Access code:

```
package com.access;


import java.math.BigDecimal;
import java.util.Date;
import java.util.List;
import com.Dao.EmployeeDao;
import com.Daoimpl.EmployeeDaoImpl;
import com.model.Employee;
public class Clientaccess {
	public static void main(String[] args) {
		EmployeeDao employeeDAO=new EmployeeDaoImpl();
		Employee employee=getEmployee();
		employeeDAO.createEmployee(employee);
		getEmployeeById(employeeDAO);
		employeeDAO.updateEmployeeEmailById("sam.2014@gmail.com", 1);
		employeeDAO.deleteEmployeeById(1);
		getAllEmployeesInfo(employeeDAO);
		employeeDAO.getAllEmployeesInfo();
	}
	private static void getAllEmployeesInfo(EmployeeDao employeeDAO) {
		List<Employee> empList= employeeDAO.getAllEmployeesInfo();
		for(Employee employee:empList) {
			System.out.println(employee);
		}
	}
	private static void getEmployeeById(EmployeeDao employeeDAO) {
		Employee employee2=employeeDAO.getEmployeeById(1);
		if(employee2!=null){
```

```
                System.out.println(employee2);
            }else {
                System.out.println("Employee does not exist..");
            }
        }
        private static Employee getEmployee() {
            Employee employee=new Employee();
            employee.setBonus(new BigDecimal(2222));
            employee.setDob(new Date());
            employee.setName("nan");
            employee.setEmail("nan@gmail.com");
            employee.setSalary(44865.7);
            return employee;
        }
}
```

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interface EmployeeDao

```
package com.Dao;

import java.util.List;

import com.model.Employee;

public interface EmployeeDao {
        public abstract void createEmployee(Employee employee);
        public abstract Employee getEmployeeById(Integer employeeId);
        public abstract void updateEmployeeEmailById(String newemailid, Integer employeeid);
        public abstract void deleteEmployeeById(Integer employeeId);
        public abstract List<Employee> getAllEmployeesInfo();
```

```
}
```

```
package com.Daoimpl;


        //step 2:string with question mark
                //step3 :passing query constructor
        //step4;setting value for qn mark
        //step 5;executing query
        import java.sql.Date;
        import java.math.BigDecimal;
        import java.sql.Connection;
        import java.sql.PreparedStatement;
        import java.sql.ResultSet;
import java.util.ArrayList;
import java.util.List;
   //import java.math.BigDecimal*;
import com.Dao.EmployeeDao;


        import com.model.Employee;
        import com.util.DbUtil;
        public class EmployeeDaoImpl implements EmployeeDao {
                public void createEmployee(Employee employee) {
                        String SQL="INSERT INTO employee(id,empName,email,salary,doj,bonus)
values(?,?.?,?,?,?);";
                        try
                        {
                        Connection connection = DbUtil.getConnection();
                                        PreparedStatement ps=connection.prepareStatement(SQL);
```

```
                ps.setInt(1, employee.getId());
                ps.setString(2, employee.getName());
                ps.setString(3, employee.getEmail());
                ps.setDouble(4, employee.getSalary());
                ps.setDate(5,new Date( employee.getDob().getTime()));
                ps.setBigDecimal(6,employee.getBonus());
                int executeUpdate = ps.executeUpdate();
                if(executeUpdate==1)
                {
                        System.out.println("Employee is created...");
                }
        }
        catch(Exception e)
        {
                e.printStackTrace();
        }
}
public Employee getEmployeeById(Integer employeeId) {
        Employee employee=null;
        String SQL="SELECT * FROM employee WHERE id=?";
        try
        {
        Connection connection = DbUtil.getConnection();
        PreparedStatement ps=connection.prepareStatement(SQL);
        ps.setInt(1, employeeId);
        ResultSet rs = ps.executeQuery();
        if(rs.next())
        {
                int id=rs.getInt("id");
```

```
                String ename=rs.getString("empName");
                String email = rs.getString("email");
                Double salary=rs.getDouble("salary");
                BigDecimal bonus = rs.getBigDecimal("bonus");
                Date date = rs.getDate("doj");
                employee=new Employee();
                employee.setId(id);
