LAPORAN PRAKTIKUM
WIRELESS COMUNICATION

PRAKTIKUM VII
LATIHAN MEMBUAT DATABASE

Disusun oleh :
Rifqy Rivaldi (V3922040)

Dosen
Yusuf Fadlila Rachman, S. Kom., M. Kom

PS D-III TEKNIK INFORMATIKA
SEKOLAH VOKASI
UNIVERSITAS SEBELAS MARET
2023

SOAL :

A. Buat database dengan nama D3_TI_2023
B. Database diisi dengan 3 tabel, yaitu : 1. Tabel Mahasiswa, Tabel Dosen, Tabel Mata Kuliah.
C. Berikut kolom wajib di tabel Mahasiswa :
NIM - Varchar (10) (Primary key)
Nama - Varchar (30)
Alamat - Varchar (255)
Mata kuliah yang diikuti – Varchar (10)**
Boleh ditambahkan sendiri …..
D. Berikut kolom wajib di tabel Dosen :

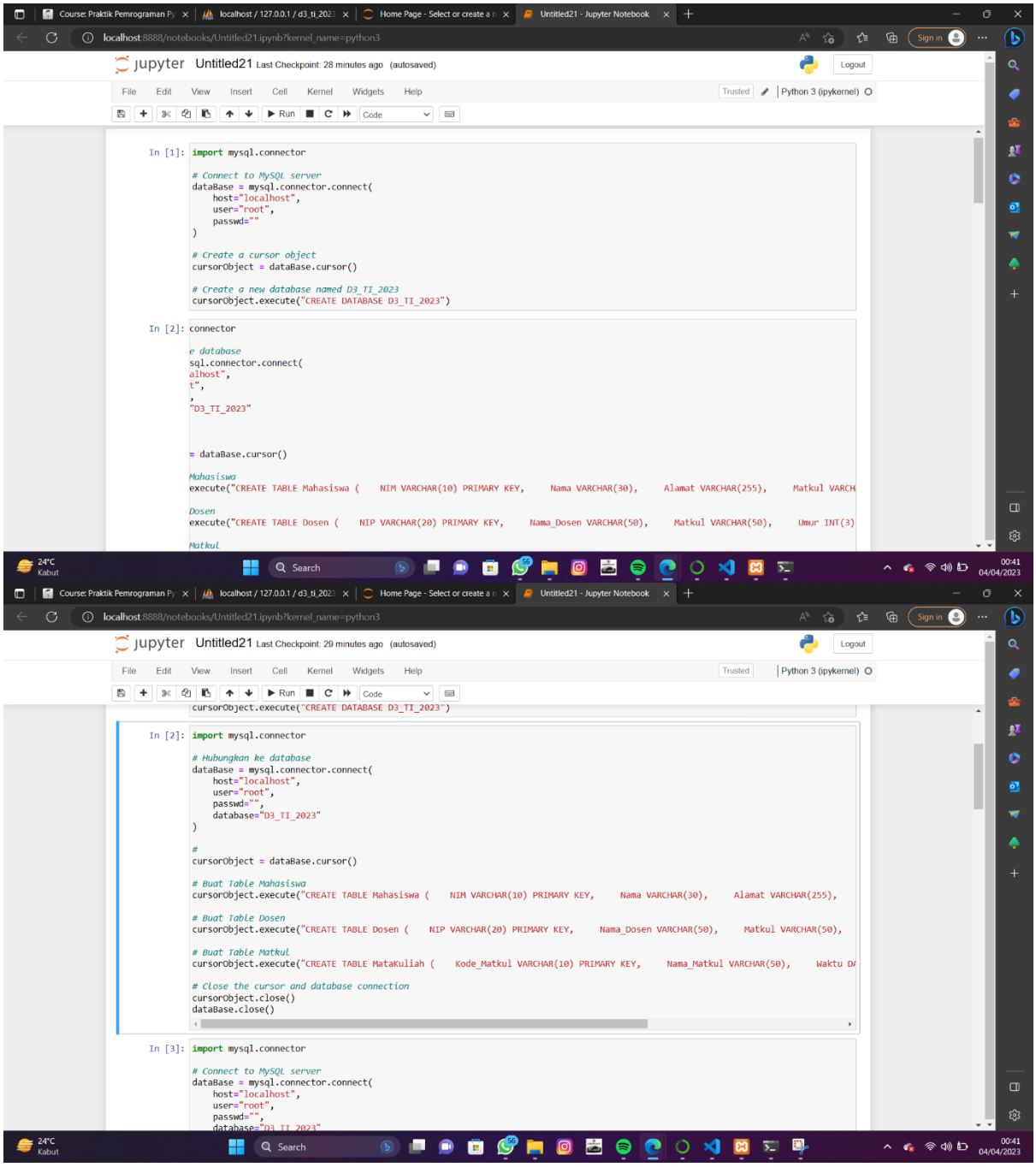
NIP - Varchar (20) (Primary key)*
Nama Dosen – Varchar (50)
Mata Kuliah yang di ajar – Varchar (50)**
Boleh ditambahkan sendiri …..
E. Berikut kolom wajib di tabel Mata Kuliah :

Kode Mata Kuliah – Varchar (10)*
Nama Mata Kuliah – Varchar (50)
Waktu - Date
Ruangan – Varchar (10)
Boleh ditambahkan sendiri …
F. Isikan minimal 5 data pada tiap – tiap tabel diatas.
G. Tampilkan data (SELECT) yang menunjukkan data mata kuliah yang diikuti oleh mahasiswa beserta dosen yang mengajar

Catatan :
* Data tidak harus real, boleh di buat/ di karang sendiri
**Merupakan foreign key dari kode MK

HASIL:

1. **Buat Database**



Course: Praktik Pemrograman Py | localhost / 127.0.0.1 / d3_ti_202 | Home Page - Select or create a r | Untitled21 - Jupyter Notebook

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Trusted | Python 3 (ipykernel)

Run Code

In [1]:
```
import mysql.connector

# Connect to MySQL server
dataBase = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd=""
)

# Create a cursor object
cursorObject = dataBase.cursor()

# Create a new database named D3_TI_2023
cursorObject.execute("CREATE DATABASE D3_TI_2023")
```

In [2]:
```
connector

e database
sql.connector.connect(
alhost",
t",
,
"D3_TI_2023"


= dataBase.cursor()

Mahasiswa
execute("CREATE TABLE Mahasiswa (    NIM VARCHAR(10) PRIMARY KEY,    Nama VARCHAR(30),    Alamat VARCHAR(255),    Matkul VARCH

Dosen
execute("CREATE TABLE Dosen (    NIP VARCHAR(20) PRIMARY KEY,    Nama_Dosen VARCHAR(50),    Matkul VARCHAR(50),    Umur INT(3)

Matkul
```

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Trusted | Python 3 (ipykernel)

Run Code

```
cursorObject.execute("CREATE DATABASE D3_TI_2023")
```

In [2]:
```
import mysql.connector

# Hubungkan ke database
dataBase = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd="",
    database="D3_TI_2023"
)

#
cursorObject = dataBase.cursor()

# Buat Table Mahasiswa
cursorObject.execute("CREATE TABLE Mahasiswa (    NIM VARCHAR(10) PRIMARY KEY,    Nama VARCHAR(30),    Alamat VARCHAR(255),

# Buat Table Dosen
cursorObject.execute("CREATE TABLE Dosen (    NIP VARCHAR(20) PRIMARY KEY,    Nama_Dosen VARCHAR(50),    Matkul VARCHAR(50),

# Buat Table Matkul
cursorObject.execute("CREATE TABLE MataKuliah (    Kode_Matkul VARCHAR(10) PRIMARY KEY,    Nama_Matkul VARCHAR(50),    Waktu DA

# Close the cursor and database connection
cursorObject.close()
dataBase.close()
```

In [3]:
```
import mysql.connector

# Connect to MySQL server
dataBase = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd="",
    database="D3_TI_2023"
```

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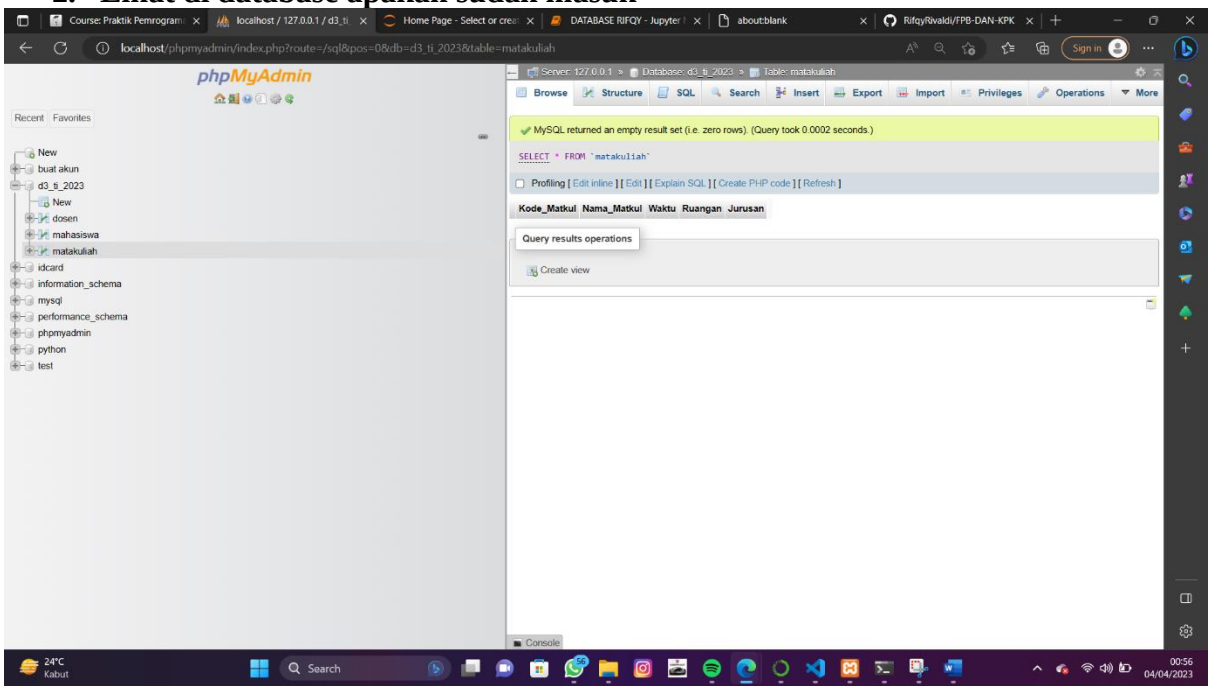
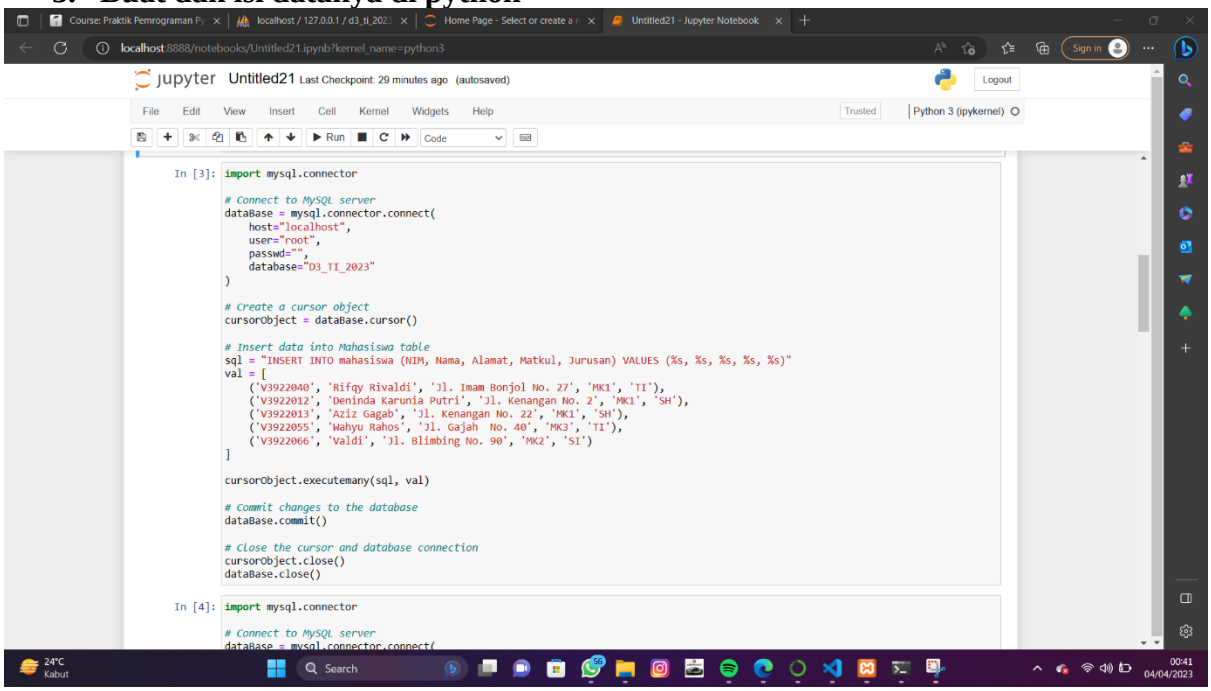
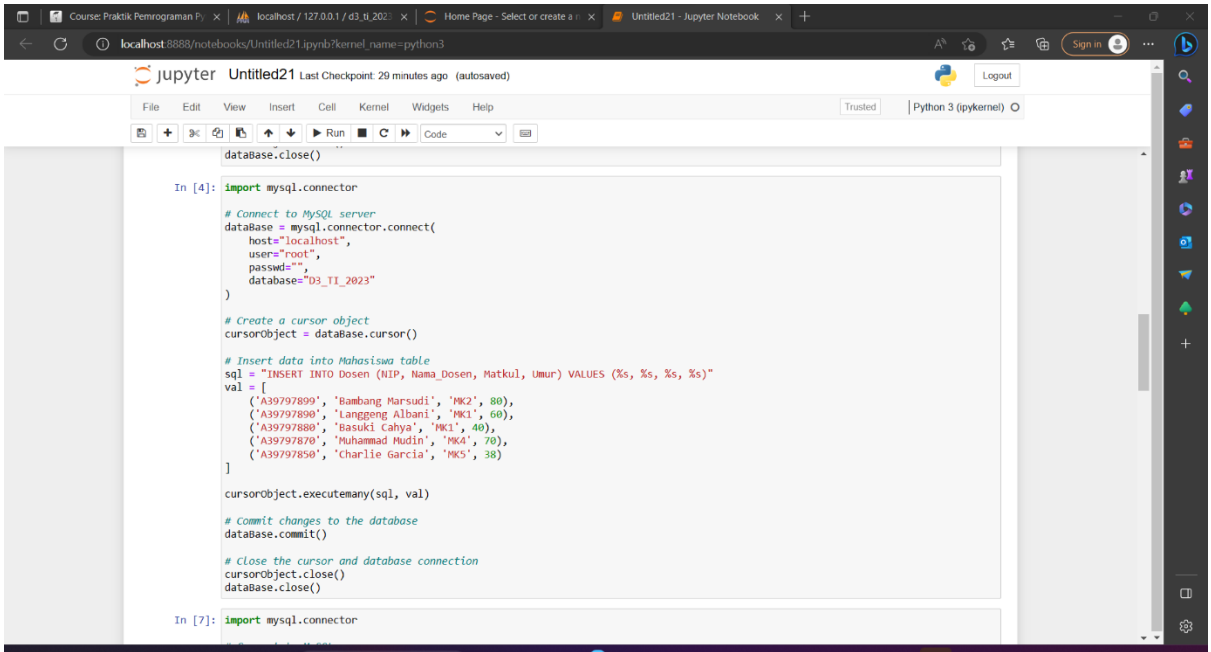
2. **Lihat di database apakah sudah masuk**



3. **Buat dan isi datanya di python**

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Python 3 (ipykernel)
Run
Code
dataBase.close()
In [4]:
import mysql.connector
# Connect to MySQL server
dataBase = mysql.connector.connect(
host="localhost",
user="root",
passwd="",
database="D3_TI_2023"
)
# Create a cursor object
cursorObject = dataBase.cursor()
# Insert data into Mahasiswa table
sql = "INSERT INTO Dosen (NIP, Nama_Dosen, Matkul, Umur) VALUES (%s, %s, %s, %s)"
val = [
('A39797899', 'Bambang Marsudi', 'MK2', 80),
('A39797890', 'Langgeng Albani', 'MK1', 60),
('A39797880', 'Basuki Cahya', 'MK1', 40),
('A39797870', 'Muhammad Mudin', 'MK4', 70),
('A39797850', 'Charlie Garcia', 'MK5', 38)
]
cursorObject.executemany(sql, val)
# Commit changes to the database
dataBase.commit()
# Close the cursor and database connection
cursorObject.close()
dataBase.close()
In [7]:
import mysql.connector
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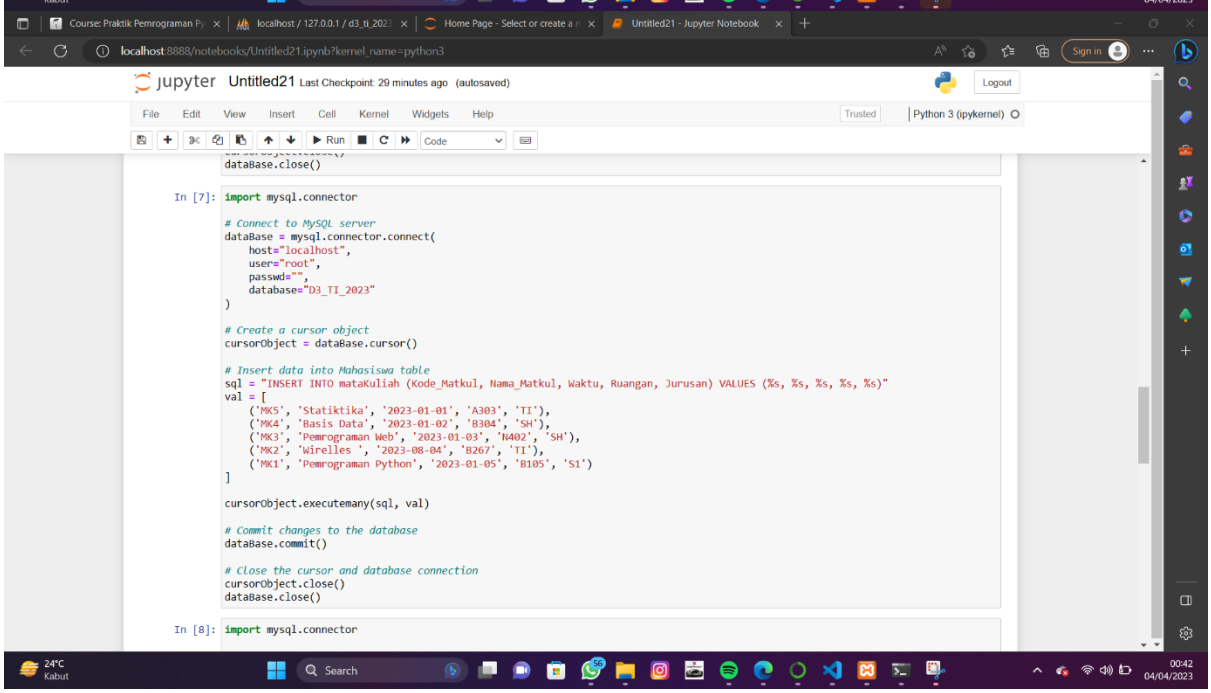
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Home Page - Select or create a r
Untitled21 - Jupyter Notebook
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File Edit View Insert Cell Kernel Widgets Help
Trusted
Python 3 (ipykernel)
Run
Code
dataBase.close()
In [7]:
import mysql.connector
# Connect to MySQL server
dataBase = mysql.connector.connect(
host="localhost",
user="root",
passwd="",
database="D3_TI_2023"
)
# Create a cursor object
cursorObject = dataBase.cursor()
# Insert data into Mahasiswa table
sql = "INSERT INTO mataKuliah (Kode_Matkul, Nama_Matkul, Waktu, Ruangan, Jurusan) VALUES (%s, %s, %s, %s, %s)"
