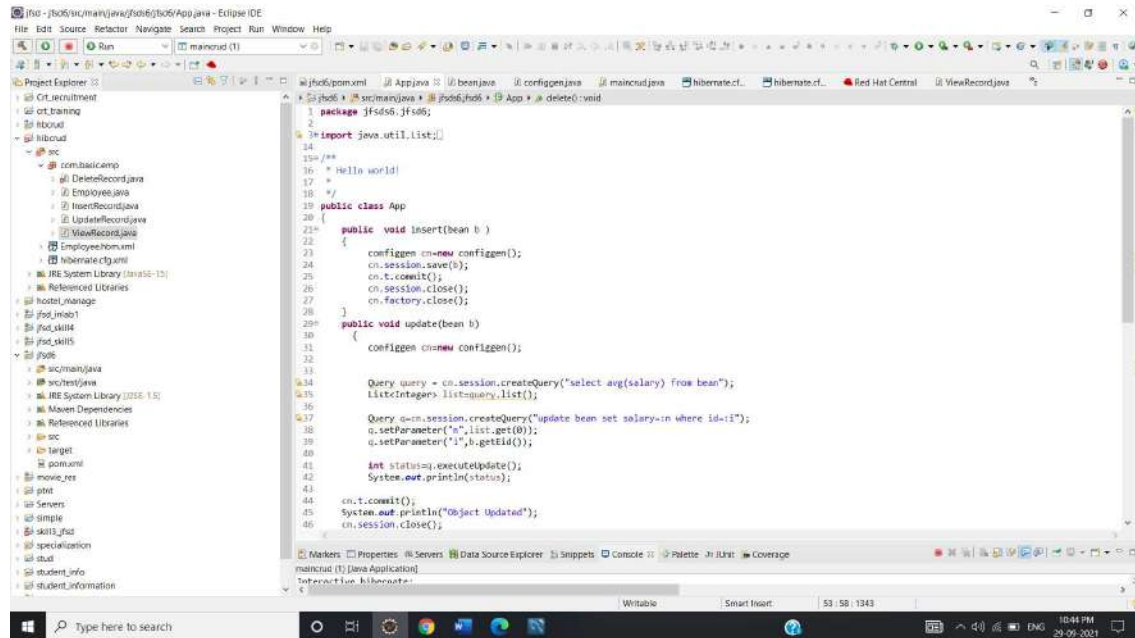


#SKILL-6 → Hibernate

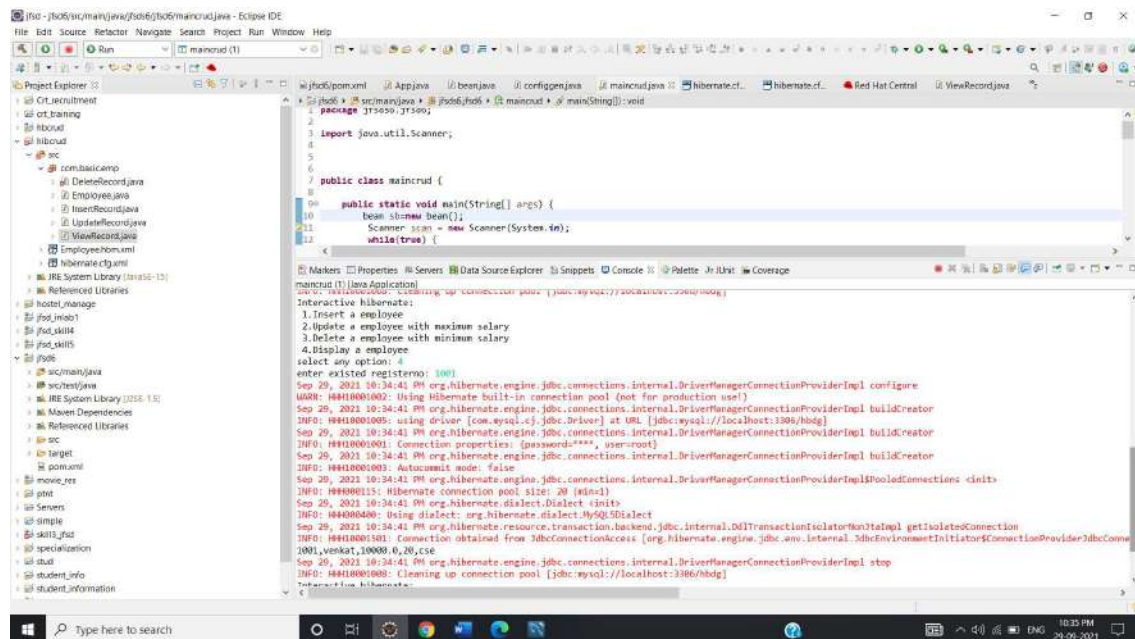
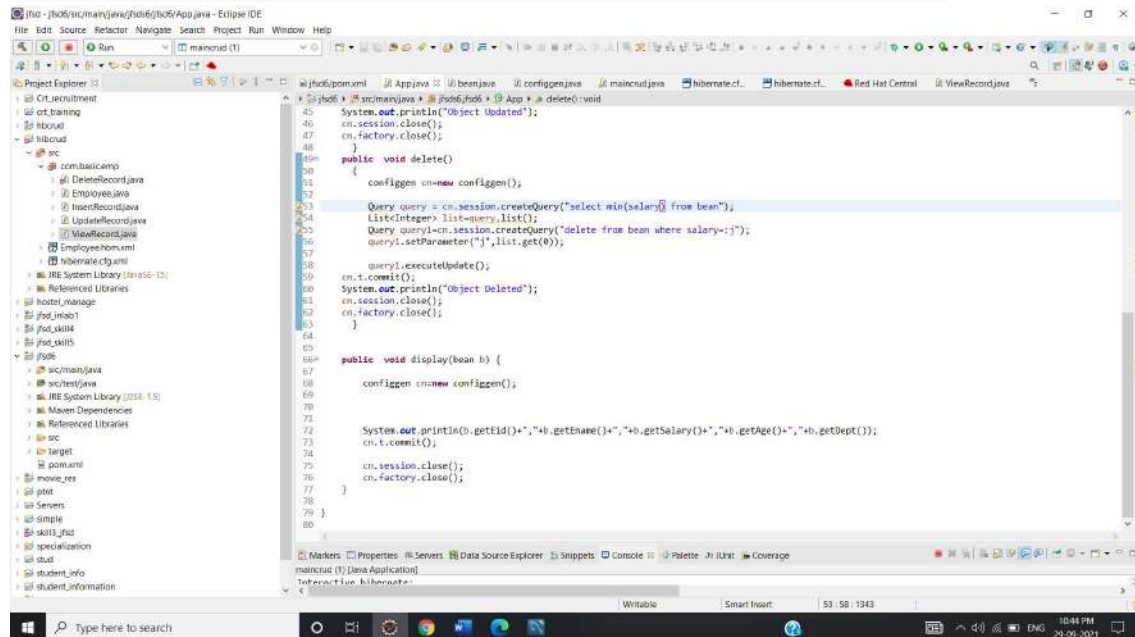
Basic Idea on Hibernate

1. Harshith is a manager for an IT (Information Technology) Company who maintains the records of his employees. Store the Employee details with the following attributes Empid, Ename, Dept, Age, Salary and use sequence generator class for Empid. Develop a separate hibernate applications for the following (should not use Hibernate Query Language).



The tasks need to be performed are stated below

a.Retrieve the details of an employee whose Empid =1001



b.Update the salary of an employee whose Empid = 1004 with Average of all the Employee Salaries

```

19 public class App {
20 {
21 public void insert(bean b) {
22 {
23     config cn=new config();
24     cn.session.save(b);
25     cn.t.commit();
26     cn.session.close();
27     cn.factory.close();
28 }
29 }
30 public void update(bean b) {
31 {
32     config cn=new config();
33
34     Query query = cn.session.createQuery("select avg(salary) from bean");
35     List<Integer> list=query.list();
36
37     Query q=cn.session.createQuery("update bean set salary=:list");
38     q.setParameter("list",list.get(0));
39     q.setParameter("id",b.getId());
40
41     int status=q.executeUpdate();
42     System.out.println(status);
43
44     cn.t.commit();
45     System.out.println("Object Updated");
46     cn.session.close();
47     cn.factory.close();
48 }
49 }
50 public void delete() {
51 {
52     config cn=new config();
53
54     Query query = cn.session.createQuery("select min(salary) from bean");
55     List<Integer> list=query.list();
56 }
57 }
58 }

```

```

1 package jts650;
2
3 import java.util.Scanner;
4
5
6
7 public class maincrud {
8
9
10 public static void main(String[] args) {
11     bean sb=new bean();
12     Scanner scan = new Scanner(System.in);
13     while(true) {
14
15
16
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```

maincrud (1) [Java Application]