                employee.setName(ename);
                employee.setBonus(bonus);
                employee.setDob(date);
                employee.setEmail(email);
                employee.setSalary(salary);
        }
        }
        catch(Exception e)
        {
                e.printStackTrace();
        }
        return employee;
}
public void updateEmployeeEmailById(String newemailid,Integer employeeid) {
        String SQL = "UPDATE employee set email=? WHERE  id=?;";
        try
        {
                Connection connection = DbUtil.getConnection();
                PreparedStatement ps=connection.prepareStatement(SQL);
                ps.setString(1,newemailid );
                ps.setInt(2, employeeid);
                int executeUpdate = ps.executeUpdate();
```

```
                    if(executeUpdate==1)
                    {
                        System.out.println("Employee email is updated...");
                    }
                }
                catch(Exception e)
                {
                    e.printStackTrace();
                }
            }
            public void deleteEmployeeById(Integer employeeId) {
                String SQL = "DELETE FROM employee WHERE id=?;";
                try
                {
                    Connection connection = DbUtil.getConnection();
                    PreparedStatement ps=connection.prepareStatement(SQL);
                    ps.setInt(1,employeeId);
                    int executeUpdate = ps.executeUpdate();
                    if(executeUpdate==1)
                    {
                        System.out.println("Employee is deleted with
ID::"+employeeId);
                    }
                }
                catch(Exception e)
                {
                    e.printStackTrace();
                }
            }
```

```
public List<Employee> getAllEmployeesInfo() {
	List<Employee> empList = new ArrayList<Employee>();
	String SQL = "SELECT * FROM employee;";
	try
	{
		Connection connection = DbUtil.getConnection();
		PreparedStatement ps=connection.prepareStatement(SQL);
		ResultSet rs = ps.executeQuery();
		while(rs.next())
		{
			int id=rs.getInt("id");
			String ename=rs.getString("empName");
			String email = rs.getString("email");
			Double salary=rs.getDouble("salaary");
			BigDecimal bonus = rs.getBigDecimal("bonus");
			Date date = rs.getDate("doj");
			Employee employee=new Employee();
			employee.setId(id);
			employee.setName(ename);
			employee.setBonus(bonus);
			employee.setDob(date);
			employee.setEmail(email);
			employee.setSalary(salary);
			empList.add(employee);
		}
	}
	catch(Exception e)
	{
		e.printStackTrace();
```

```
                }
                return empList;
        }
        }
```

```
package com.model;

import java.math.BigDecimal;
import java.util.Date;

public class Employee {
int id;
String name;
String email;
BigDecimal bonus;
double salary;
Date dob;
public int getId() {
        return id;
}
public void setId(int id) {
        this.id = id;
}


public String getName() {
        return name;
}
public void setName(String name) {
        this.name = name;
```

```
}
public String getEmail() {
	return email;
}
public void setEmail(String email) {
	this.email = email;
}

public BigDecimal getBonus() {
	return bonus;
}
public void setBonus(BigDecimal bonus) {
	this.bonus = bonus;
}
public double getSalary() {
	return salary;
}
public void setSalary(double salary) {
	this.salary = salary;
}
public Date getDob() {
	return dob;
}
public void setDob(Date dob) {
	this.dob = dob;
}
@Override
public String toString() {
```

```
	return "Employee [id=" + id + ", name=" + name + ", email=" + email + ", bonus=" + bonus + ",
salary=" + salary
				+ ", dob=" + dob + "]";
}
}
```

```
package com.util;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;

public class DbUtil {
private static final String DB_DRIVER_CLASS="com.mysql.cj.jdbc.Driver";
private static final String DB_USERNAME="root";
private static final String DB_PASSWORD=" ";
private static final String DB_URL="jdc:mysql://localhost:3306/employee";
private static Connection Connection=null;

public static Connection getConnection() {

	try {
		Class.forName(DB_DRIVER_CLASS);
		Connection = DriverManager.getConnection(DB_URL, DB_USERNAME,DB_PASSWORD);
	}
	catch(ClassNotFoundException e) {
		e.printStackTrace();
	}
	catch(SQLException e) {
```

```
                e.printStackTrace();
            }
            return Connection;
    }
    }
```