Nama : Muhammad Rizki NIM : 24060121130086

Lab: C2

Menggunakan Persistent Object sebagai model basis data relasional

A. Source Code

1. PersonDAO.java

2. PersonDAO.java

```
刘 File Edit Selection View Go Run Terminal Help
                                                                 Person.java - Untitled (Workspace)
       EXPLORER

∨ UNTITLED (WORKSPACE)

                           persistenrelasional > 🔬 Person.java > 😭 Person
      DAOManager.cl...
           DAOManager.java

    MainDAO.class

          🔬 MainDAO.java
                                  public class Person {
         mysql-connecto...

♠ MySQLPersonD...

         MySQLPersonD...
                                      public Person(String n){
           PersonDAO.class
                                           name = n;
       > persistenserial
                                       public Person(int i, String n){
6
                                           name = n;
                                       public int getId(){
                                          return name;
                             26
```

3. MySQLPersonDAO.java

```
X File Edit Selection View Go Run Terminal Help
                                                           MySQLPersonDAO.java - Untitled (Workspace) - Visual Studio Code
     ∨UNTITL... [‡ 日 ひ 🗗
                          👣 persistenrelasional > 🔬 MySQLPersonDAO.java > ...

♠ DAOManager.cl...

          MainDAO.class
           mysql-connecto...
         MvSOLPersonD...
                                 public class MySQLPersonDAO implements PersonDAO {
                                     public void savePerson(Person person) throws Exception{
           Person.java
          PersonDAO.iava
                                          Connection con = DriverManager.getConnection(
        persistenserial
                                             url:"jdbc:mysql://localhost:3306/pbo", user:"root", password:"");
                                          String query = "INSERT INTO person(name) VALUES('"+name+"')";
                                          System.out.println(query);
                                          s.executeUpdate(query);
```

4. DAOManager.java

```
刘 File Edit Selection View Go Run Terminal Help
                                                             DAOManager.java - Untitled (Workspa

∨ UNTITLED (WORKSPACE)

                           🄰 persistenrelasional > 🐇 DAOManager.java > ધ DAOManager
      MainDAO.class
          MainDAO.java
           mysql-connecto...
                                  public class DAOManager {
            MySQLPersonD...
                                      private PersonDAO personDAO;
           MySQLPersonD...
                                      public void setPersonDAO(PersonDAO person){
          Person.class
                                          personDAO = person;
          PersonDAO.class
                                      public PersonDAO getPersonDAO(){
          PersonDAO.iava
        persistenserial
                                          return personDAO;
```

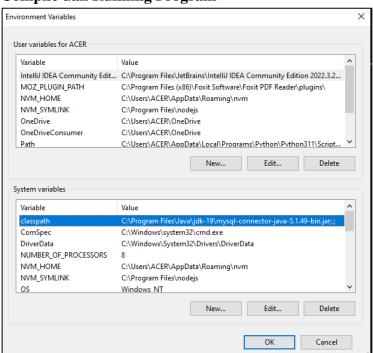
5. MainDAO.java

```
File
    Edit Selection
                                   Terminal
                                            Help
                                                                   MainDAO.java - Untitled (Workspace) -
                   View
                         Go
                              Run
                          🐇 MainDAO.java 🗙
   EXPLORER

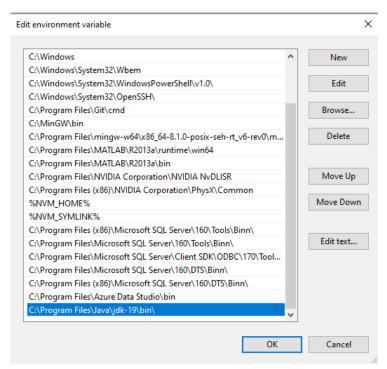
✓ UNTITLED (WORKSPACE)

                           🄰 persistenrelasional 🗦 🔬 MainDAO.java 🗦 😭 MainDAO
     persistenrelasional
         DAOManager.cl...
         DAOManager.java
         MainDAO.class
                                  public class MainDAO {
         mysql-connecto...
         MySQLPersonD...
                                       public static void main(String[] args) {
         MySQLPersonD...
                                            Person person = new Person(n:"Indra");
         Person.class
                                            DAOManager m = new DAOManager();
         Person.java
                                            m.setPersonDAO(new MySQLPersonDAO());
         PersonDAO.class
                                            try{
         PersonDAO.java
                                                 m.getPersonDAO().savePerson(person);
     persistenserial
                                                 e.printStackTrace();;
                            17
```