```

Sep 29, 2021 10:36:28 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl configure
INFO: HH10001008: Cleaning up connection pool [jdbc:mysql://localhost:3306/hib]
Interactive hibernate:
1.Insert a employee
2.Update a employee with maximum salary
3.Delete a employee with minimum salary
4.Display a employee
select any option: 4
enter existed registerno: 1004
Sep 29, 2021 10:36:38 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl configure
WARN: HH10001002: Using hibernate built-in connection pool (not for production use)
Sep 29, 2021 10:36:38 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HH10001005: using driver [com.mysql.cj.jdbc.Driver] at URL [jdbc:mysql://localhost:3306/hib]
Sep 29, 2021 10:36:38 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HH10001001: Connection properties: (password=****, user=root)
Sep 29, 2021 10:36:38 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HH10001003: autoCommit mode: false
Sep 29, 2021 10:36:38 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HH10001015: Hibernate connection pool size: 20 (min=1)
Sep 29, 2021 10:36:38 PM org.hibernate.dialect.Dialect <init>
INFO: HH10001000: Using dialect: org.hibernate.dialect.MySQL5Dialect
Sep 29, 2021 10:36:38 PM org.hibernate.resource.transaction.backend.jdbc.internal.DBTTransactionIsolationNotImpl getIsolatedConnection
INFO: HH10001501: Connection obtained from JdbcConnectionAccess [org.hibernate.engine.jdbc.env.internal.JdbcEnvironmentInitiator$ConnectionProviderJdbcConnectionAccess]
1004.praneetha_20000_0_20_c10
Sep 29, 2021 10:36:38 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl close

