LAPORAN PRAKTIKUM

PRAKTIK PEMROGRAMAN PYTHON

PRAKTIKUM LATIHAN DATABASE

Disusun Oleh:

Lia Fitriani (V3923013)

Dosen

Yusuf Fadila Rachman. S.Kom., M.Kom

PS D-III TEKNIK INFORMATIKA

SEKOLAH VOKASI

UNIVERSITAS SEBELAS MARET

2024

A. HASIL DAN PEMBAHASAN

LATIHAN DATABASE

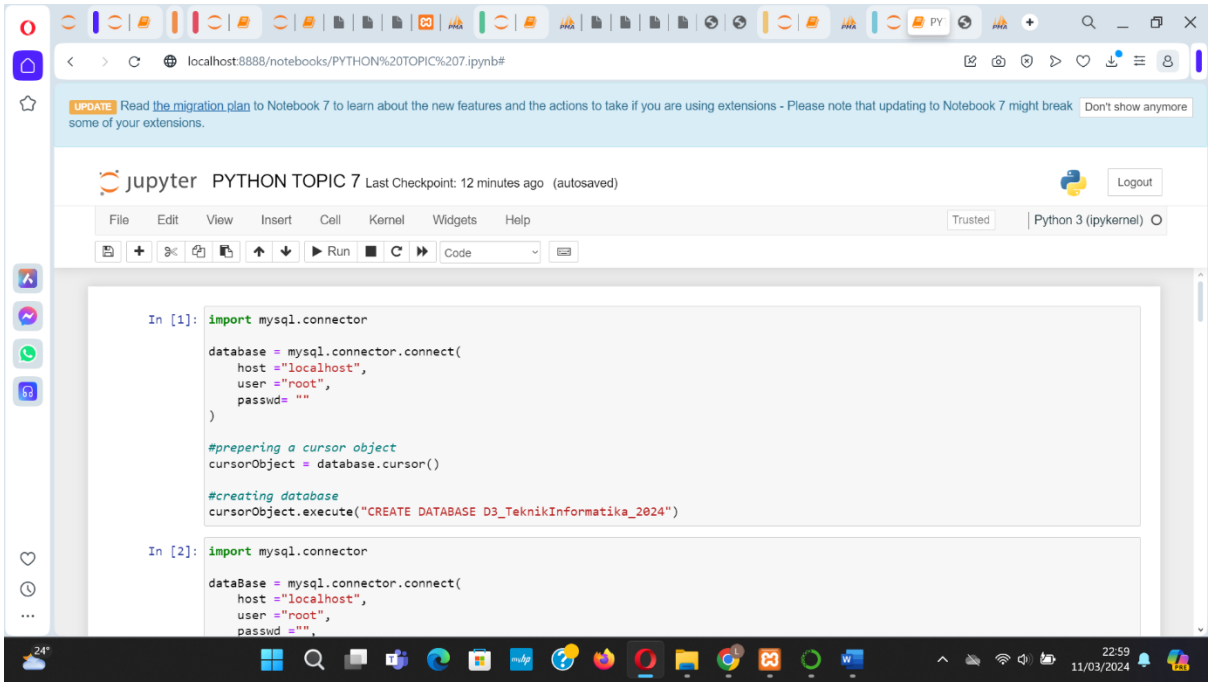
1. Buat database dengan nama D3_TI_2023
2. Database diisi dengan 3 tabel, yaitu : 1. Tabel Mahasiswa, Tabel Dosen, Tabel Mata Kuliah.
3. Berikut data wajib di tabel Mahasiswa :
    a. NIM - Varchar (10) (Primary key)
    b. Nama - Varchar (30)
    c. Alamat - Varchar (255)
    d. Mata kuliah yang diikuti – Varchar (10)** (Foreign key kode MK)
    e. Boleh ditambahkan sendiri …..
4. Berikut data wajib di tabel Dosen :
    a. NIP - Varchar (20) (Primary key)*
    b. Nama Dosen – Varchar (50)
    c. Mata Kuliah yang di ajar – Varchar (50)** (Foreign key kode MK)
    d. Boleh ditambahkan sendiri …..
5. Berikut data wajib di tabel Mata Kuliah :
    a. Kode Mata Kuliah – Varchar (10)*
    b. Nama Mata Kuliah – Varchar (50)
    c. Waktu - Date
    d. Ruangan – Varchar (10)
    e. Boleh ditambahkan sendiri …
6. Isikan minimal 5 data pada tiap – tiap tabel diatas.
7. 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

