**Hibernate Annotations**

**Pom.xml**

<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>com.example</groupId>

    <artifactId>hibernate-annotations-demo</artifactId>

    <version>1.0-SNAPSHOT</version>

    <dependencies>

        <dependency>

    <groupId>org.hibernate</groupId>

    <artifactId>hibernate-core</artifactId>

    <version>6.4.4.Final</version>

</dependency>

<dependency>

    <groupId>org.hibernate.orm</groupId>

    <artifactId>hibernate-core</artifactId>

    <version>5.6.15.Final</version>

</dependency>

<dependency>

    <groupId>javax.persistence</groupId>

    <artifactId>javax.persistence-api</artifactId>

    <version>2.2</version>

</dependency>

        <dependency>

            <groupId>com.mysql</groupId>

            <artifactId>mysql-connector-j</artifactId>

            <version>8.0.33</version>

        </dependency>

        <dependency>

            <groupId>jakarta.persistence</groupId>

            <artifactId>jakarta.persistence-api</artifactId>

            <version>3.1.0</version>

        </dependency>

    </dependencies>

</project>

**Main/resources/hibernate.cfg.xml**

<?xml version='1.0' encoding='utf-8'?>

<!DOCTYPE hibernate-configuration PUBLIC

    "-//Hibernate/Hibernate Configuration DTD 3.0//EN"

    "http://hibernate.sourceforge.net/hibernate-configuration-3.0.dtd">

<hibernate-configuration>

    <session-factory>

        <property name="hibernate.connection.driver\_class">com.mysql.cj.jdbc.Driver</property>

        <property name="hibernate.connection.url">jdbc:mysql://localhost:3306/test</property>

        <property name="hibernate.connection.username">root</property>

        <property name="hibernate.connection.password">system</property>

        <property name="hibernate.dialect">org.hibernate.dialect.MySQLDialect</property>

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

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

        <mapping class="com.example.Employee"/>

    </session-factory>

</hibernate-configuration>

**/main/java/com/example**

**App.java**

package com.example;

import org.hibernate.Session;

import org.hibernate.SessionFactory;

import org.hibernate.Transaction;

import org.hibernate.cfg.Configuration;

public class App {

    public static void main(String[] args) {

        SessionFactory factory = new Configuration()

                .configure("hibernate.cfg.xml")

                .addAnnotatedClass(Employee.class)

                .buildSessionFactory();

        Session session = factory.openSession();

        Transaction tx = session.beginTransaction();

        Employee emp = new Employee();

        emp.setFirstName("John");

        emp.setLastName("Doe");

        emp.setSalary(50000);

        session.save(emp);

        tx.commit();

        session.close();

        factory.close();

        System.out.println("Employee saved successfully!");

    }

}

**Employee.java**

package com.example;

import jakarta.persistence.\*;

@Entity

@Table(name = "EMPLOYEE")

public class Employee {

    @Id

    @GeneratedValue

    @Column(name = "id")

    private int id;

    @Column(name = "first\_name")

    private String firstName;

    @Column(name = "last\_name")

    private String lastName;

    @Column(name = "salary")

    private int salary;

    public int getId() {

        return id;

    }

    public void setId(int id) {

        this.id = id;

    }

    public String getFirstName() {

        return firstName;

    }

    public void setFirstName(String firstName) {

        this.firstName = firstName;

    }

    public String getLastName() {

        return lastName;

    }

    public void setLastName(String lastName) {

        this.lastName = lastName;

    }

    public int getSalary() {

        return salary;

    }

    public void setSalary(int salary) {

        this.salary = salary;

    }

}

**HibernateDemo.java**

package com.example;

import org.hibernate.Session;

import org.hibernate.SessionFactory;

import org.hibernate.Transaction;

import org.hibernate.cfg.Configuration;

public class HibernateDemo {

    public static void main(String[] args) {

        SessionFactory factory = new Configuration().configure().buildSessionFactory();

        Session session = factory.openSession();

        Transaction tx = session.beginTransaction();

        Employee emp = new Employee();

        emp.setFirstName("John");

        emp.setLastName("Doe");

        emp.setSalary(50000);

        session.save(emp);

        tx.commit();

        session.close();

        factory.close();

        System.out.println("Employee saved successfully!");

    }

}

Output:

