ACTIVITY PERTEMUAN 4

NAMA : Rama Adi Satria
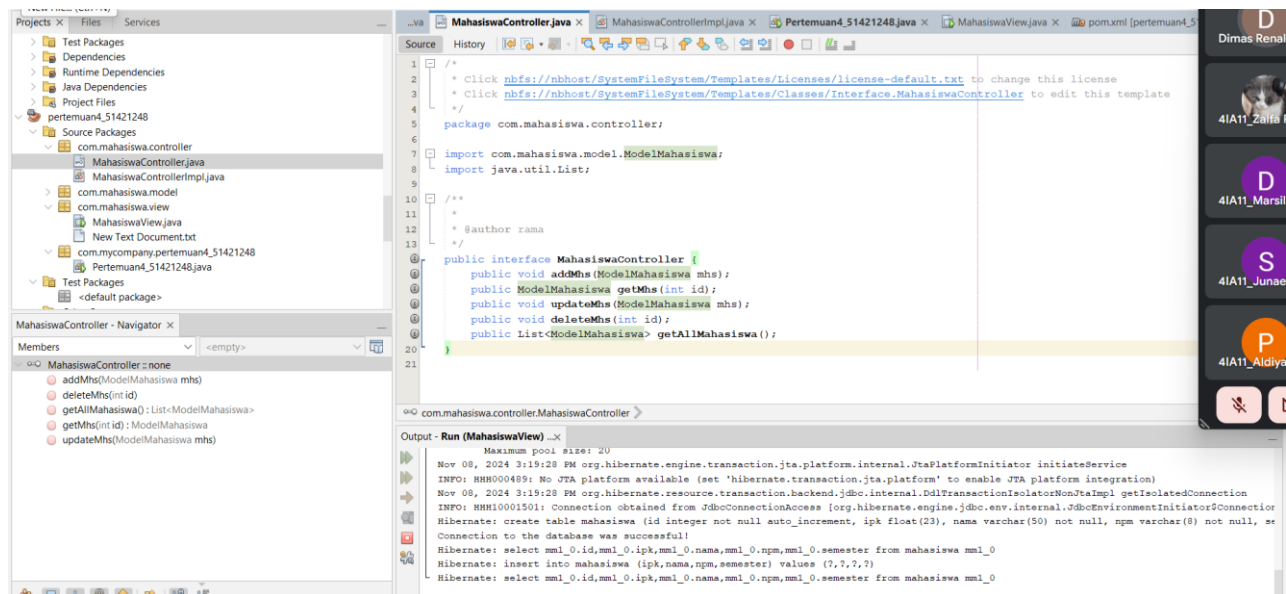
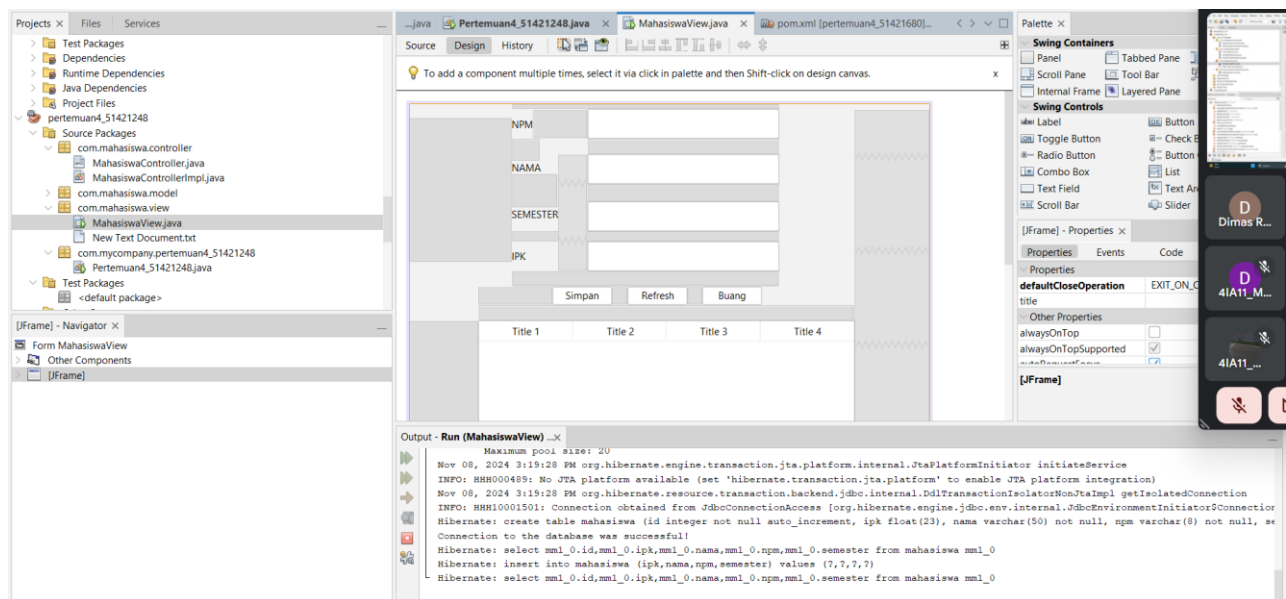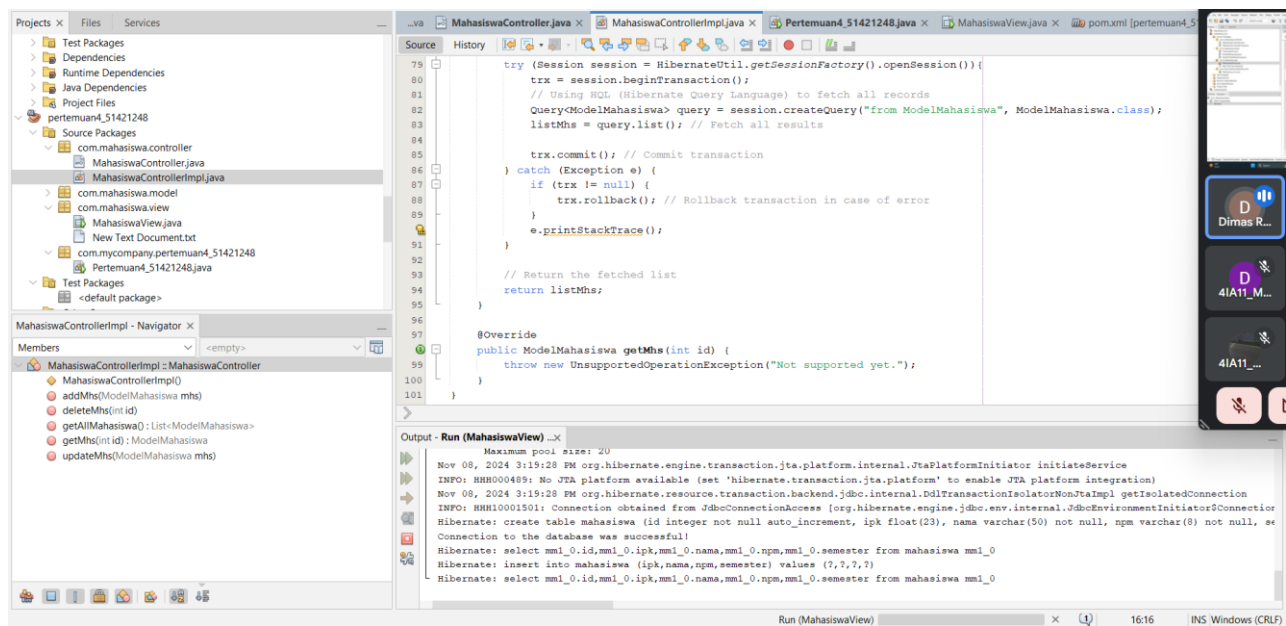