val = [
('MK5', 'Statiktika', '2023-01-01', 'A303', 'TI'),
('MK4', 'Basis Data', '2023-01-02', 'B304', 'SH'),
('MK3', 'Pemrograman Web', '2023-01-03', 'N402', 'SH'),
('MK2', 'Wirelles ', '2023-08-04', 'B267', 'TI'),
('MK1', 'Pemrograman Python', '2023-01-05', 'B105', 'S1')
]
cursorObject.executemany(sql, val)
# Commit changes to the database
dataBase.commit()
# Close the cursor and database connection
cursorObject.close()
dataBase.close()
In [8]:
import mysql.connector
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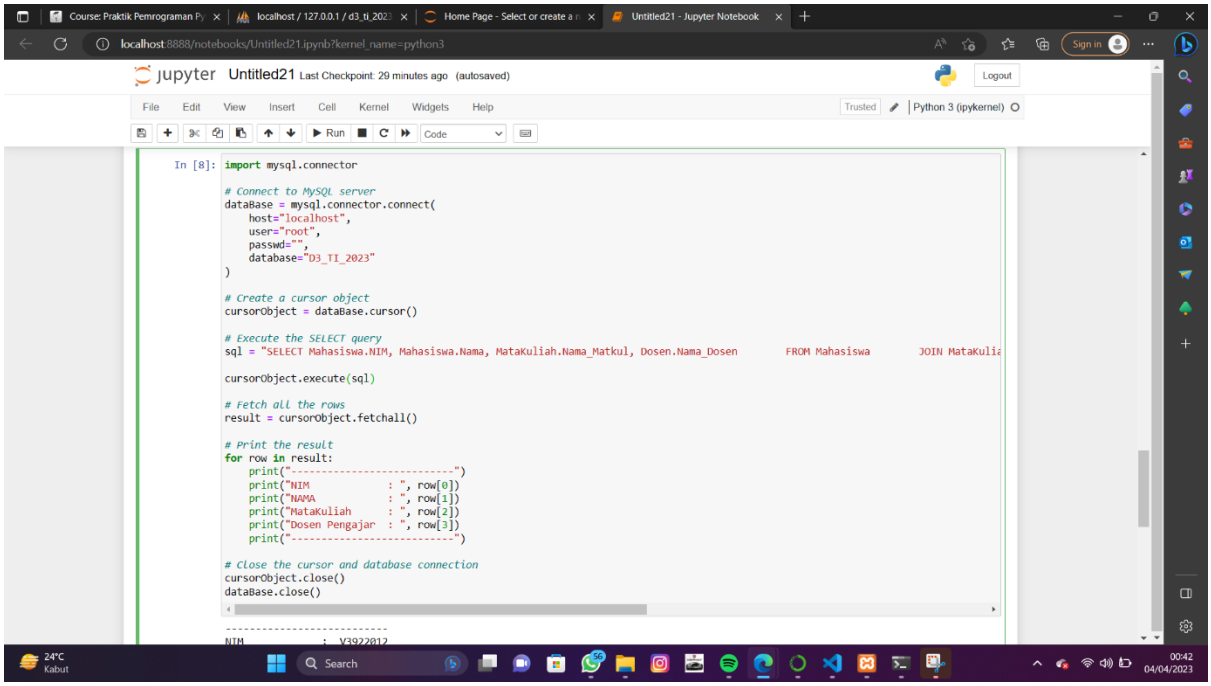
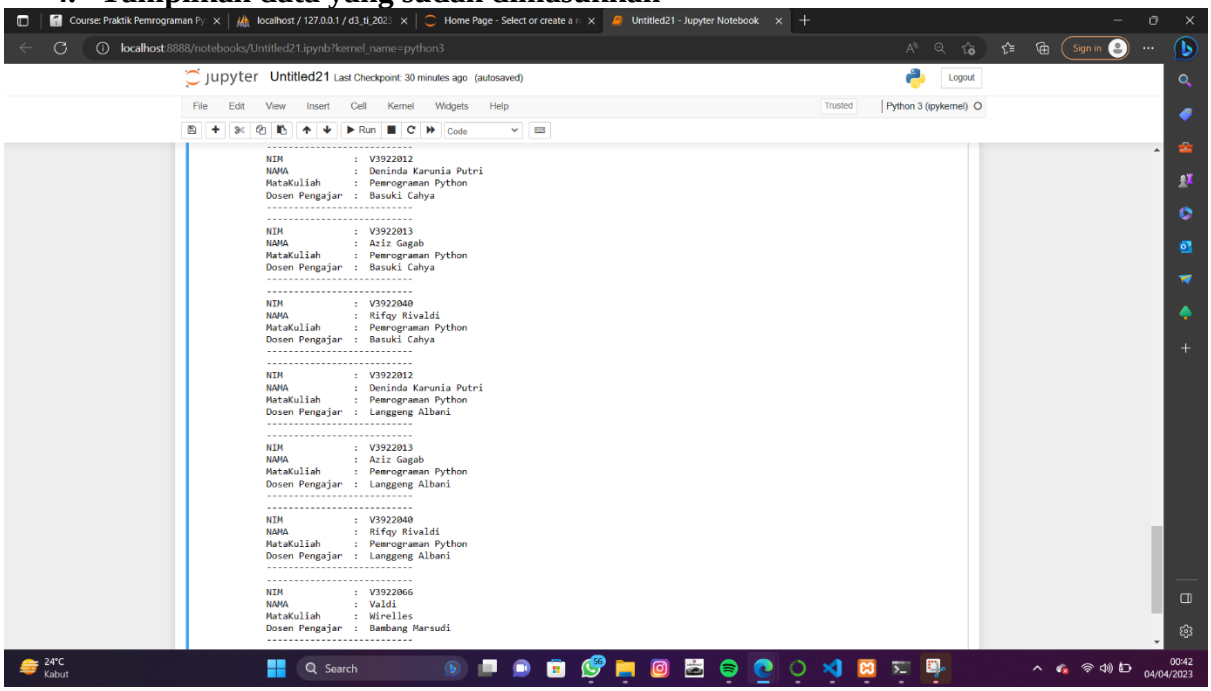


```
In [8]:
import mysql.connector

# Connect to MySQL server
dataBase = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd="",
    database="D3_TI_2023"
)

# Create a cursor object
cursorObject = dataBase.cursor()

# Execute the SELECT query
sql = "SELECT Mahasiswa.NIM, Mahasiswa.Nama, MataKuliah.Nama_Matkul, Dosen.Nama_Dosen       FROM Mahasiswa       JOIN MataKuliа

cursorObject.execute(sql)

# Fetch all the rows
result = cursorObject.fetchall()

# Print the result
for row in result:
    print("---------------------------")
    print("NIM             : ", row[0])
    print("NAMA            : ", row[1])
    print("MataKuliah      : ", row[2])
    print("Dosen Pengajar  : ", row[3])
    print("---------------------------")

# Close the cursor and database connection
cursorObject.close()
dataBase.close()

---------------------------
NIM             :  V3922012
```