B. Compile dan Running Program

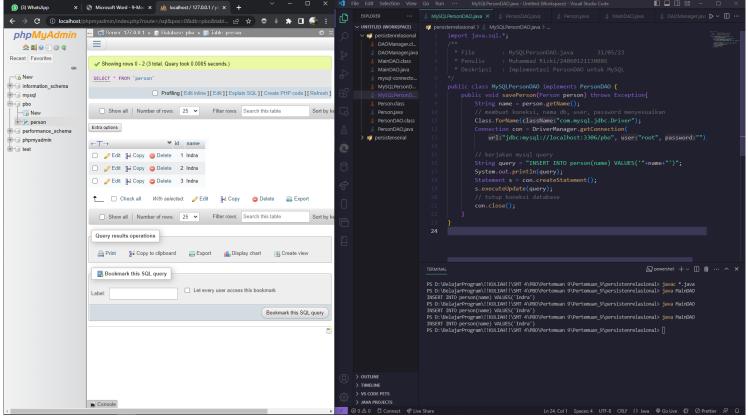


Sebelum running program yang telah dibuat, disini saya menambahkan classpath dari MySQL connector pada environment variables terlebih dahulu. Hal ini dikarenakan pada laptop saya tidak bisa menggunakkan cara yang seperti di modul.



Selain itu pastikan path ke bin dari Java sudah ada di path environment variable.

Setelah menambah classpath dan path di environment variable, maka program dapat di compile dan di run seperti biasa tanpa perlu menambah classpath MySQL connector lagi pada saat menjalankan MainDAO.



Pada Connection con, url-nya ditambahkan :3306, dikarenakan port yang digunakan pada MySQL saya adalah 3306. Selain itu, localhost juga bisa diganti dengan IP 127.0.

Menggunakan Persistent Object sebagai objek terserialisasi

Source Code + Compile + Running:

1. SerializePerson.java

```
▼ File Edit Selection View Go Run Terminal Help
                                                                                                                   SerializePerson.java - Untitled (Workspace
Ф

∨ UNTITLED (WORKSPACE)

                                💗 persistenserial > 🔬 SerializePerson.java > 😭 SerializePerson
       > 🔰 persistenrelasional
        ReadSerializedP...
           SerializePerson.c...
                                                   name = n;
                                             public String getName(){
                                                   return name;
6
                                         public class SerializePerson{
                                              public static void main(String[] args) {
                                                   Person person = new Person(n:"Panji");
                                                        FileOutputStream f = new FileOutputStream(name:"person.ser");
                                                        ObjectOutputStream s = new ObjectOutputStream(f);
                                                        s.writeObject(person);
                                                        System.out.println(x:"selesai menulis objek person");
                                                        s.close();
                                                        e.printStackTrace();
                                 PS D:\BelajarProgram\!!KULIAH!!\SMT 4\PBO\Pertemuan 9\Pertemuan_9\persistenserial> javac SerializePerson.java PS D:\BelajarProgram\!!KULIAH!!\SMT 4\PBO\Pertemuan 9\Pertemuan_9\persistenserial> java SerializePerson
                                 selesai menulis objek person
PS D:\BelajarProgram\!!KULIAH!!\SMT 4\PBO\Pertemuan 9\Pertemuan_9\persistenserial>
```

2. ReadSerializedPerson.java