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| Assignment No | 8 - Assignment |
| Title | Employee Application |
| Objective | To Insert and Update a row using JDBC |
| Roll No | MCA2511 |

## 1. To Insert and Update a row using JDBC.

## Source Code:

**<u>EmplyeeBean.java</u>**

```
package edu.met.p1;

public class EmployeeBean {
        int eid;
        String ename;
        int esalary;

        public int getEid() {
                return eid;
        }
        public void setEid(int eid) {
                this.eid = eid;
        }
        public String getEname() {
                return ename;
        }
        public void setEname(String ename) {
                this.ename = ename;
        }
        public int getEsalary() {
                return esalary;
        }
        public void setEsalary(int esalary) {
                this.esalary = esalary;
        }
        @Override
        public String toString() {
                return "EmployeesBean [eid=" + eid + ", ename=" + ename + ", esalary=" +
esalary + "]";
        }
}
```

**EmployeesDAO.java**

```
package edu.met.p1;

import org.springframework.jdbc.core.JdbcTemplate;

public class EmployeesDAO {

        JdbcTemplate jdbcT;

        public EmployeesDAO (JdbcTemplate jdbcT) {
                super();
                this.jdbcT = jdbcT;
        }

        // method to insert record in table
        void insertRow(EmployeeBean e1) {
                String insertQ = "insert into myemployees
values("+e1.getEid()+",'"+e1.getEname()+"','"+e1.getEsalary()+"')";
                jdbcT.update(insertQ);
        }

        //method to update a record in table
        void updateRow(EmployeeBean m1)
        {
                String updateQ = "update myemployees set ename = ?, esalary = ? where
eid=?";
                jdbcT.update(updateQ,m1.getEname(),m1.getEsalary(),m1.getEid());
        }
}
```

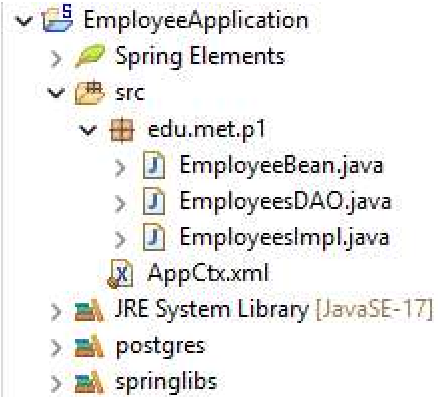
**EmployeesImpl.java**

```
package edu.met.p1;

import org.springframework.context.ApplicationContext;
import org.springframework.context.support.ClassPathXmlApplicationContext;

public class EmployeesImpl {

        private static ApplicationContext ctx;
        public static void main(String[] args) {
                // TODO Auto-generated method stub

                ctx = new ClassPathXmlApplicationContext("AppCtx.xml");
                //get movies bean Object
                EmployeeBean m1 = (EmployeeBean)ctx.getBean("employee");
                // Get the DAO bean object
                EmployeesDAO dao = (EmployeesDAO)ctx.getBean("employeesDao");
                // insert the record
                dao.insertRow(m1);
                m1.setEid(101);
                m1.setEname("Jay");
                m1.setEsalary(400000);
                dao.insertRow(m1);

                m1.setEid(102);
                m1.setEname("Omkar");
                m1.setEsalary(500000);
                dao.insertRow(m1);

                m1.setEid(103);
                m1.setEname("Nimish");
                m1.setEsalary(450000);
                dao.insertRow(m1);

                m1.setEid(104);
                m1.setEname("Aniket");
                m1.setEsalary(550000);
                dao.insertRow(m1);

                m1.setEid(105);
                m1.setEname("Altamash");
                m1.setEsalary(500000);
                dao.insertRow(m1);

                m1.setEid(106);
                m1.setEname("Bhavesh");
                m1.setEsalary(500000);
                dao.insertRow(m1);

                m1.setEid(106);
                m1.setEname("Sumit");
                m1.setEsalary(520000);
                dao.updateRow(m1);
        }

}
```

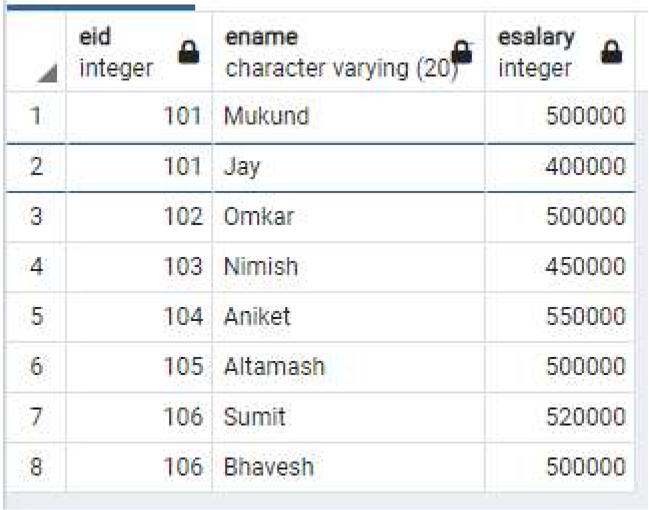
**AppCtx.xml**

```
<?xml version="1.0" encoding="UTF-8"?>
<beans
   xmlns="http://www.springframework.org/schema/beans"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:p="http://www.springframework.org/schema/p"
   xsi:schemaLocation="http://www.springframework.org/schema/beans
          http://www.springframework.org/schema/beans/spring-beans-3.0.xsd">

        <bean id="ds"
class="org.springframework.jdbc.datasource.DriverManagerDataSource">
                <property name="driverClassName" value="org.postgresql.Driver" />
                <property name="url" value="jdbc:postgresql://localhost:5432/postgres"/>
                <property name="username" value="postgres" />
                <property name="password" value="password" />
        </bean>

        <bean id="jdbcT" class="org.springframework.jdbc.core.JdbcTemplate">
                <property name="dataSource" ref="ds"/>
        </bean>

        <bean id="employeesDao" class="edu.met.p1.EmployeesDAO">
                <constructor-arg name="jdbcT" ref="jdbcT"/>
        </bean>

        <bean id="employee" class="edu.met.p1.EmployeeBean">
                <property name="eid" value="101"/>
                <property name="ename" value="Mukund"/>
                <property name="esalary" value="500000"/>
        </bean>
 </beans>
```

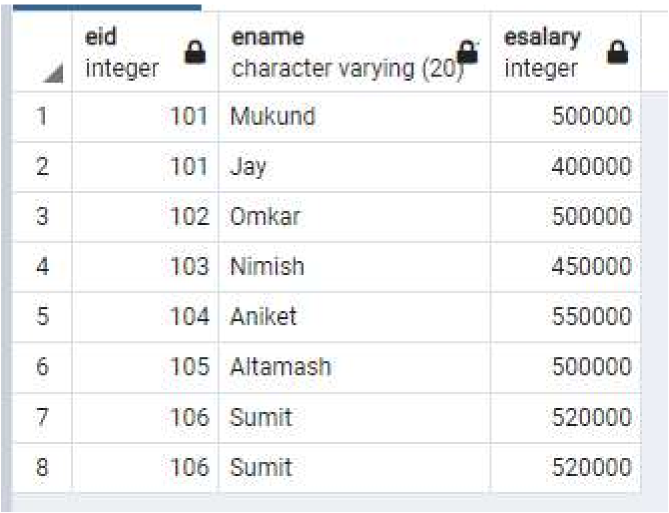
**Output:**



```
EmployeeApplication
  Spring Elements
  src
    edu.met.p1
      EmployeeBean.java
      EmployeesDAO.java
      EmployeesImpl.java
    AppCtx.xml
  JRE System Library [JavaSE-17]
  postgres
  springlibs
```



| | eid<br>integer | ename<br>character varying (20) | esalary<br>integer |
|---|---|---|---|
| 1 | 101 | Mukund | 500000 |
| 2 | 101 | Jay | 400000 |
| 3 | 102 | Omkar | 500000 |
| 4 | 103 | Nimish | 450000 |
| 5 | 104 | Aniket | 550000 |
| 6 | 105 | Altamash | 500000 |
| 7 | 106 | Sumit | 520000 |
| 8 | 106 | Bhavesh | 500000 |



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