4. Tampilkan data yang sudah dimasukkan



```
---------------------------
NIM             :  V3922012
NAMA            :  Deninda Karunia Putri
MataKuliah      :  Pemrograman Python
Dosen Pengajar  :  Basuki Cahya
---------------------------
---------------------------
NIM             :  V3922013
NAMA            :  Aziz Gagab
MataKuliah      :  Pemrograman Python
Dosen Pengajar  :  Basuki Cahya
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NIM             :  V3922040
NAMA            :  Rifqy Rivaldi
MataKuliah      :  Pemrograman Python
Dosen Pengajar  :  Basuki Cahya
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NIM             :  V3922012
NAMA            :  Deninda Karunia Putri
MataKuliah      :  Pemrograman Python
Dosen Pengajar  :  Langgeng Albani
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NIM             :  V3922013
NAMA            :  Aziz Gagab
MataKuliah      :  Pemrograman Python
Dosen Pengajar  :  Langgeng Albani
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NIM             :  V3922040
NAMA            :  Rifqy Rivaldi
MataKuliah      :  Pemrograman Python
Dosen Pengajar  :  Langgeng Albani
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---------------------------
NIM             :  V3922066
NAMA            :  Valdi
MataKuliah      :  Wirelles
Dosen Pengajar  :  Bambang Marsudi
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```
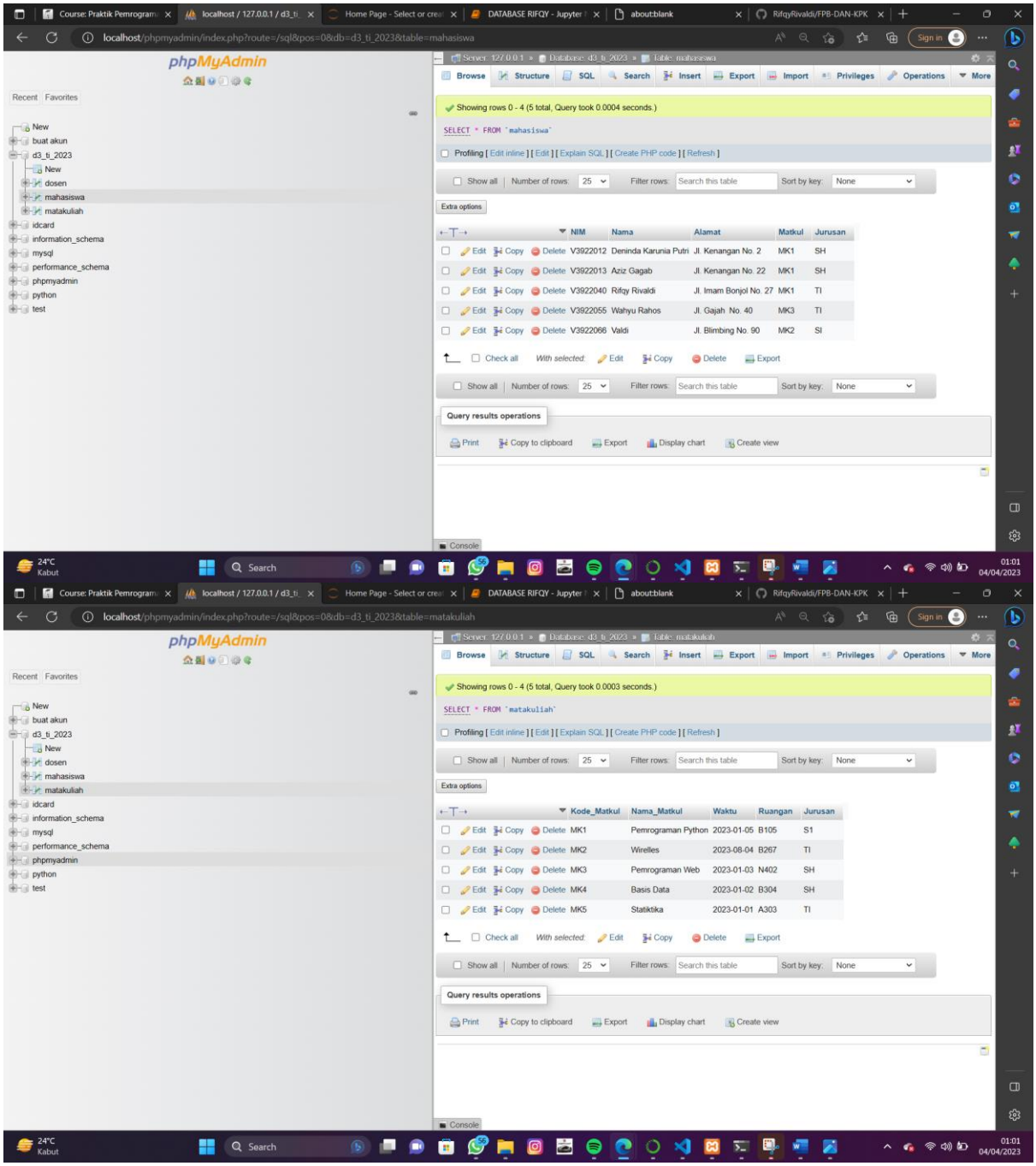

5. Isi dari database


phpMyAdmin
Recent Favorites
New
buat akun
d3_ti_2023
New
dosen
mahasiswa
matakuliah
idcard
information_schema
mysql
performance_schema
phpmyadmin
python
test
Server: 127.0.0.1 » Database: d3_ti_2023 » Table: mahasiswa
Browse Structure SQL Search Insert Export Import Privileges Operations More
Showing rows 0 - 4 (5 total, Query took 0.0004 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
NIM Nama Alamat Matkul Jurusan
Edit Copy Delete V3922012 Deninda Karunia Putri Jl. Kenangan No. 2 MK1 SH
Edit Copy Delete V3922013 Aziz Gagab Jl. Kenangan No. 22 MK1 SH
Edit Copy Delete V3922040 Rifqy Rivaldi Jl. Imam Bonjol No. 27 MK1 TI
Edit Copy Delete V3922055 Wahyu Rahos Jl. Gajah No. 40 MK3 TI
Edit Copy Delete V3922066 Valdi Jl. Blimbing No. 90 MK2 SI
Check all With selected: Edit Copy Delete Export
Query results operations
Print Copy to clipboard Export Display chart Create view
Console
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Search
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phpMyAdmin
Recent Favorites
New
buat akun
d3_ti_2023
New
dosen
mahasiswa
matakuliah
idcard
information_schema
mysql
performance_schema
phpmyadmin
python
test
Server: 127.0.0.1 » Database: d3_ti_2023 » Table: matakuliah
Browse Structure SQL Search Insert Export Import Privileges Operations More
Showing rows 0 - 4 (5 total, Query took 0.0003 seconds.)
SELECT * FROM `matakuliah`
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
Kode_Matkul Nama_Matkul Waktu Ruangan Jurusan
Edit Copy Delete MK1 Pemrograman Python 2023-01-05 B105 S1
Edit Copy Delete MK2 Wirelles 2023-08-04 B267 TI
Edit Copy Delete MK3 Pemrograman Web 2023-01-03 N402 SH
Edit Copy Delete MK4 Basis Data 2023-01-02 B304 SH
Edit Copy Delete MK5 Statiktika 2023-01-01 A303 TI
Check all With selected: Edit Copy Delete Export
Query results operations
Print Copy to clipboard Export Display chart Create view
Console
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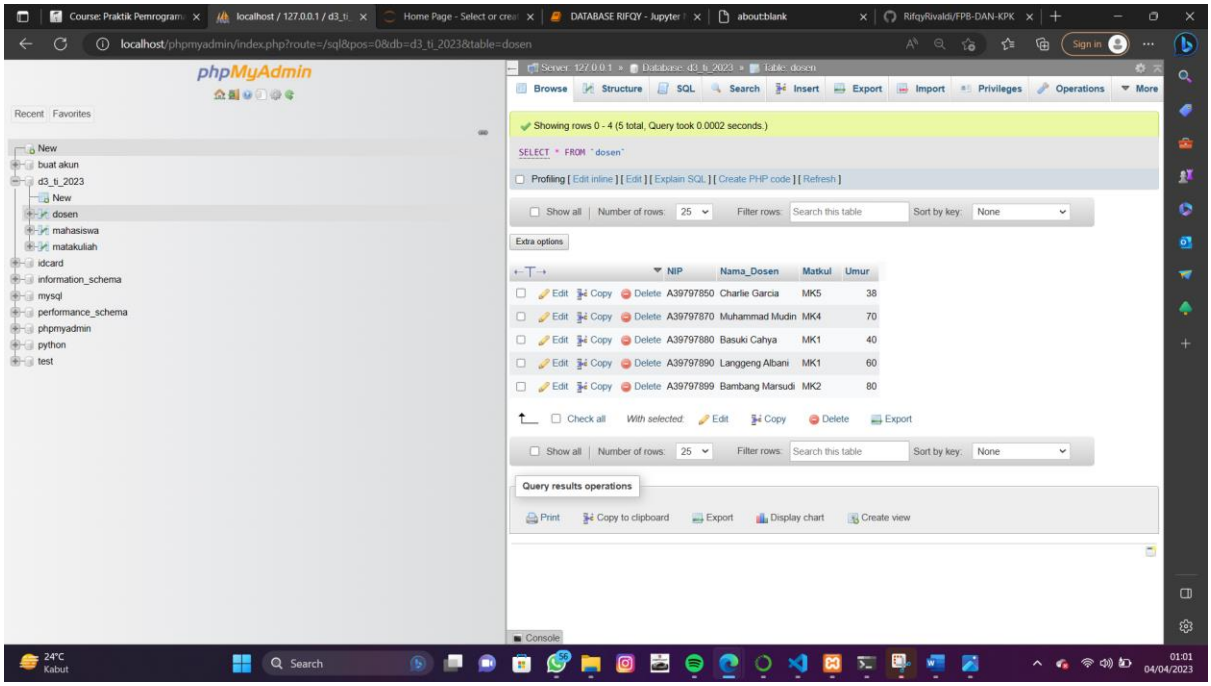
phpMyAdmin
Recent Favorites
New
buat akun
d3_ti_2023
New
dosen
mahasiswa
matakuliah
idcard
information_schema
mysql
performance_schema
phpmyadmin
python
test
Server: 127.0.0.1 » Database: d3_ti_2023 » Table: dosen
Browse Structure SQL Search Insert Export Import Privileges Operations More
Showing rows 0 - 4 (5 total, Query took 0.0002 seconds.)
SELECT * FROM `dosen`
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
NIP Nama_Dosen Matkul Umur
Edit Copy Delete A39797850 Charlie Garcia MK5 38
Edit Copy Delete A39797870 Muhammad Mudin MK4 70
Edit Copy Delete A39797880 Basuki Cahya MK1 40
Edit Copy Delete A39797890 Langgeng Albani MK1 60
Edit Copy Delete A39797899 Bambang Marsudi MK2 80
Check all With selected: Edit Copy Delete Export
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
Query results operations
Print Copy to clipboard Export Display chart Create view
Console
24°C Kabut
Search
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