

1. Write a Servlet application for fetching the entire data from the database and showing it as table in response webpage. Use the following query in MySQL for creating a table which contains employee details. create table employee(empid varchar(10), empname varchar(20), age integer, salary integer);

Connection Interface package

```
com.jdbc.demo.connection;
```

```
interface DBDetails { String CONST
="jdbc:mysql://localhost:3306/cdac_tvm?useSSL=false";
```

```
String DBDDRIVER = "com.mysql.cj.jdbc.Driver";
String USERNAME = "root";
String PASSWORD = "abc1234";
}
```

```
• Connection package
com.jdbc.demo.connection; // 5
connection implementation import
java.sql.Connection; import
java.sql.DriverManager; import
java.sql.SQLException;

public class DbConnection { public static
Connection getDbConnection() {

try {
Class.forName(DBDetails.DBDDRIVER);

Connection con=
```

```

        DriverManager.getConnection(dBDetails.CONSTR,dBDetails.USERNAME,dBDetails.PASSWORD);
        return con;
    }
    catch(ClassNotFoundException |SQLException exc)
        { exc.printStackTrace(); return null;
        }
    }
}

```

EMPLOYEE POJO CLASS

```

package com.jdbc.demo.pojo;
//1 Employee class public
class Employee { private
int id; private String
ename; private int age;
private int salary; public
Employee() {

    }
    public int getId()
        { return id;
    }
    public void setId(int id)
        { this.id = id;
    }
    public String getEname()
        { return ename;
    }
    public void setEname(String ename)
        { this.ename = ename;
    }
    public int getAge()
        { return age;
    }
    public void setAge(int age)
        { this.age = age;
    }
    public int getSalary()
        { return salary;
    }
    public void setSalary(int salary)
        { this.salary = salary;
    }
    @Override

```

```

        public String toString() { return "Employee [id=" + id + ",
            ename=" + ename + ",
age=" + age + ", salary=" + salary + "]\n";
        }
    }
}

```

- **Employee DAO CLASS** package

```
com.jdbc.demo.dao;
```

```

    • EmployeeDao import
java.util.List; import
com.jdbc.demo.pojo.Employee;

```

```

public interface EmployeeDao {

    //query Operations
    List<Employee> getAllEmployee();
    Employee searchEmployee(int EmpId);
}

```

- **IMPLEMENTATION OF EMPLOYEE DAO CLASS**

```

    • package com.jdbc.demo.empImp;
import java.sql.Connection; import
java.sql.PreparedStatement; import
java.sql.ResultSet; import
java.sql.SQLException; import
java.sql.Statement; import
java.util.ArrayList; //3 implement
employeeDao import java.util.List;

```

```

import com.jdbc.demo.connection.DbConnection;
import com.jdbc.demo.dao.EmployeeDao; import
com.jdbc.demo.pojo.Employee; public class
EmployeeDaoImp implements EmployeeDao{

```

```

    @Override
    public List<Employee> getAllEmployee()
    { List<Employee> lst=new ArrayList<>();
    try(Connection con=DbConnection.getConnection()){
        PreparedStatement pst=con.prepareStatement("SELECT *
FROM Employee");
    }
}

```

```

        ResultSet rs=pst.executeQuery();
        while(rs.next()) {
            Employee emp=new Employee();
            emp.setId(rs.getInt("eid"));
            emp.setEname(rs.getString("ename"));
            emp.setAge(rs.getInt("age"));
            emp.setSalary(rs.getInt("salary"));
            lst.add(emp);
        }
        return lst;
    }
    catch(NullPointerException |SQLException exc)
    { exc.printStackTrace(); return null;
    }
}

@Override
public Employee searchEmployee(int EmpId) {
    Employee emp=null; try(Connection
con=DbConnection.getConnection()){
        PreparedStatement pst=con.prepareStatement("SELECT *
FROM Employee WHERE eid=?");
        //at the place of first ? value of EmpId
parameter must be there pst.setInt(1,EmpId);
        ResultSet rs=pst.executeQuery();
        if(rs.isBeforeFirst()) { rs.next();
        emp=new Employee();
        emp.setId(rs.getInt("eid"));
        emp.setEname(rs.getString("ename"));
        emp.setAge(rs.getInt("age"));
        emp.setSalary(rs.getInt("salary"));
        return
        emp; }
        return emp;
    } catch(SQLException|NullPointerException
exc)
    { exc.printStackTrace()
    ; return null;
    }
}

```

Main class

```
package com.jdbcdemo.main;
```

```

import java.util.List;
import java.util.Scanner;

import com.jdbc.demo.dao.EmployeeDao;
import com.jdbc.demo.empImp.EmployeeDaoImp;
import com.jdbc.demo.pojo.Employee; public
class AppMain {

    public static void main(String[] args) {

        //ADD NEW ROW
        EmployeeDaoImp daoImp=new EmployeeDaoImp();
        Scanner sc=new Scanner(System.in);

        System.out.println("Enter the name");
        String name=sc.next();

        System.out.println("Enter the age");
        int age=sc.nextInt();

        System.out.println("Enter the Salary");
        int salary=sc.nextInt();

        Employee emp=new Employee();
        emp.setEname(name);

        emp.setAge(age);
        emp.setSalary(salary);
        if(daoImp.addNewEmployee(emp)) {
            System.out.println("Employee Save");
        }
        else
        {
            System.out.println("Employee Not save");
        }

    }

}

```

Result Grid					Filter Rows:	
	eid	ename	age	salary		
▶	1	atharva	23	1000		