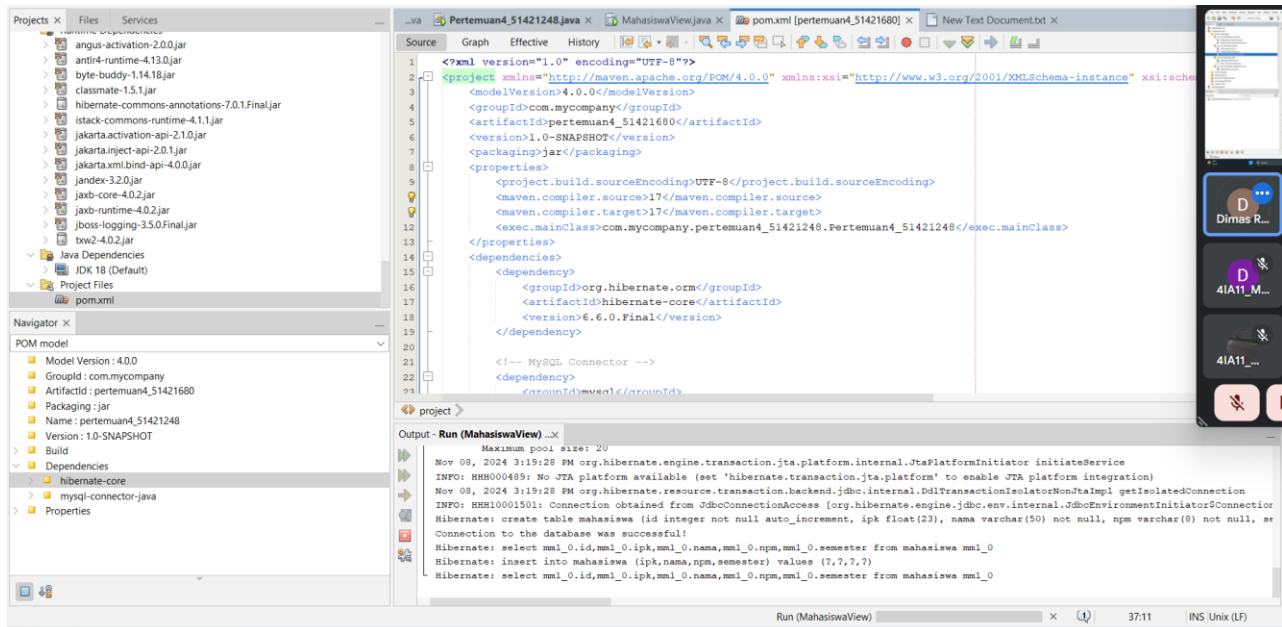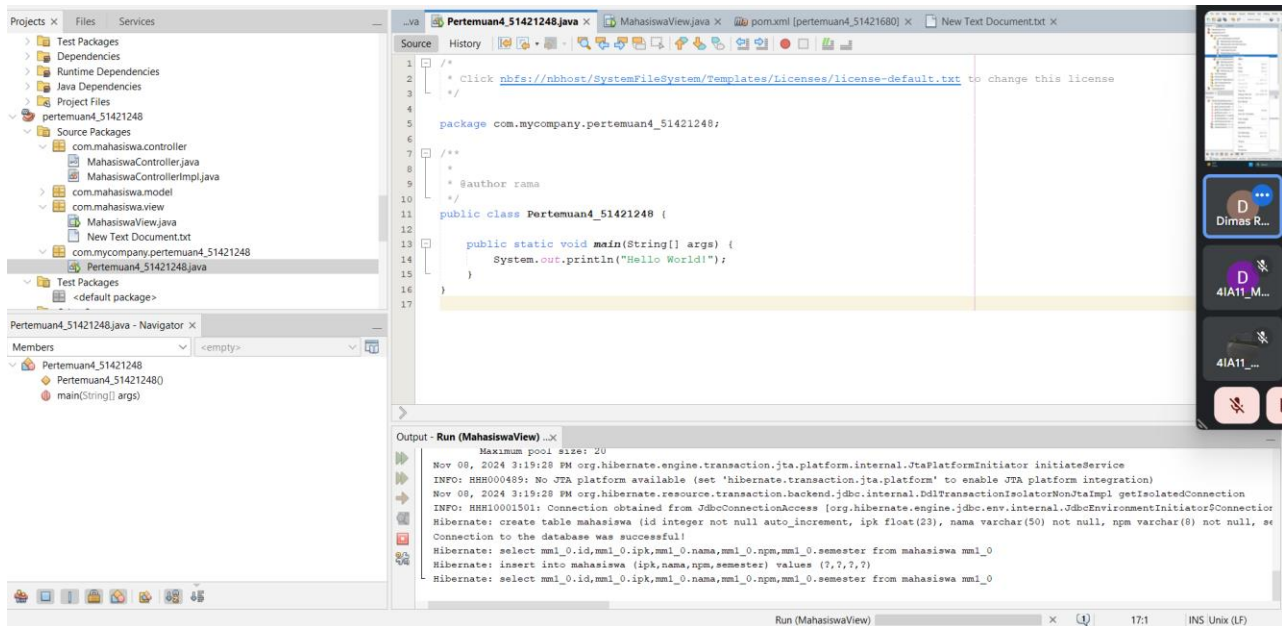**NPM   : 51421248**

KELAS   : 4IA11

MATERI : ORM

MATA PRAKTIKUM : Rekayasa Perangkat Lunak

(Screenshoot langkah-langkah sesuai video pembelajaran dan jelaskan dengan ringkas)

Two screenshots of a NetBeans IDE showing a Java project (pertemuan4_51421248) with MahasiswaController, MahasiswaControllerImpl, and MahasiswaView files.

Top screenshot — Source code of MahasiswaControllerImpl.java:

```java
try (Session session = HibernateUtil.getSessionFactory().openSession()){
    trx = session.beginTransaction();
    // Using HQL (Hibernate Query Language) to fetch all records
    Query<ModelMahasiswa> query = session.createQuery("from ModelMahasiswa", ModelMahasiswa.class);
    listMhs = query.list(); // Fetch all results

    trx.commit(); // Commit transaction
} catch (Exception e) {
    if (trx != null) {
        trx.rollback(); // Rollback transaction in case of error
    }
    e.printStackTrace();
}

// Return the fetched list
return listMhs;
}

@Override
public ModelMahasiswa getMhs(int id) {
    throw new UnsupportedOperationException("Not supported yet.");
}
```

Output - Run (MahasiswaView):

```
Maximum pool size: 20
Nov 08, 2024 3:19:28 PM org.hibernate.engine.transaction.jta.platform.internal.JtaPlatformInitiator initiateService
INFO: HHH000489: No JTA platform available (set 'hibernate.transaction.jta.platform' to enable JTA platform integration)
Nov 08, 2024 3:19:28 PM org.hibernate.resource.transaction.backend.jdbc.internal.DdlTransactionIsolatorNonJtaImpl getIsolatedConnection
INFO: HHH10001501: Connection obtained from JdbcConnectionAccess [org.hibernate.engine.jdbc.env.internal.JdbcEnvironmentInitiator$Connection
Hibernate: create table mahasiswa (id integer not null auto_increment, ipk float(23), nama varchar(50) not null, npm varchar(8) not null, se
Connection to the database was successful!
Hibernate: select mm1_0.id,mm1_0.ipk,mm1_0.nama,mm1_0.npm,mm1_0.semester from mahasiswa mm1_0
Hibernate: insert into mahasiswa (ipk,nama,npm,semester) values (?,?,?,?)
Hibernate: select mm1_0.id,mm1_0.ipk,mm1_0.nama,mm1_0.npm,mm1_0.semester from mahasiswa mm1_0
```

Bottom screenshot — Design view of MahasiswaView.java:

Form with fields: NPM, NAMA, SEMESTER, IPK, and buttons Simpan, Refresh, Buang. A table with columns Title 1, Title 2, Title 3, Title 4.

Top screenshot - Pertemuan4_51421248.java:

```java
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 */

package com.mycompany.pertemuan4_51421248;

/**
 *
 * @author rama
 */
public class Pertemuan4_51421248 {

    public static void main(String[] args) {
        System.out.println("Hello World!");
    }

}
```

Output - Run (MahasiswaView):
```
        Maximum pool size: 20
Nov 08, 2024 3:19:28 PM org.hibernate.engine.transaction.jta.platform.internal.JtaPlatformInitiator initiateService
INFO: HHH000489: No JTA platform available (set 'hibernate.transaction.jta.platform' to enable JTA platform integration)
Nov 08, 2024 3:19:28 PM org.hibernate.resource.transaction.backend.jdbc.internal.DdlTransactionIsolatorNonJtaImpl getIsolatedConnection
INFO: HHH10001501: Connection obtained from JdbcConnectionAccess [org.hibernate.engine.jdbc.env.internal.JdbcEnvironmentInitiator$Connection
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Hibernate: insert into mahasiswa (ipk,nama,npm,semester) values (?,?,?,?)
Hibernate: select mm1_0.id,mm1_0.ipk,mm1_0.nama,mm1_0.npm,mm1_0.semester from mahasiswa mm1_0
```

Bottom screenshot - pom.xml [pertemuan4_51421680]:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:sche
    <modelVersion>4.0.0</modelVersion>
    <groupId>com.mycompany</groupId>
    <artifactId>pertemuan4_51421680</artifactId>
    <version>1.0-SNAPSHOT</version>
    <packaging>jar</packaging>
    <properties>
        <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
        <maven.compiler.source>17</maven.compiler.source>
        <maven.compiler.target>17</maven.compiler.target>
        <exec.mainClass>com.mycompany.pertemuan4_51421248.Pertemuan4_51421248</exec.mainClass>
    </properties>
    <dependencies>
        <dependency>
            <groupId>org.hibernate.orm</groupId>
            <artifactId>hibernate-core</artifactId>
            <version>6.6.0.Final</version>
        </dependency>

        <!-- MySQL Connector -->
        <dependency>
            <groupId>mysql</groupId>
```

NPM	51111111	
NAMA	YamaYumi	
SEMESTER	7	
IPK	3	

Simpan   Refresh   Buang

ID	NPM	Nama	Semester	IPK
1	51421248	Rama Adi Sat...	7	4.0

NPM   51111111

NAMA   YamaYumi

SEMESTER   7

IPK   3

[Simpan] [Refresh] [Buang]

ID	NPM	Nama	Semester	IPK
1	51421248	Rama Adi Sat...	7	4.0
2	51111111	YamaYumi	7	3.0

Hapus Mahasiswa   ×

Masukkan ID yang ingin dihapus: 51111111

[OK]   [Cancel]

ID	NPM	Nama	Semester	IPK
1	5142124			
2	5111111			

Sukses   ×

Data berhasil dihapus.

[OK]

NPM 51421248

NAMA Rama Adi Satria

SEMESTER 7

IPK 4

[Simpan] [Refresh] [Buang]

ID	NPM	Nama	Semester	IPK
1	51421248	Rama Adi Sat...	7	4.0

✔ Showing rows 0 - 1 (2 total, Query took 0.0003 seconds.)

SELECT * FROM `mahasiswa`

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

[Extra options]

←T→	▼	id	ipk	nama	npm	semester
☐ 🖉 Edit 🗐 Copy ⊖ Delete		1	4	Rama Adi Satria	51421248	7

↑ ☐ Check all With selected: 🖉 Edit 🗐 Copy ⊖ Delete 📄 Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

NPM	51421250
NAMA	SintaJojo
SEMESTER	7
IPK	4

[Simpan] [Refresh] [Buang]

ID	NPM	Nama	Semester	IPK
1	51421248	Rama Adi Sat...	7	4.0
3	51421249	RamaRumi	7	3.0
4	51421250	SintaJojo	7	4.0

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all │ Number of rows: 25 ⌄   Filter rows: Search this table

Extra options

←T→				id	ipk	nama	npm	semester
☐	🖉 Edit	Copy	⊖ Delete	1	4	Rama Adi Satria	51421248	7
☐	🖉 Edit	Copy	⊖ Delete	3	3	RamaRumi	51421249	7
☐	🖉 Edit	Copy	⊖ Delete	4	4	SintaJojo	51421250	7

```
INFO: HHH10001501: Connection obtained from JdbcConnectionAccess [org.hibernate.engine.jdbc.env.in
Connection to the database was successful!
Hibernate: select mm1_0.id,mm1_0.ipk,mm1_0.nama,mm1_0.npm,mm1_0.semester from mahasiswa mm1_0
Hibernate: insert into mahasiswa (ipk,nama,npm,semester) values (?,?,?,?)
Hibernate: select mm1_0.id,mm1_0.ipk,mm1_0.nama,mm1_0.npm,mm1_0.semester from mahasiswa mm1_0
Hibernate: insert into mahasiswa (ipk,nama,npm,semester) values (?,?,?,?)
Hibernate: select mm1_0.id,mm1_0.ipk,mm1_0.nama,mm1_0.npm,mm1_0.semester from mahasiswa mm1_0
Hibernate: select mm1_0.id,mm1_0.ipk,mm1_0.nama,mm1_0.npm,mm1_0.semester from mahasiswa mm1_0
```