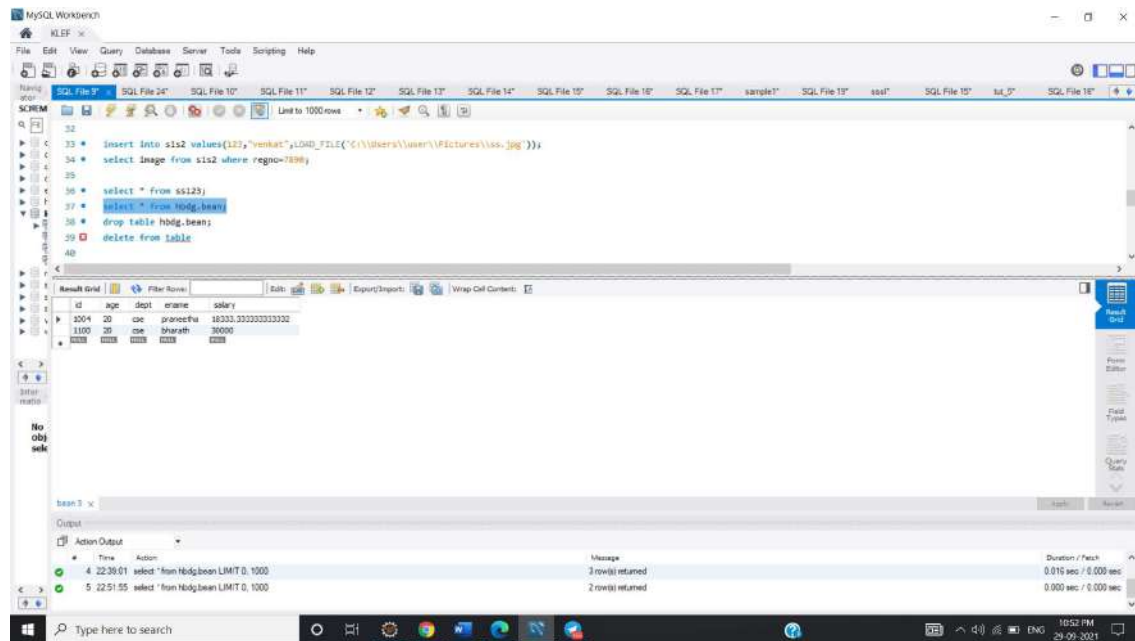
```


The screenshot shows the Eclipse IDE interface. The Project Explorer on the left displays a project named 'maincrud' with a package 'com.basiccamp'. The Package Explorer shows the package structure. The main editor displays the 'maincrud (1)' class, which contains a 'main' method. The console output shows the following log messages:

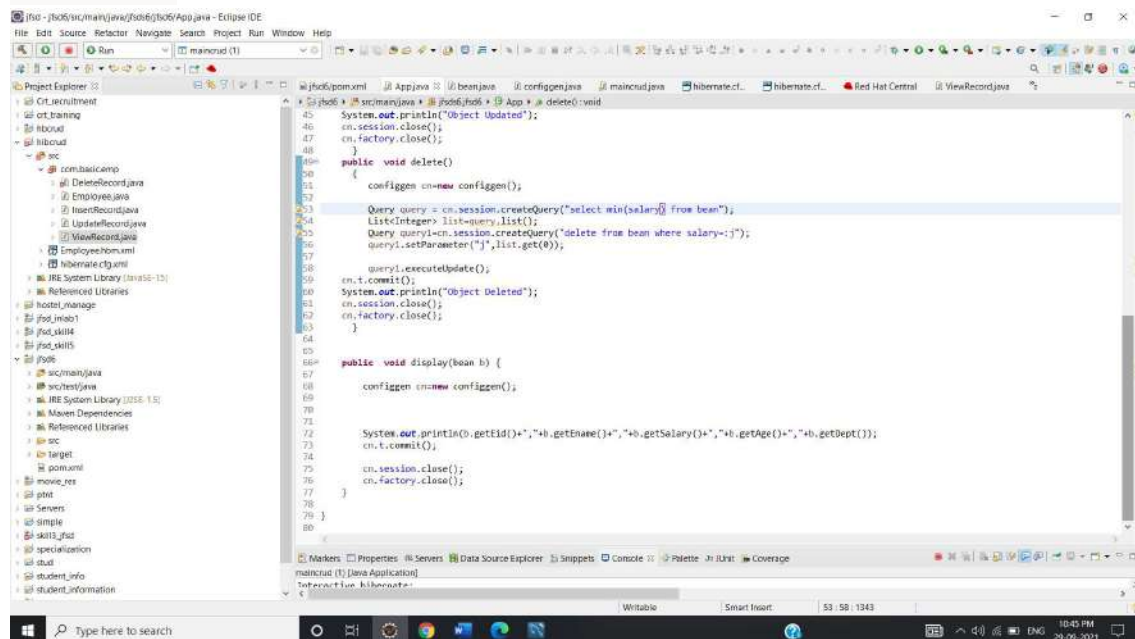
```
maincrud (1) [Java Application]
Interactive hibernate:
1.Insert a employee
2.Update a employee with maximum salary
3.Delete a employee with minimum salary
4.Display a employee
select any option: 0
enter existed registerno: 1004
Sep 29, 2021 10:37:36 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl configure
WARN: HH410001002: Using hibernate built-in connection pool (not for production use!)
Sep 29, 2021 10:37:36 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HH410001005: using driver [com.mysql.cj.jdbc.Driver] at URL [jdbc:mysql://localhost:3306/hog]
Sep 29, 2021 10:37:36 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HH410001001: Connection properties: (password=****, user=root)
Sep 29, 2021 10:37:36 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HH410001003: Autocommit mode: false
Sep 29, 2021 10:37:36 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HH410001015: Hibernate connection pool size: 20 (default)
Sep 29, 2021 10:37:36 PM org.hibernate.dialect.Dialect
INFO: HH410004000: using dialect: org.hibernate.dialect.MySQL5Dialect
Sep 29, 2021 10:37:36 PM org.hibernate.resource.transaction.backend.jdbc.internal.DBTTransactionIsolationNonHajml getIsolatedConnection
INFO: HH410001001: Connection obtained from JDBCConnectionAccess [org.hibernate.engine.jdbc.env.internal.JDBCEnvironmentInitiator$ConnectionProvider$JDBCConnection
Sep 29, 2021 10:37:36 PM org.hibernate.hql.internal.QueryTranslatorFactoryInitiator initiateService
INFO: HH410003077: Using ASTQueryTranslatorFactory
Hibernate: select avg(bean0.salary) as col_0_0_ from bean bean0_
Hibernate: update bean set salary=? where id=?
1
Object Updated
Sep 29, 2021 10:37:36 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl stop
INFO: HH410001008: Cleaning up connection pool [jdbc:mysql://localhost:3306/hog]
Interactive hibernate:
1.Insert a employee
2.Update a employee with maximum salary
3.Delete a employee with minimum salary
4.Display a employee
```

The screenshot shows the Eclipse IDE interface. The Project Explorer on the left displays a project named 'maincrud' with a package 'com.basiccamp'. The Package Explorer shows the package structure. The main editor displays the 'maincrud (1)' class, which contains a 'main' method. The console output shows the following log messages:

```
maincrud (1) [Java Application]
Interactive hibernate:
1.Insert a employee
2.Update a employee with maximum salary
3.Delete a employee with minimum salary
4.Display a employee
select any option: 0
enter existed registerno: 1004
Sep 29, 2021 10:37:44 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl configure
WARN: HH410001002: Using hibernate built-in connection pool (not for production use!)
Sep 29, 2021 10:37:44 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HH410001005: using driver [com.mysql.cj.jdbc.Driver] at URL [jdbc:mysql://localhost:3306/hog]
Sep 29, 2021 10:37:44 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HH410001001: Connection properties: (password=****, user=root)
Sep 29, 2021 10:37:44 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HH410001003: Autocommit mode: false
Sep 29, 2021 10:37:44 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HH410001015: Hibernate connection pool size: 20 (default)
Sep 29, 2021 10:37:44 PM org.hibernate.dialect.Dialect
INFO: HH410004000: using dialect: org.hibernate.dialect.MySQL5Dialect
Sep 29, 2021 10:37:44 PM org.hibernate.resource.transaction.backend.jdbc.internal.DBTTransactionIsolationNonHajml getIsolatedConnection
INFO: HH410001001: Connection obtained from JDBCConnectionAccess [org.hibernate.engine.jdbc.env.internal.JDBCEnvironmentInitiator$ConnectionProvider$JDBCConnection
1004,pranavtha,20000.0,20,cso
Sep 29, 2021 10:37:44 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl stop
INFO: HH410001008: Cleaning up connection pool [jdbc:mysql://localhost:3306/hog]
Interactive hibernate:
1.Insert a employee
2.Update a employee with maximum salary
3.Delete a employee with minimum salary
```



c.Delete an employee record from the table whose Salary is Minimum.



The screenshot shows the Eclipse IDE interface. The Project Explorer on the left displays the project structure, including a package 'src/main/java' and a class 'maincrud.java'. The main editor window shows the source code of 'maincrud.java', which contains a package declaration, an import statement for 'java.util.Scanner', and a main method. The console window at the bottom displays the output of the application, showing various Hibernate logs, including version information, connection pool configuration, and the execution of SQL queries. The logs indicate that the application is using Hibernate 5.3.7.Final and is connected to a MySQL database at localhost:3306/hbdg. The application successfully inserts, updates, and deletes records in the 'bean' table.

```
package src.main.java;

import java.util.Scanner;

public class maincrud {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        Interactive hibernate = new Interactive();

        hibernate.insertEmployee();
        hibernate.updateEmployee();
        hibernate.deleteEmployee();
        hibernate.displayEmployee();

        scanner.close();
    }
}
```

maincrud (1) [Java Application]

Interactive hibernate:

- 1.Insert a employee
- 2.Update a employee with maximum salary
- 3.Delete a employee with minimum salary
- 4.Display a employee

select any option: 1

Sep 29, 2021 10:43:01 PM org.hibernate.Version logVersion
INFO: HHH000041: Hibernate Core (5.3.7.Final)
Sep 29, 2021 10:43:01 PM org.hibernate.cfg.Environment <clinit>
INFO: HHH00026: Hibernate.properties not found
Sep 29, 2021 10:43:01 PM org.hibernate.annotations.common.reflection.java.JavaReflectionManager <clinit>
INFO: HHH000000: Hibernate Commons Annotations (5.0.4.Final)
Sep 29, 2021 10:43:03 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl configure
WARN: HHH0001002: Using Hibernate built-in connection pool (not for production use!)
Sep 29, 2021 10:43:03 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HHH0001005: using driver [com.mysql.cj.jdbc.Driver] at URL [jdbc:mysql://localhost:3306/hbdg]
Sep 29, 2021 10:43:03 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HHH0001003: Connection properties: {password=****, user=root}
Sep 29, 2021 10:43:03 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator
INFO: HHH0001003: Autocommit mode: false
Sep 29, 2021 10:43:03 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl PooledConnections <init>
INFO: HHH000113: Hibernate connection pool size: 20 (min=1)
Sep 29, 2021 10:43:05 PM org.hibernate.dialect.Dialect <init>
INFO: HHH000400: Using dialect: org.hibernate.dialect.MySQL5Dialect
Sep 29, 2021 10:43:06 PM org.hibernate.resource.transaction.backend.jdbc.internal.DdlTransactionIsolator\$NoInitalImpl getIsolatedConnection
INFO: HHH0001501: Connection obtained from JdbcConnectionAccess [org.hibernate.engine.jdbc.env.internal.JdbcEnvironmentInitiator\$ConnectionProvider\$DbConec
Sep 29, 2021 10:43:07 PM org.hibernate.hql.internal.QueryTranslatorFactoryInitiator initiateService
INFO: HHH000397: Using ASTQueryTranslatorFactory
Hibernate: select min(salary) as col_0_0_ from bean bean_
Hibernate: delete from bean where salary=?
Object Deleted
Sep 29, 2021 10:43:07 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl stop
INFO: HHH0005008: Cleaning up connection pool [jdbc:mysql://localhost:3306/hbdg]
Interactive hibernate: