**Jdbc Lab [55 Marks]**

Consider a Database **OrganizationDB** having tables

**Employee** (EmpID int, EmpFname varchar(50), EmpLname varchar(50), EmpAddress varchar (250), Designation varchar(50) , DepID int)

**Department** (DepID int, DepName varchar (100))

Write two java classes EmployeeDAL and Deaprtment DAL with methods given below:

**DepartmenDAL methods [5 + 5 + 5 + 5 + 5 = 25]**

1. **int AddDepartment(DepID , DepName )**

This method takes DeptID and DepName as input and inserts it inot department table.

1. **int UpdateDepartment(DepID , newDepName )**

This method takes DeptID and DepName as input and updates the name of department with DepID to newDepName

1. **int DeleteDepartment(DepID)**

This method delete the department with given DepID.

1. **void ListDepartment()**

Displays all the departments information on console.

1. **int SearchDepartmentByName(DepName)**

This method take DepName as input and searches it in department table. If found returns the department id otherwise returns 0.

**EmployeeDAL methods [10 + 5 + 5 + 5 + 5 = 30]**

1. **int AddEmployee (EmpID, EmpFname, EmpLname, EmpAddress, Designation, DepID, DepName)**

This method will first check if the deparment with given DepName exists in the Department table.

* + If yes, it’ll ignore the given depId and depName and use existing depID and insert record in employee table.
  + If no, it’ll add given depID and depName Department table and then add employee information to employee table.

1. **void ListEmployees()**

Displays all the employees information on console.

1. **void ListEmployeesByDepartment(int DepID)**

Displays all the employees information belonging to specific Department Id.

1. **void DeleteEmployee(EmpID)**

This method takes employee id as input and deletes the record with given ID from employee table.

1. **int UpdateEmployee (EmpID, EmpFname, EmpLname, EmpAddress, Designation, DepName)**

This method searches employee with given empid and updates its information sent as parameters.

Write test class with main method and demonstrate these functions with proper menu options.