INPUT


localhost:8888/notebooks/PYTHON%20TOPIC%207.ipynb#
UPDATE Read the migration plan to Notebook 7 to learn about the new features and the actions to take if you are using extensions - Please note that updating to Notebook 7 might break some of your extensions.
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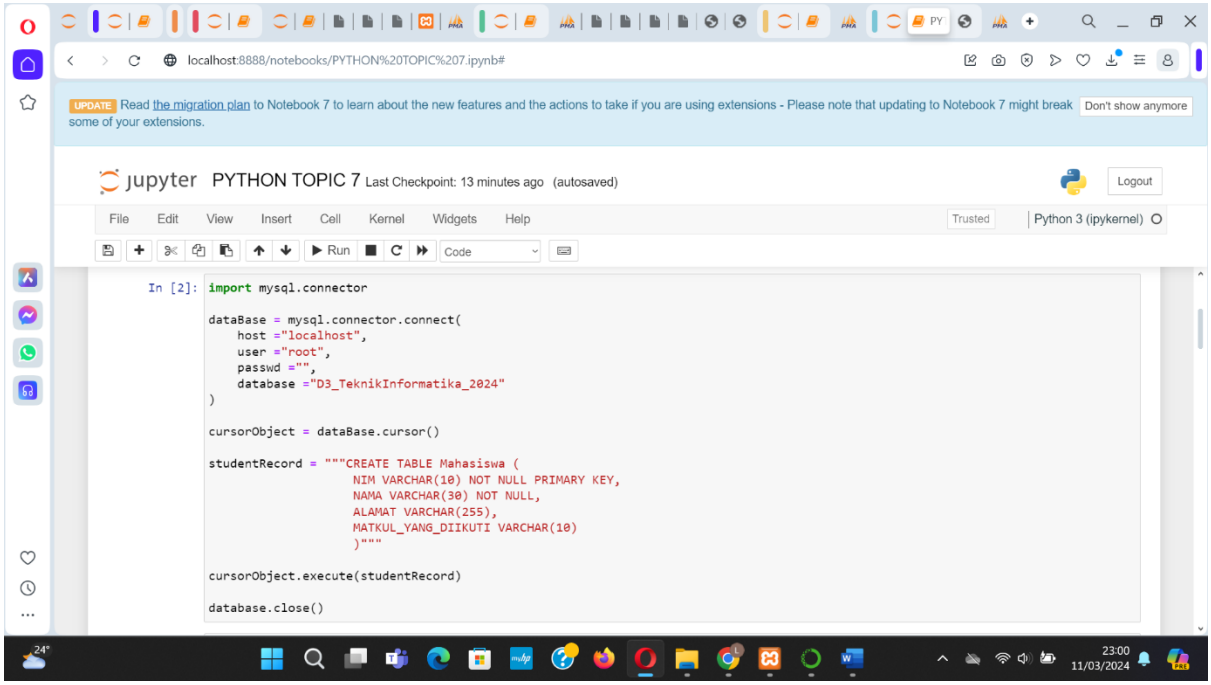
jupyter PYTHON TOPIC 7 Last Checkpoint: 12 minutes ago (autosaved)
Logout
File Edit View Insert Cell Kernel Widgets Help
Trusted
Python 3 (ipykernel)
Run
Code
In [1]:
import mysql.connector
database = mysql.connector.connect(
host ="localhost",
user ="root",
passwd= ""
)
#prepering a cursor object
cursorObject = database.cursor()
#creating database
cursorObject.execute("CREATE DATABASE D3_TeknikInformatika_2024")
In [2]:
import mysql.connector
dataBase = mysql.connector.connect(
host ="localhost",
user ="root",
passwd =""
22:59
11/03/2024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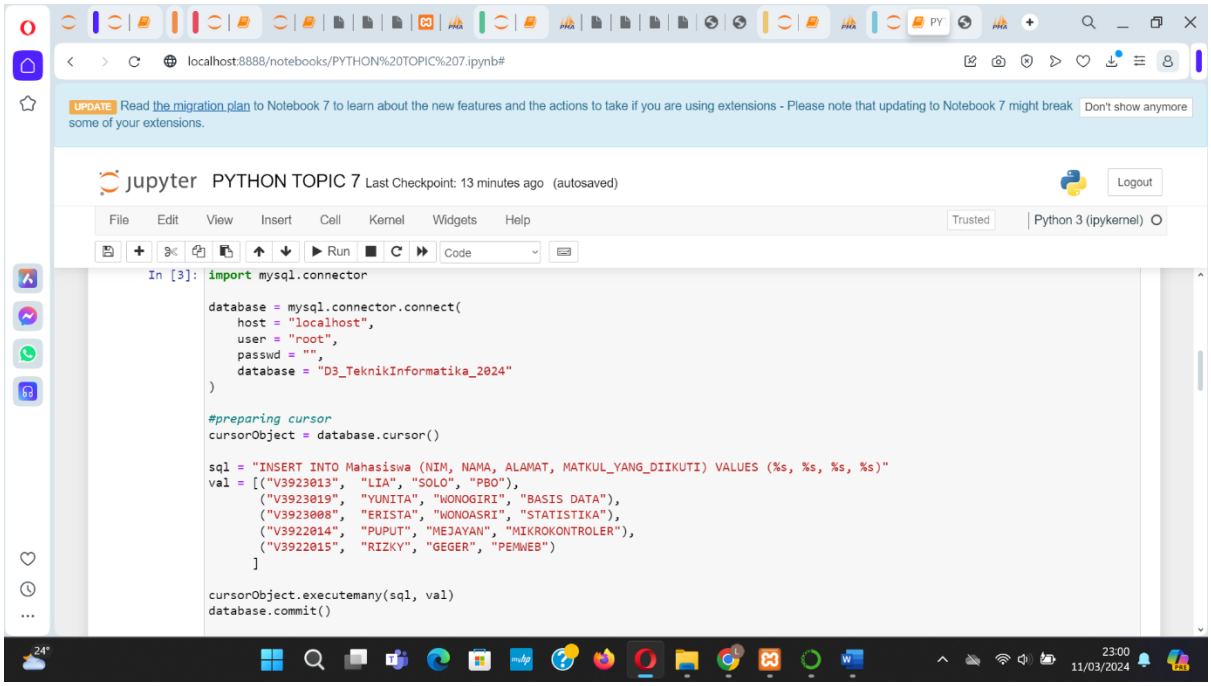
File Edit View Insert Cell Kernel Widgets Help
Trusted
Python 3 (ipykernel)
Run
Code
In [2]:
import mysql.connector
dataBase = mysql.connector.connect(
host ="localhost",
user ="root",
passwd ="",
database ="D3_TeknikInformatika_2024"
)
cursorObject = dataBase.cursor()
studentRecord = """CREATE TABLE Mahasiswa (
NIM VARCHAR(10) NOT NULL PRIMARY KEY,
