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Lab : C1

1. PersonDAO.java

```
/**
 * File : PersonDAO.java 06/05/2023
 * Penulis : Niko Geraldi Sinabariba
 * Deskripsi : Interface untuk person access object
 */

public interface PersonDAO{
    public void savePerson(Person p) throws Exception;
}
```

2. Person.java

```
/**
 *File : PersonDAO.java 06/06/2023
 *Penulis : Niko Geraldi Sinabariba
 * Deskripsi : Person database model
 */

public class Person {
    private int id;
    private String name;

    public Person(String n){
        name = n;
    }

    public Person(int i, String n){
        id = i;
        name = n;
    }

    public int getId(){
        return id;
    }

    public String getName(){
        return name;
    }
}
```

3. MySQLPerson.java

```
/**
 *File : PersonDAO.java 06/06/2023
 *Penulis : Niko Geraldi Sinabariba
 * Deskripsi : Implementasi PersonDAO untuk MySQL
 */

import java.sql.*;

public class MySQLPersonDAO implements PersonDAO{
    public void savePerson(Person person) throws
    Exception{
        String name = person.getName();
        Class.forName("com.mysql.jdbc.Driver");
        Connection con =
        DriverManager.getConnection("jdbc:mysql://localhost/pbo
        ", "root", "");
        String query = "INSERT INTO person(name)
        VALUES ('"+name+"') ";
        System.out.println(query);
        Statement s = con.createStatement();
        s.executeUpdate(query);
        con.close();
    }
}
```

4. DAOManager.java

```
/**
 *File : PersonDAO.java 06/06/2023
 *Penulis : Niko Geraldi Sinabariba
 * Deskripsi : Pengelola DAO dalam program
 */

public class DAOManager {
    private PersonDAO personDAO;

    public void setPersonDAO(PersonDAO person) {
        personDAO = person;
    }

    public PersonDAO getPersonDAO() {
        return personDAO;
    }
}
```

5. MainDAO.java

```
/**
 *File : PersonDAO.java 06/06/2023
 *Penulis : Niko Geraldi Sinabariba
 * Deskripsi : Main program untuk akses DAO
 */

public class MainDAO {
    public static void main(String args[]){
        Person
person = new Person("Indra");
        DAOManager m = new
DAOManager();
        m.setPersonDAO(new MySQLPersonDAO());
        try{
            m.getPersonDAO().savePerson(person);
        }catch(Exception e){
            e.printStackTrace();
        }
    }
}
```

6. SerializePerson.java

```
/**
 *File : PersonDAO.java 06/06/2023
 *Penulis : Niko Geraldi Sinabariba
 * Deskripsi : program untuk serialisasi objek person
 */

import java.io.*;
class Person implements Serializable {
private String name;
    public
Person(String n) {
        name = n;
    }
    public String getName() {
return name;
    }
}
```

```

public class SerializePerson {
    public static void main(String[] args) {
        Person person = new Person("rio");
        try {
            FileOutputStream f = new
FileOutputStream("person.ser");
            ObjectOutputStream s = new
ObjectOutputStream(f);
            s.writeObject(person);
            System.out.println("Selesai   menulis   objek
person");
            s.close();
        } catch (IOException e) {
            e.printStackTrace();
        }
    }
}

```

7. ReadSerializedPerson.java

```

/**
 *File : PersonDAO.java 06/06/2023
 *Penulis : Niko Geraldi Sinabariba
 * Deskripsi : program untuk serialisasi objek person
 */

import java.io.*;
public class ReadSerializedPerson {
    public static void main(String[] args) {
        Person person = null;
        try {
            FileInputStream f = new
FileInputStream("person.ser");
            ObjectInputStream s = new
ObjectInputStream(f);
            person = (Person) s.readObject();
            s.close();
            System.out.println("serialized person name
= " + person.getName());
        } catch (Exception ioe) {
            ioe.printStackTrace();
        }
    }
}

```

8. Hasil Output

```
Windows PowerShell
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PS D:\PBOPRAK\praktikum9> javac *.java
PS D:\PBOPRAK\praktikum9> java SerializePerson
Selesai menulis objek person
PS D:\PBOPRAK\praktikum9> java ReadSerializedPerson
serialized person name = rio
PS D:\PBOPRAK\praktikum9> |
```