```
1 package model;
 2
 3 import jakarta.persistence.*;
 4
 5 @Entity
 6 @Table(name="USER")
 7 public class User {
       @Column(name="USER_ID")
 8
 9
       @GeneratedValue(strategy = GenerationType.
10
   IDENTITY)
       private Integer id;
11
12
       private String fullName;
13
       private String email;
14
       private String password;
15
       private int age;
16
       private double salary;
       private String city;
17
18
19
       public User(String fullName, String email, String
    password, int age, double salary, String city) {
           this.fullName = fullName;
20
           this.email = email;
21
22
           this.password = password;
23
           this.age = age;
24
           this.salary = salary;
           this.city = city;
25
26
       }
27
28
       public User(){
29
       }
30
31
       public Integer getId() {
32
33
           return id;
34
       }
35
36
       public void setId(Integer id) {
37
           this.id = id;
38
       }
39
```

```
public String getFullName() {
40
41
           return fullName;
42
       }
43
44
       public void setFullName(String fullName) {
45
           this.fullName = fullName;
46
       }
47
       public String getEmail() {
48
           return email;
49
50
       }
51
52
       public void setEmail(String email) {
53
           this.email = email;
       }
54
55
56
       public String getPassword() {
57
           return password;
       }
58
59
       public void setPassword(String password) {
60
61
           this.password = password;
62
       }
63
64
       public int getAge() {
65
           return age;
       }
66
67
68
       public void setAge(int age) {
69
           this.age = age;
70
       }
71
       public double getSalary() {
72
73
           return salary;
74
       }
75
76
       public void setSalary(double salary) {
77
           this.salary = salary;
78
       }
79
       public String getCity() {
80
```

```
81
           return city;
       }
82
83
       public void setCity(String city) {
84
           this.city = city;
85
       }
86
87 }
88
```

```
1 package controller;
 2
 3 import model.User;
 4 import org.hibernate.Session;
 5 import org.hibernate.SessionFactory;
 6 import org.hibernate.Transaction;
 7 import org.hibernate.cfg.Configuration;
 8
 9 public class UserController {
10
       public static void main(String[] args) {
11
           SessionFactory factory = new Configuration().
   configure().buildSessionFactory();
           Session session = factory.openSession();
12
13 //
             addUser(factory, session);
             findUser(factory, session, 3);
14 //
15 //
16 //
             updateUser(session,3);
17 //
           deleteUser(session,4);
18
19
20
           factory.close();
21
           session.close();
22
       }
23
       public static void addUser(SessionFactory factory
   , Session session){
24
           Transaction transaction = session.
   beginTransaction();
25
           User uOne = new User();
           uOne.setEmail("haseeb@gmail.com");
26
           uOne.setFullName("Moh Haseeb");
27
           u0ne.setPassword("has123");
28
           u0ne.setSalary(2000.69);
29
30
           u0ne.setAge(20);
           uOne.setCity("NYC");
31
32
           User uTwo = new User();
33
           uTwo.setEmail("James@gmail.com");
34
           uTwo.setFullName("James Santana");
35
           uTwo.setPassword("James123");
36
           uTwo.setSalary(2060.69);
37
38
           uTwo.setAge(25);
```

```
uTwo.setCity("Dallas");
39
40
41
           User uThree = new User();
           uThree.setEmail("Shahparan@gmail.com");
42
           uThree.setFullName("AH Shahparan");
43
44
           uThree.setPassword("Shahparan123");
           uThree.setSalary(3060.69);
45
           uThree.setAge(30);
46
           uThree.setCity("Chicago");
47
48
           User uFour = new User("Christ", "christ@gmail
49
   .com", "147852", 35, 35000.3, "NJ");
           User uFive = new User("Sid", "Sid", "s258",
50
   29, 4000.36, "LA");
51
52
           session.persist(u0ne);
53
           session.persist(uTwo);
           session.persist(uThree);
54
           session.persist(uFour);
55
           session.persist(uFive);
56
57
58
           transaction.commit();
           System.out.println("successfully saved");
59
60
           factory.close();
           session.close();
61
62
63
64
       }
65
66
       public static void findUser(SessionFactory
   factory, Session session, int userId){
           Transaction tx = session.beginTransaction();
67
68
69
           User u = session.get(User.class, userId);
           System.out.println("FullName: " + u.
70
   getFullName());
           System.out.println("Email: " + u.getEmail());
71
           System.out.println("password: " + u.
72
   getPassword());
           tx.commit();
73
74
           factory.close();
```

```
75
            session.close();
 76
        }
        public static void updateUser(Session session,
 77
    int userId) {
            // Todo comment out findUser method and
 78
    uncomment updateUser method
 79
 80
            Transaction tx = session.beginTransaction();
 81
            User u = new User();
 82
            u.setId(userId);
            u.setEmail("mhaseeb@perscholas");
 83
            u.setFullName("M Haseeb");
 84
            u.setPassword("123456");
 85
            session.merge(u);
 86
            session.getTransaction().commit();
 87
 88
            session.close();
        }
 89
 90
 91
        public static void deleteUser(Session session,
    int userId){
 92
            // Todo comment out updateUser method and
    uncomment deleteUser method
 93
 94
            SessionFactory factory = new Configuration
    ().configure().buildSessionFactory();
            Transaction tx = session.beginTransaction();
 95
 96
            User u = new User();
 97
            u.setId(userId);
 98
            session.remove(u);
 99
            tx.commit();
100
            session.close();
101
            factory.close();
102
        }
103
104
105 }
106
```

```
1 <?xml version="1.0" encoding="UTF-8"?>
 2 <!DOCTYPE hibernate-configuration PUBLIC
 3
          "-//Hibernate/Hibernate Configuration DTD 3.0
  //EN"
          "http://www.hibernate.org/dtd/hibernate-
 4
  configuration-3.0.dtd">
5 <hibernate-configuration>
 6
      <session-factory>
 7
          <!-- Drop and re-create the database on
  startup -->
8
          property name="hibernate.hbm2ddl.auto">
  update </property>
 9
          <!-- Database connection settings -->
10
          connection.driver_class">com.
11
  mysql.cj.jdbc.Driver
          connection.url">jdbc:mysql://
12
  localhost:3306/usersDb?createDatabaseIfNotExist=true
  </property>
13
          connection.username">root
  property>
14
          connection.password">
  SzhengSQL123</property>
15
          <!-- MySQL DB dialect -->
16
          roperty name="dialect">org.hibernate.
17
  dialect.MySQLDialect/property>
          <!-- print all executed SQL on console -->
18
          cproperty name="hibernate.show_sql" >true 
19
  property>
20
          roperty name="hibernate.format_sql" >true
  </property>
21
                Mapping entity file -->
22
          <mapping class="model.User"/>
23
24
      </session-factory>
25
26 </hibernate-configuration>
27
28
```