NAMA VARCHAR(30) NOT NULL,
ALAMAT VARCHAR(255),
MATKUL_YANG_DIIKUTI VARCHAR(10)
)"""
cursorObject.execute(studentRecord)
database.close()
23:00
11/03/2024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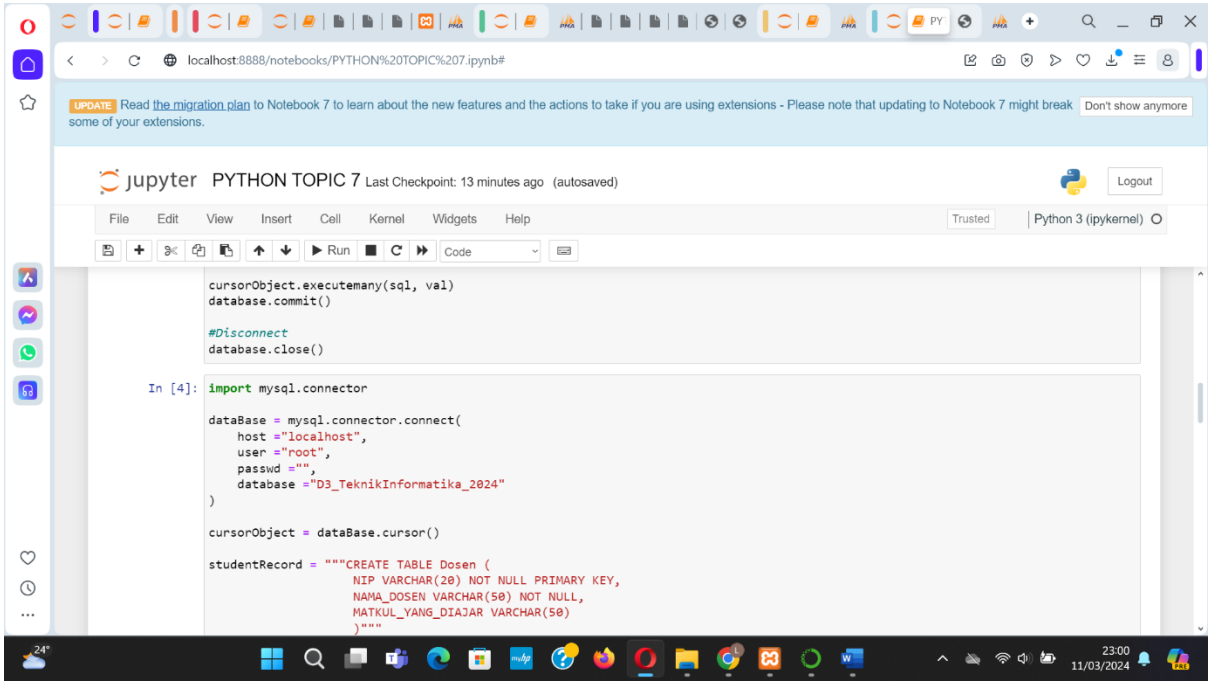
Logout
File Edit View Insert Cell Kernel Widgets Help
Trusted
Python 3 (ipykernel)
Run
Code
In [3]:
import mysql.connector
database = mysql.connector.connect(
host = "localhost",
user = "root",
passwd = "",
database = "D3_TeknikInformatika_2024"
)
#preparing cursor
cursorObject = database.cursor()
sql = "INSERT INTO Mahasiswa (NIM, NAMA, ALAMAT, MATKUL_YANG_DIIKUTI) VALUES (%s, %s, %s, %s)"
val = [("V3923013", "LIA", "SOLO", "PBO"),
("V3923019", "YUNITA", "WONOGIRI", "BASIS DATA"),
("V3923008", "ERISTA", "WONOASRI", "STATISTIKA"),
("V3922014", "PUPUT", "MEJAYAN", "MIKROKONTROLER"),
("V3922015", "RIZKY", "GEGER", "PEMWEB")
]
cursorObject.executemany(sql, val)
database.commit()
23:00
11/03/2024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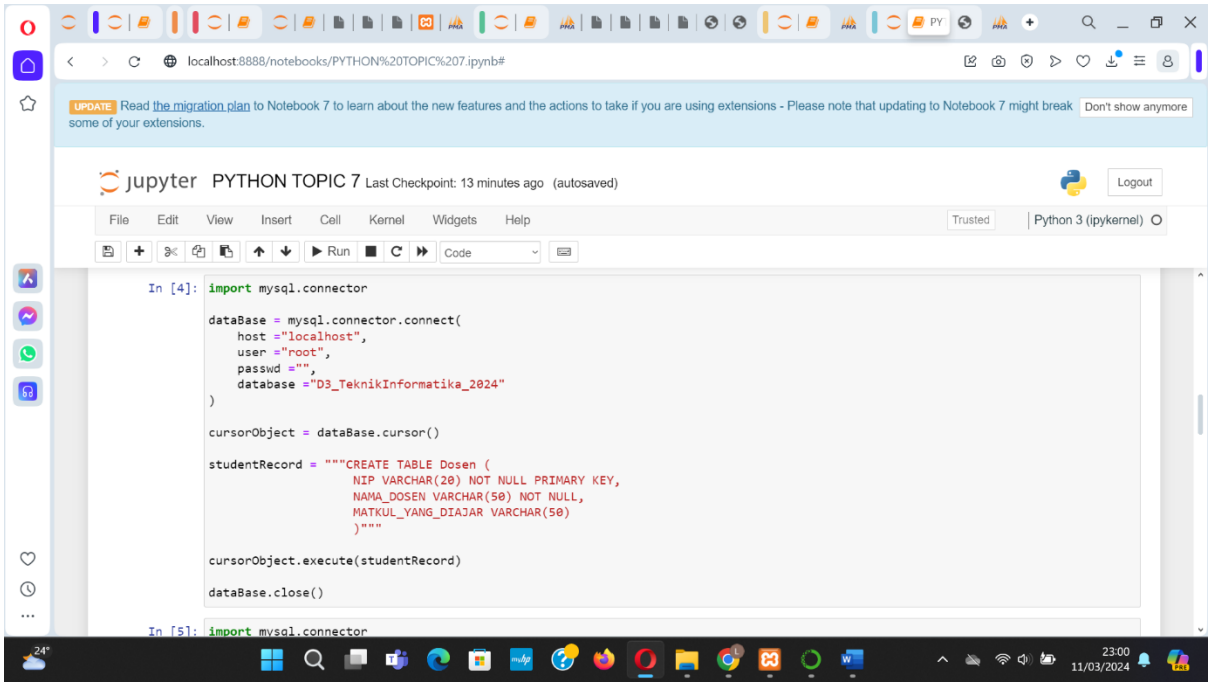
Trusted
Python 3 (ipykernel)
Run
Code
cursorObject.executemany(sql, val)
database.commit()
#Disconnect
database.close()
In [4]:
import mysql.connector
dataBase = mysql.connector.connect(
host ="localhost",
user ="root",
passwd ="",
database ="D3_TeknikInformatika_2024"
)
cursorObject = dataBase.cursor()
studentRecord = """CREATE TABLE Dosen (
NIP VARCHAR(20) NOT NULL PRIMARY KEY,
NAMA_DOSEN VARCHAR(50) NOT NULL,
MATKUL_YANG_DIAJAR VARCHAR(50)
)"""
23:00
11/03/2024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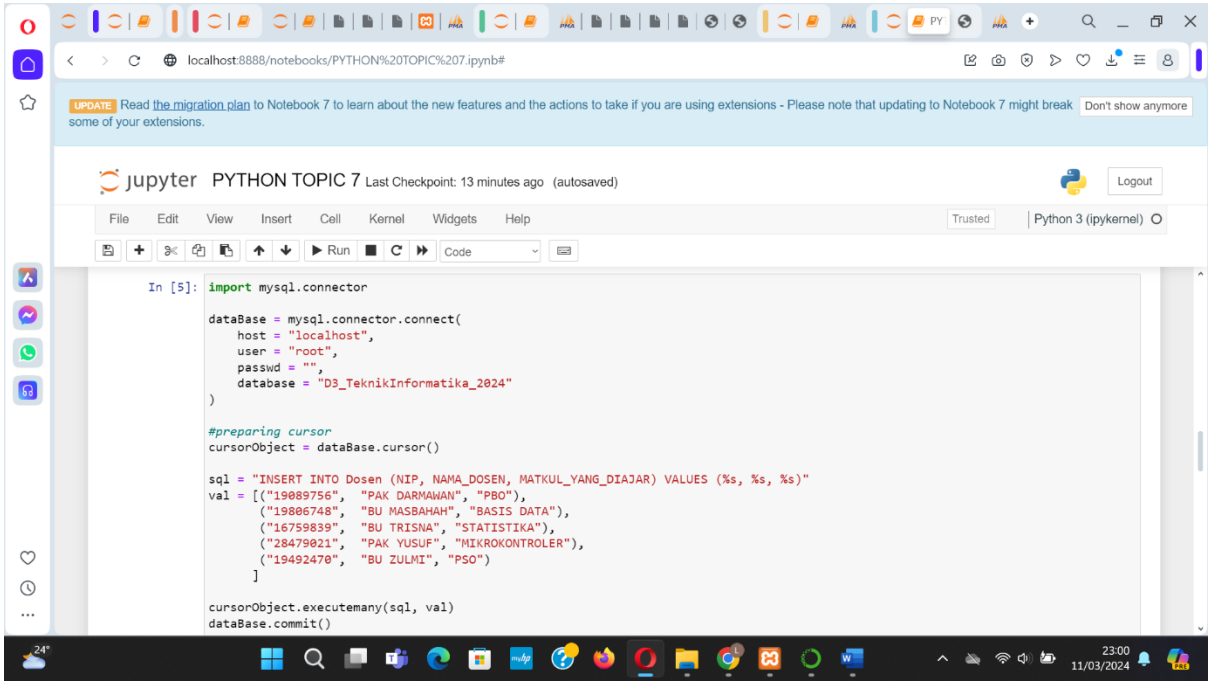
Python 3 (ipykernel)
Run
Code
In [4]:
import mysql.connector
dataBase = mysql.connector.connect(
host ="localhost",
user ="root",
passwd ="",
database ="D3_TeknikInformatika_2024"
)
cursorObject = dataBase.cursor()
studentRecord = """CREATE TABLE Dosen (
NIP VARCHAR(20) NOT NULL PRIMARY KEY,
NAMA_DOSEN VARCHAR(50) NOT NULL,
MATKUL_YANG_DIAJAR VARCHAR(50)
)"""
cursorObject.execute(studentRecord)
dataBase.close()
In [5]: import mysql.connector
23:00
11/03/2024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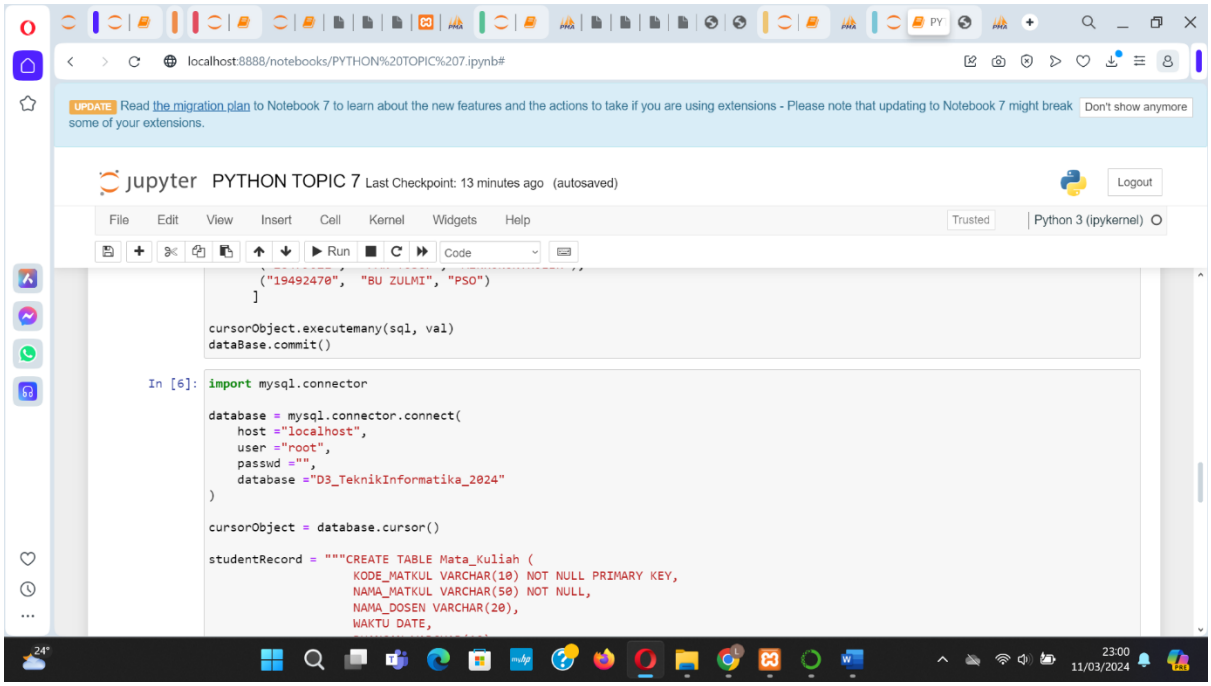
Logout
File Edit View Insert Cell Kernel Widgets Help
Trusted
Python 3 (ipykernel)
Run
Code
In [5]:
import mysql.connector
dataBase = mysql.connector.connect(
host = "localhost",
user = "root",
passwd = "",
database = "D3_TeknikInformatika_2024"
)
#preparing cursor
cursorObject = dataBase.cursor()
sql = "INSERT INTO Dosen (NIP, NAMA_DOSEN, MATKUL_YANG_DIAJAR) VALUES (%s, %s, %s)"
val = [("19089756", "PAK DARMAWAN", "PBO"),
("19806748", "BU MASBAHAH", "BASIS DATA"),
("16759839", "BU TRISNA", "STATISTIKA"),
("28479021", "PAK YUSUF", "MIKROKONTROLER"),
("19492470", "BU ZULMI", "PSO")
]
cursorObject.executemany(sql, val)
dataBase.commit()
23:00
11/03/2024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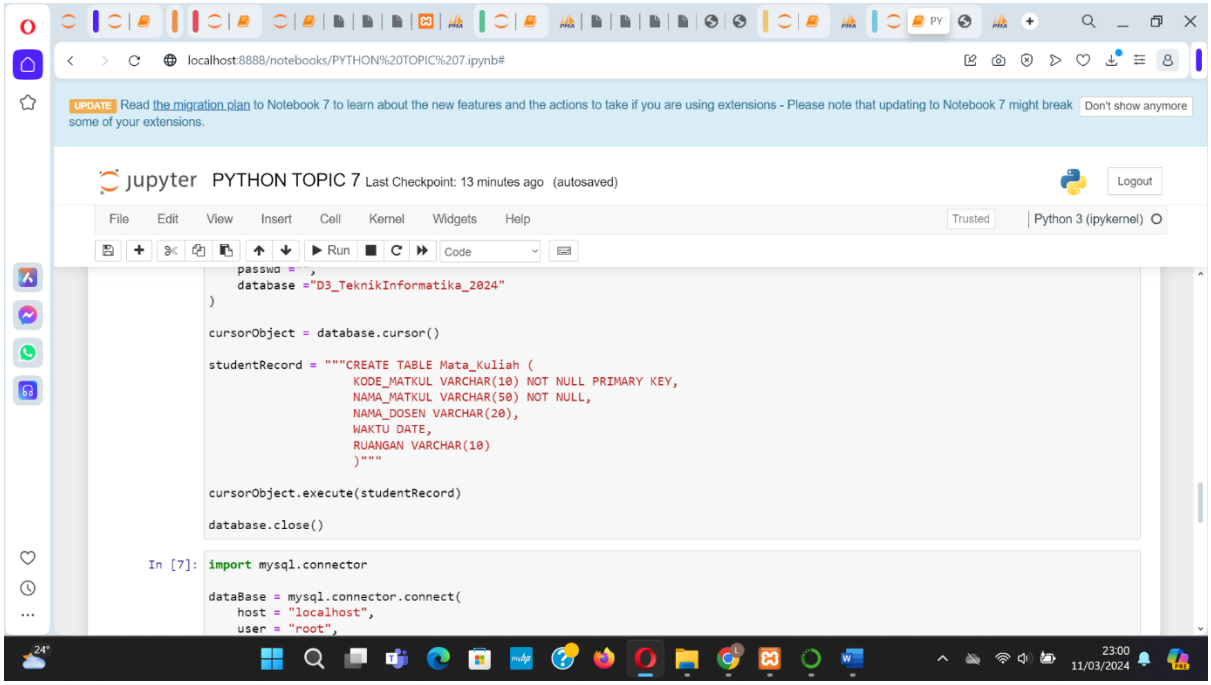
Trusted
Python 3 (ipykernel)
Run
Code
("19492470", "BU ZULMI", "PSO")
]
cursorObject.executemany(sql, val)
dataBase.commit()
In [6]:
import mysql.connector
database = mysql.connector.connect(
host ="localhost",
user ="root",
passwd ="",
database ="D3_TeknikInformatika_2024"
)
cursorObject = database.cursor()
studentRecord = """CREATE TABLE Mata_Kuliah (
KODE_MATKUL VARCHAR(10) NOT NULL PRIMARY KEY,
NAMA_MATKUL VARCHAR(50) NOT NULL,
NAMA_DOSEN VARCHAR(20),
WAKTU DATE,
24°
23:00
11/03/2024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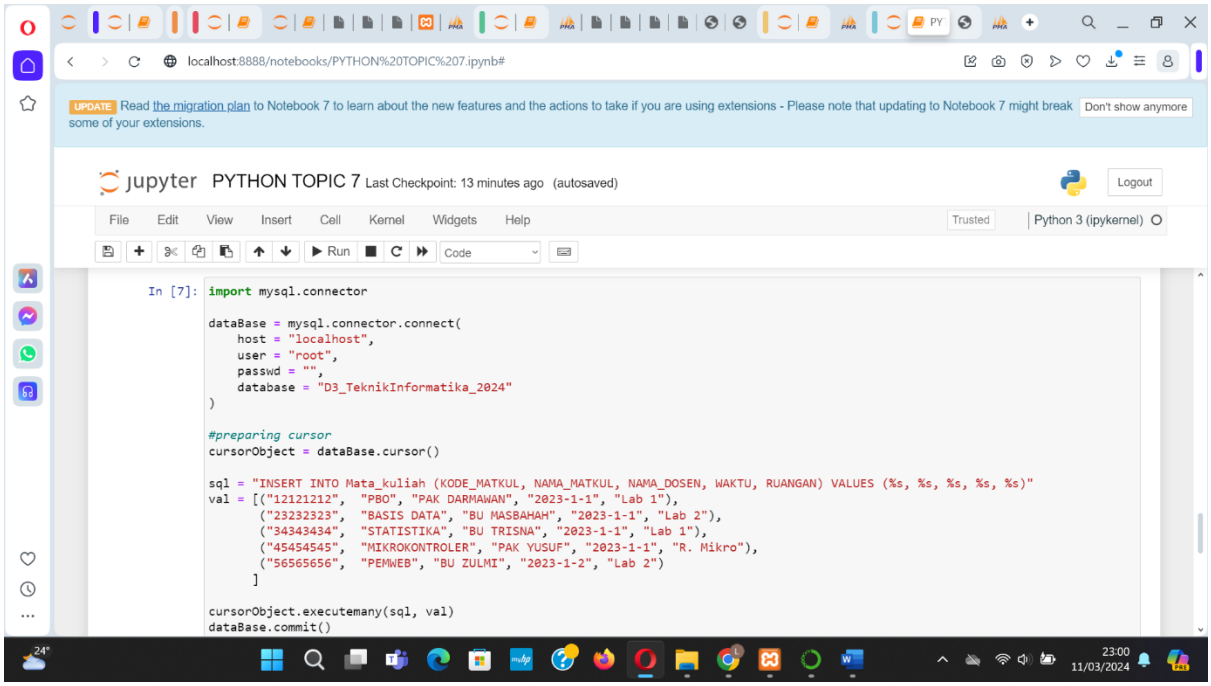
Python 3 (ipykernel)
Run
Code
passwd ="",
database ="D3_TeknikInformatika_2024"
)
cursorObject = database.cursor()
studentRecord = """CREATE TABLE Mata_Kuliah (
KODE_MATKUL VARCHAR(10) NOT NULL PRIMARY KEY,
NAMA_MATKUL VARCHAR(50) NOT NULL,
NAMA_DOSEN VARCHAR(20),
WAKTU DATE,
RUANGAN VARCHAR(10)
)"""
cursorObject.execute(studentRecord)
database.close()
In [7]:
import mysql.connector
dataBase = mysql.connector.connect(
host = "localhost",
user = "root",
24°
23:00
11/03/2024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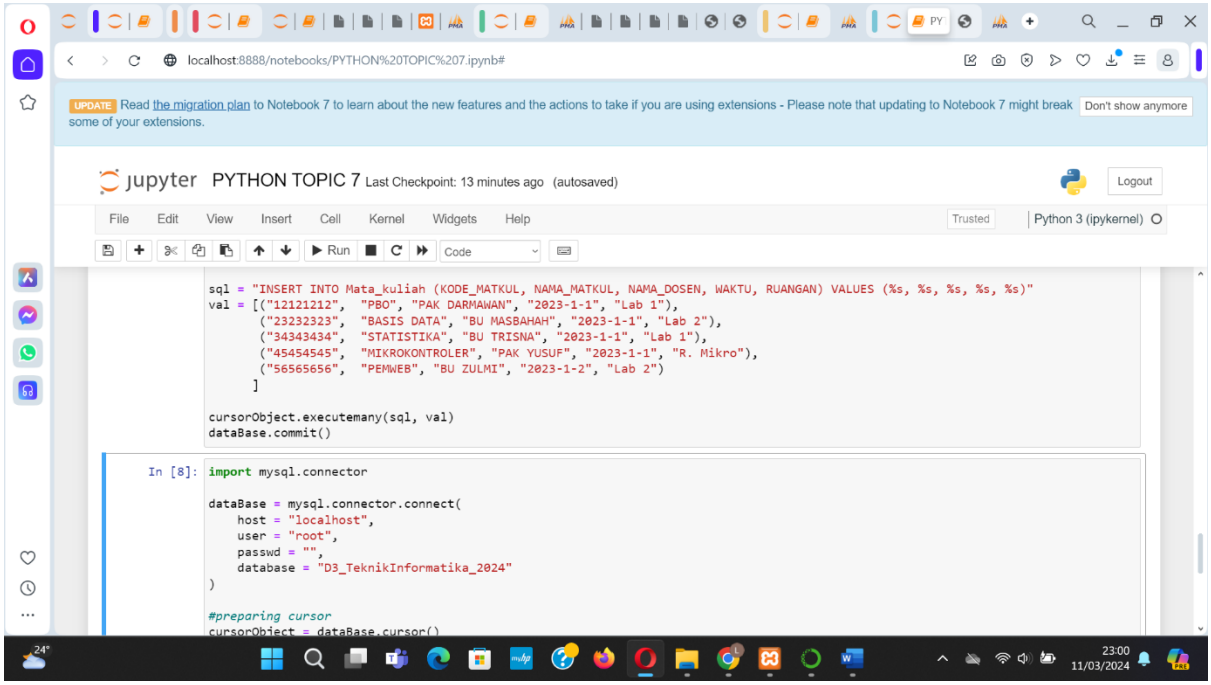
Python 3 (ipykernel)
Run
Code
In [7]:
import mysql.connector
dataBase = mysql.connector.connect(
host = "localhost",
user = "root",
passwd = "",
database = "D3_TeknikInformatika_2024"
)
#preparing cursor
cursorObject = dataBase.cursor()
sql = "INSERT INTO Mata_kuliah (KODE_MATKUL, NAMA_MATKUL, NAMA_DOSEN, WAKTU, RUANGAN) VALUES (%s, %s, %s, %s, %s)"
val = [("12121212", "PBO", "PAK DARMAWAN", "2023-1-1", "Lab 1"),
("23232323", "BASIS DATA", "BU MASBAHAH", "2023-1-1", "Lab 2"),
("34343434", "STATISTIKA", "BU TRISNA", "2023-1-1", "Lab 1"),
("45454545", "MIKROKONTROLER", "PAK YUSUF", "2023-1-1", "R. Mikro"),
("56565656", "PEMWEB", "BU ZULMI", "2023-1-2", "Lab 2")
]
cursorObject.executemany(sql, val)
dataBase.commit()
24°
23:00
11/03/2024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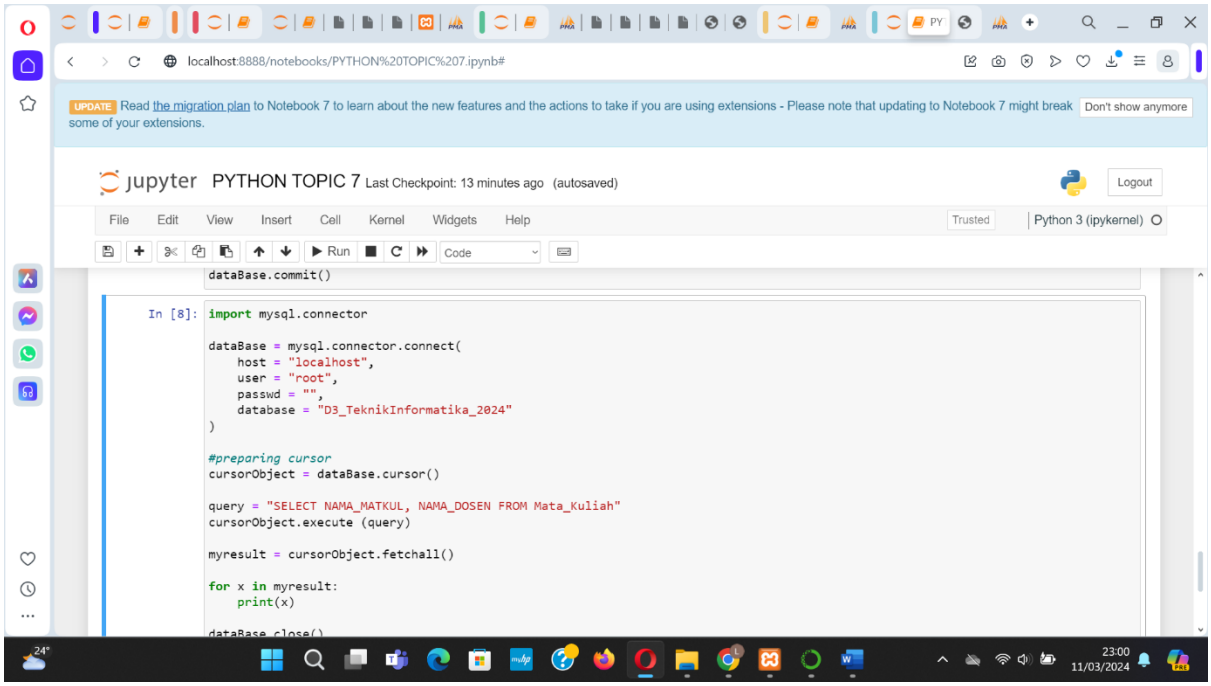
Python 3 (ipykernel)
Run
Code
sql = "INSERT INTO Mata_kuliah (KODE_MATKUL, NAMA_MATKUL, NAMA_DOSEN, WAKTU, RUANGAN) VALUES (%s, %s, %s, %s, %s)"
val = [("12121212", "PBO", "PAK DARMAWAN", "2023-1-1", "Lab 1"),
("23232323", "BASIS DATA", "BU MASBAHAH", "2023-1-1", "Lab 2"),
("34343434", "STATISTIKA", "BU TRISNA", "2023-1-1", "Lab 1"),
("45454545", "MIKROKONTROLER", "PAK YUSUF", "2023-1-1", "R. Mikro"),
("56565656", "PEMWEB", "BU ZULMI", "2023-1-2", "Lab 2")
]
cursorObject.executemany(sql, val)
dataBase.commit()
In [8]:
import mysql.connector
dataBase = mysql.connector.connect(
host = "localhost",
user = "root",
passwd = "",
database = "D3_TeknikInformatika_2024"
)
#preparing cursor
24°
23:00
11/03/2024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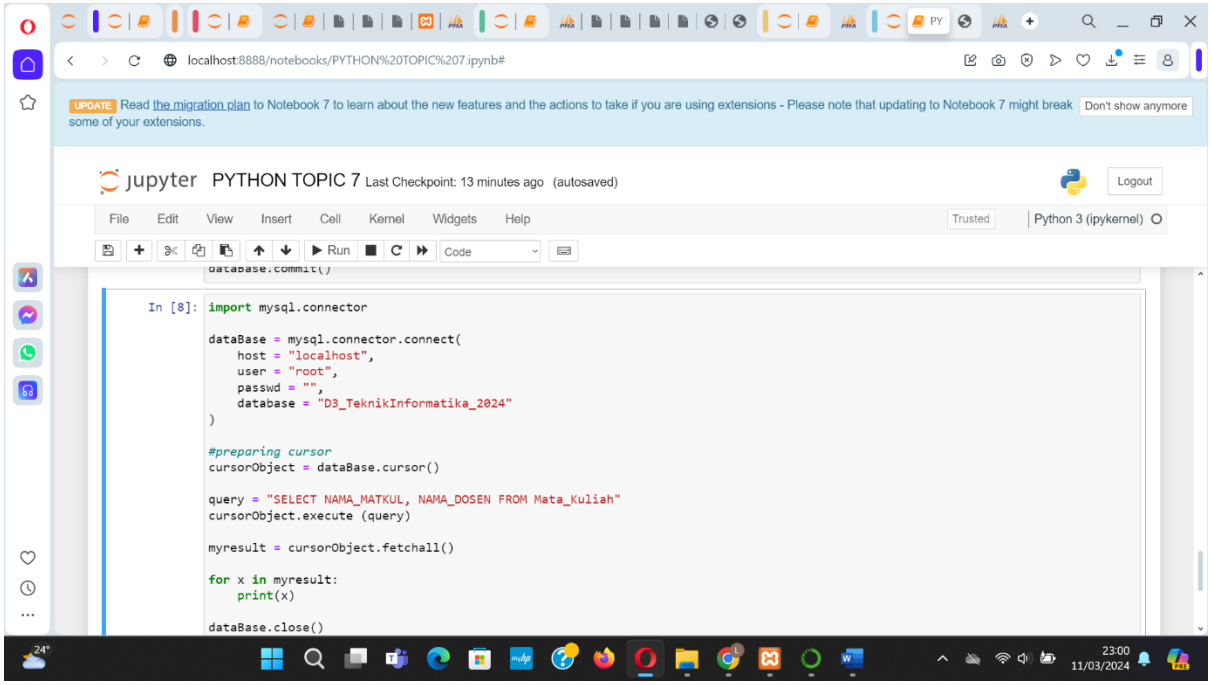
Code
dataBase.commit()
In [8]:
import mysql.connector
dataBase = mysql.connector.connect(
host = "localhost",
user = "root",
passwd = "",
database = "D3_TeknikInformatika_2024"
)
#preparing cursor
cursorObject = dataBase.cursor()
query = "SELECT NAMA_MATKUL, NAMA_DOSEN FROM Mata_Kuliah"
cursorObject.execute (query)
myresult = cursorObject.fetchall()
for x in myresult:
print(x)
23:00
11/03/2024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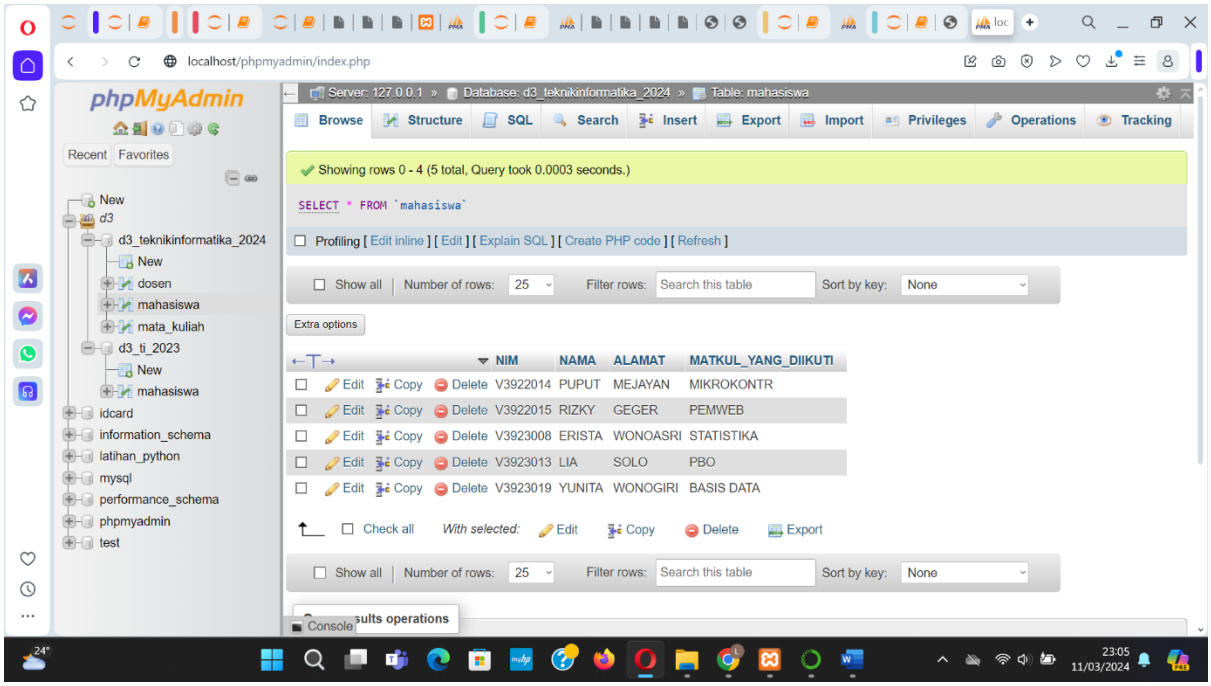
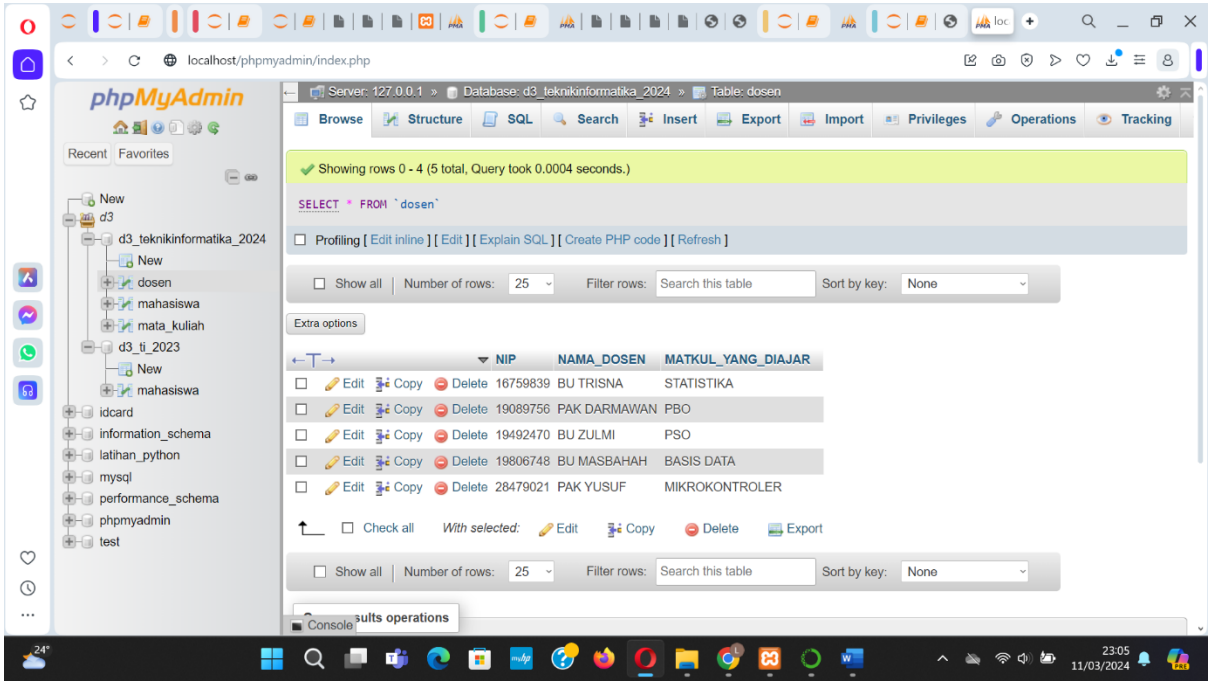
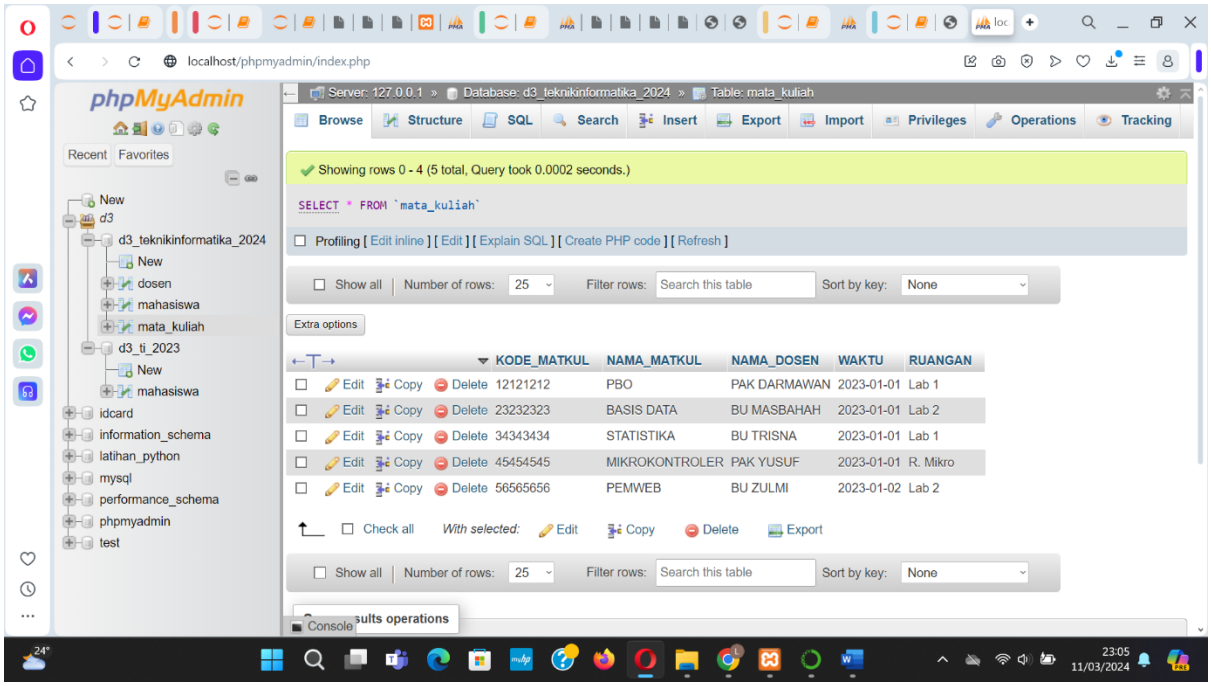
Code
In [8]:
import mysql.connector
dataBase = mysql.connector.connect(
host = "localhost",
user = "root",
passwd = "",
database = "D3_TeknikInformatika_2024"
)
#preparing cursor
cursorObject = dataBase.cursor()
query = "SELECT NAMA_MATKUL, NAMA_DOSEN FROM Mata_Kuliah"
cursorObject.execute (query)
myresult = cursorObject.fetchall()
for x in myresult:
print(x)
dataBase.close()
23:00
11/03/2024

OUTPUT


localhost/phpmyadmin/index.php
phpMyAdmin
Recent Favorites
New
d3
d3_teknikinformatika_2024
New
dosen
mahasiswa
mata_kuliah
d3_ti_2023
New
mahasiswa
idcard
information_schema
latihan_python
mysql
performance_schema
phpmyadmin
test
Server: 127.0.0.1 » Database: d3_teknikinformatika_2024 » Table: mahasiswa
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking
Showing rows 0 - 4 (5 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
NIM NAMA ALAMAT MATKUL_YANG_DIIKUTI
Edit Copy Delete V3922014 PUPUT MEJAYAN MIKROKONTR
Edit Copy Delete V3922015 RIZKY GEGER PEMWEB
Edit Copy Delete V3923008 ERISTA WONOASRI STATISTIKA
Edit Copy Delete V3923013 LIA SOLO PBO
Edit Copy Delete V3923019 YUNITA WONOGIRI BASIS DATA
Check all With selected: Edit Copy Delete Export
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
Console
23:05
11/03/2024


localhost/phpmyadmin/index.php
phpMyAdmin
Recent Favorites
New
d3
d3_teknikinformatika_2024
New
dosen
mahasiswa
mata_kuliah
d3_ti_2023
New
mahasiswa
idcard
information_schema
latihan_python
mysql
performance_schema
phpmyadmin
test
Server: 127.0.0.1 » Database: d3_teknikinformatika_2024 » Table: dosen
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking
Showing rows 0 - 4 (5 total, Query took 0.0004 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_YANG_DIAJAR
Edit Copy Delete 16759839 BU TRISNA STATISTIKA
Edit Copy Delete 19089756 PAK DARMAWAN PBO
Edit Copy Delete 19492470 BU ZULMI PSO
Edit Copy Delete 19806748 BU MASBAHAH BASIS DATA
Edit Copy Delete 28479021 PAK YUSUF MIKROKONTROLER
Check all With selected: Edit Copy Delete Export
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
Console
23:05
11/03/2024




```
('PBO', 'PAK DARMAWAN')
('BASIS DATA', 'BU MASBAHAH')
('STATISTIKA', 'BU TRISNA')
('MIKROKONTROLER', 'PAK YUSUF')
('PEMWEB', 'BU ZULMI')
```

In [ ]: