LAPORAN PRAKTIKUM
PEMROGRAMAN PYTHON

DATABASE

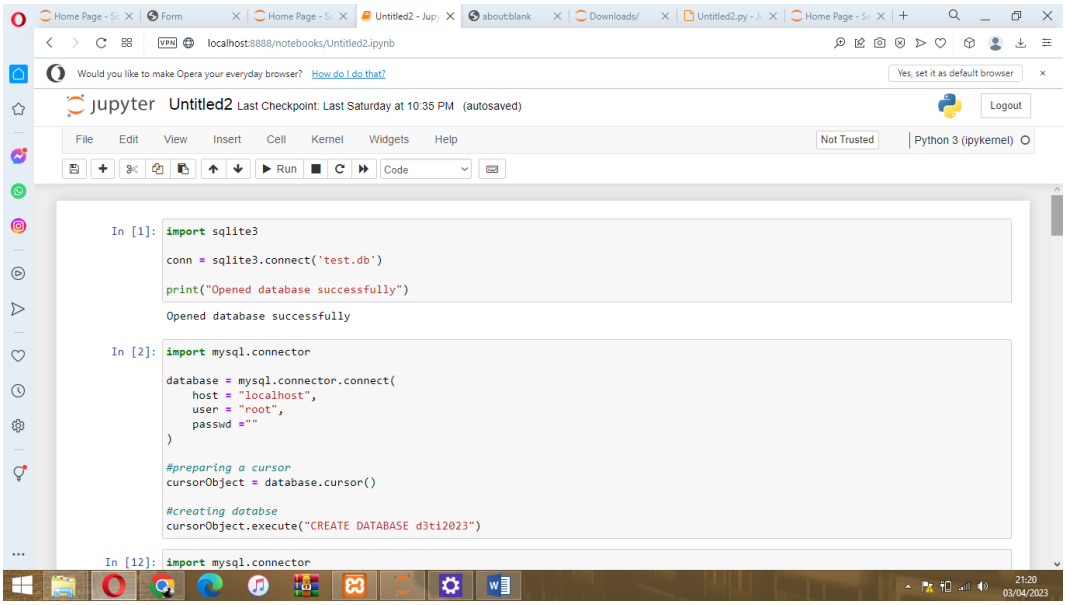
Disusun oleh :
Mahesa Agung Sejati
V3922029

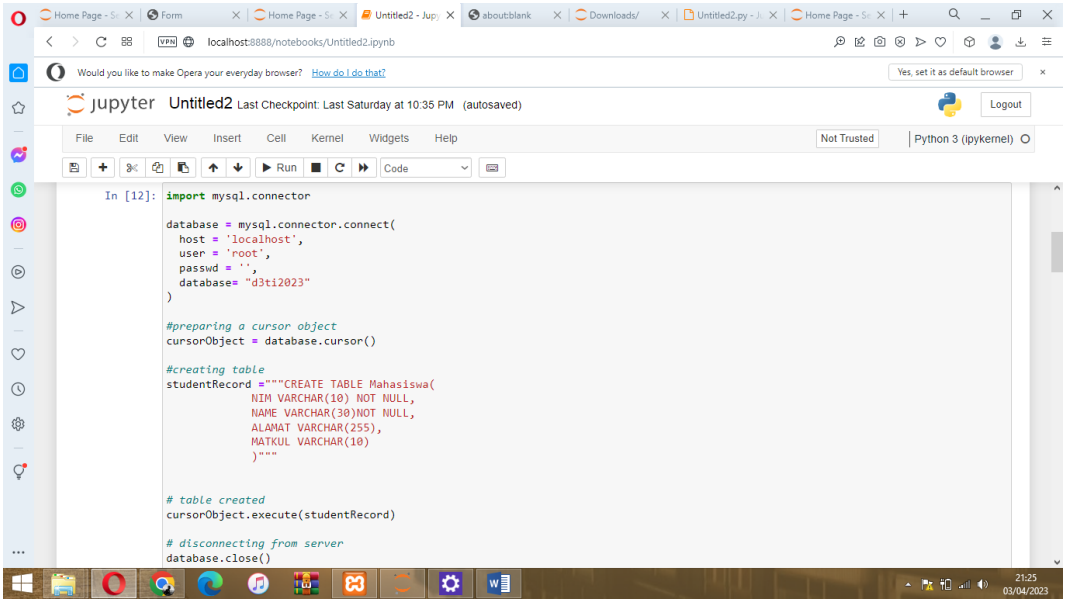
Dosen
Yusuf Fadila Rachman, S. Kom, M. Kom

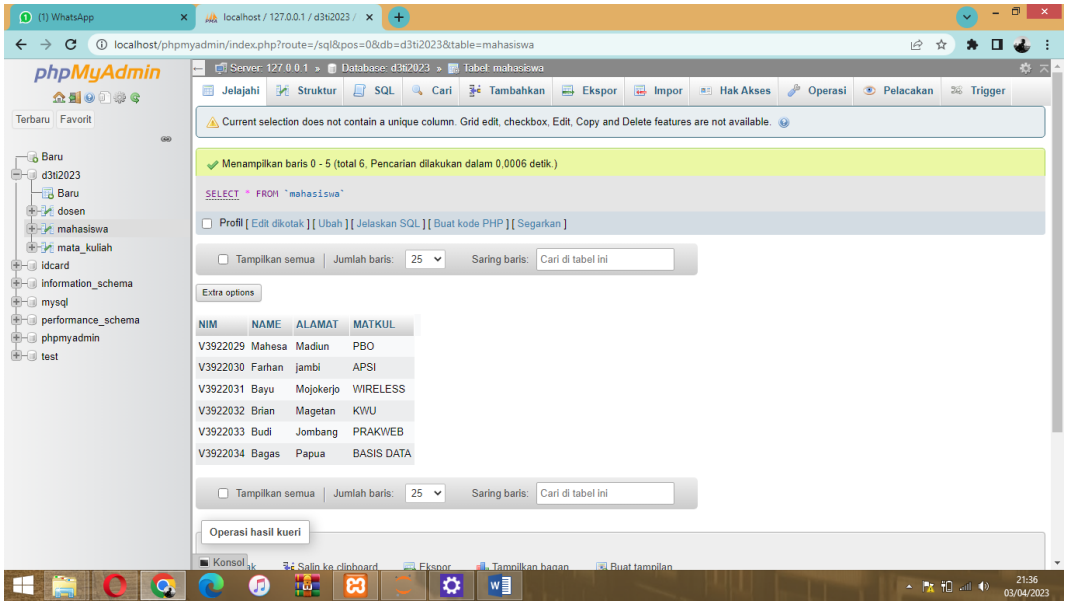
PS D-III TEKNIK INFORMATIKA
SEKOLAH VOKASI
UNIVERSITAS SEBELAS MARET
2023

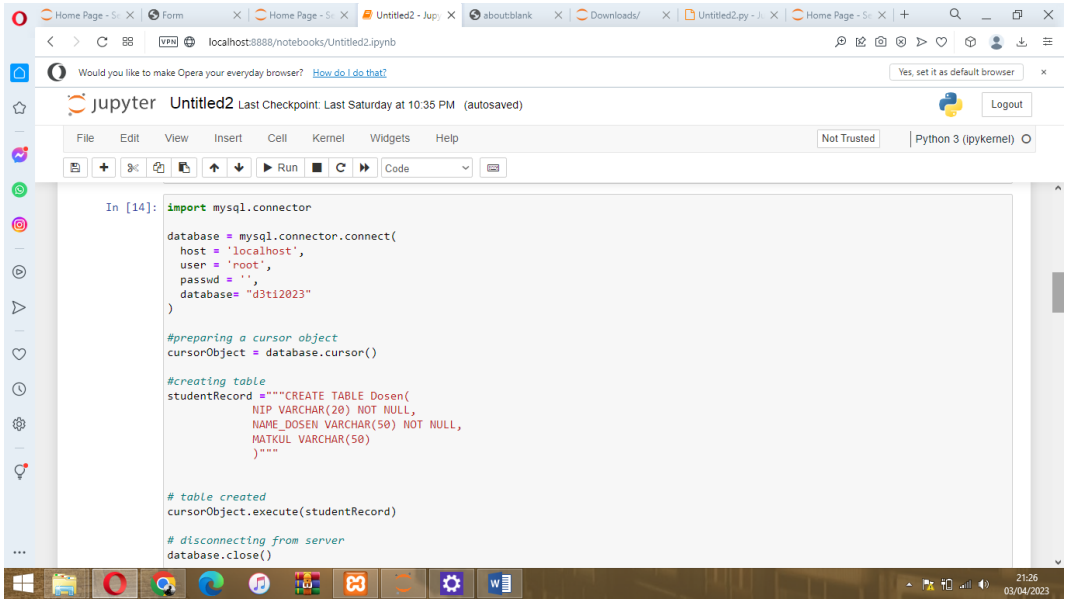
BAB I
HASIL DAN PEMBAHASAN

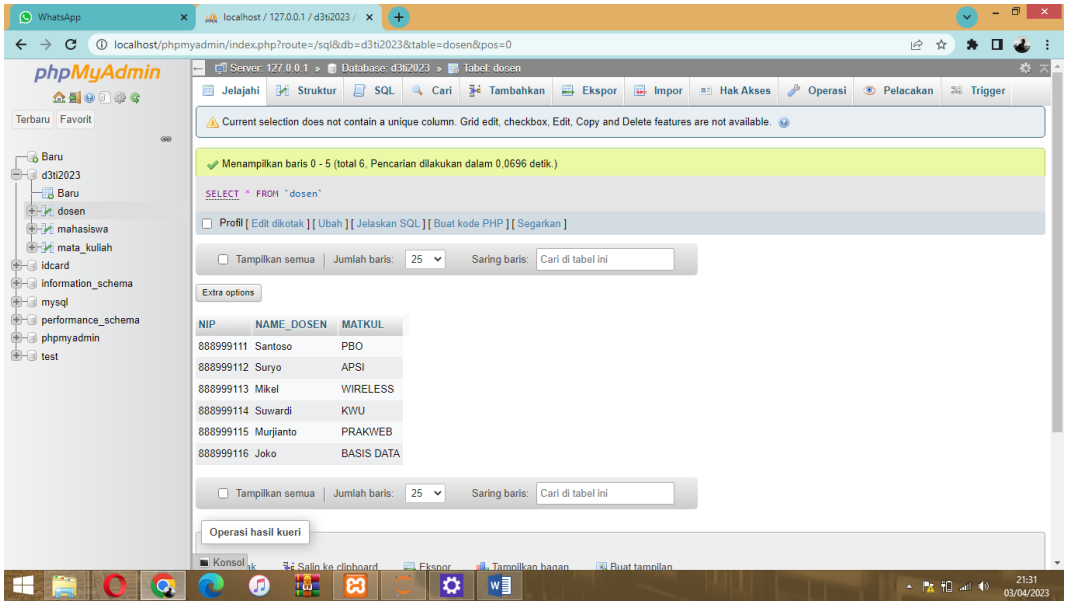
1. Buat database dengan nama D3_TI_2023
2. Database diisi dengan 3 tabel, yaitu : 1. Tabel Mahasiswa, Tabel Dosen, Tabel Mata Kuliah.
3. Berikut data wajib di tabel Mahasiswa :
   NIM - Varchar (10) (Primary key)
   Nama - Varchar (30)
   Alamat - Varchar (255)
   Mata kuliah yang diikuti – Varchar (10)**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

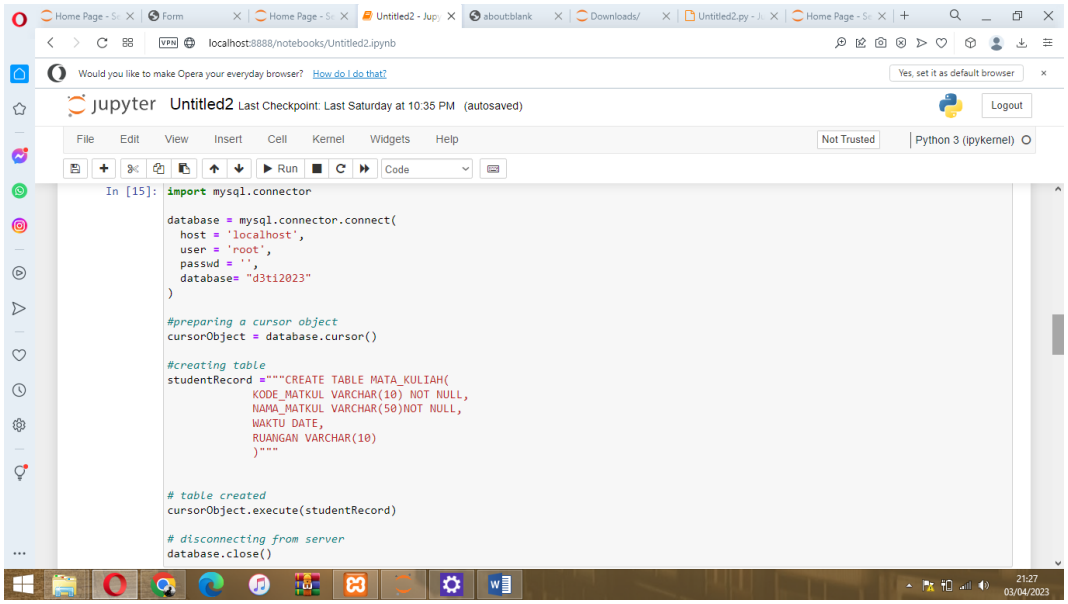

localhost:8888/notebooks/Untitled2.ipynb
jupyter Untitled2 Last Checkpoint: Last Saturday at 10:35 PM (autosaved)
Logout
File Edit View Insert Cell Kernel Widgets Help
Not Trusted
Python 3 (ipykernel)
Run
Code
In [1]:
import sqlite3
conn = sqlite3.connect('test.db')
print("Opened database successfully")
Opened database successfully
In [2]:
import mysql.connector
database = mysql.connector.connect(
host = "localhost",
user = "root",
passwd =""
)
#preparing a cursor
cursorObject = database.cursor()
#creating databse
cursorObject.execute("CREATE DATABASE d3ti2023")
In [12]:
import mysql.connector

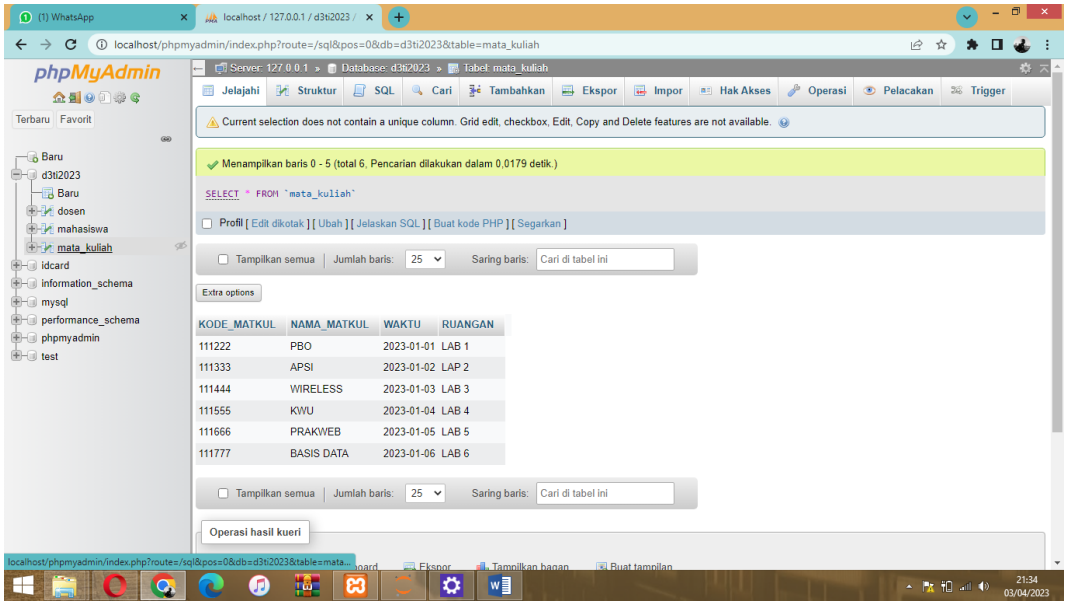

localhost:8888/notebooks/Untitled2.ipynb
jupyter Untitled2 Last Checkpoint: Last Saturday at 10:35 PM (autosaved)
Logout
File Edit View Insert Cell Kernel Widgets Help
Not Trusted
Python 3 (ipykernel)
Run
Code
In [12]:
import mysql.connector
database = mysql.connector.connect(
host = 'localhost',
user = 'root',
passwd = '',
database= "d3ti2023"
)
#preparing a cursor object
cursorObject = database.cursor()
#creating table
studentRecord ="""CREATE TABLE Mahasiswa(
NIM VARCHAR(10) NOT NULL,
NAME VARCHAR(30)NOT NULL,
ALAMAT VARCHAR(255),
MATKUL VARCHAR(10)
)"""
# table created
cursorObject.execute(studentRecord)
# disconnecting from server
database.close()

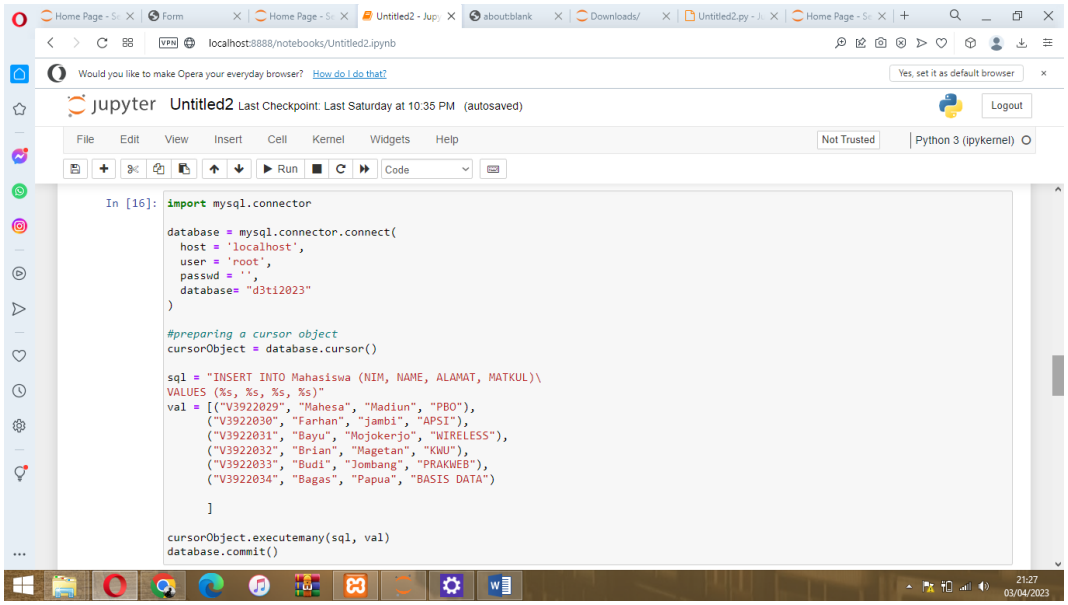

phpMyAdmin
Terbaru Favorit
Baru
d3ti2023
Baru
dosen
mahasiswa
mata_kuliah
idcard
information_schema
mysql
performance_schema
phpmyadmin
test
Server: 127.0.0.1 » Database: d3ti2023 » Tabel: mahasiswa
Jelajahi Struktur SQL Cari Tambahkan Ekspor Impor Hak Akses Operasi Pelacakan Trigger
Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.
Menampilkan baris 0 - 5 (total 6, Pencarian dilakukan dalam 0,0006 detik.)
SELECT * FROM `mahasiswa`
Profil [Edit dikotak] [Ubah] [Jelaskan SQL] [Buat kode PHP] [Segarkan]
Tampilkan semua Jumlah baris: 25 Saring baris: Cari di tabel ini
Extra options
NIM NAME ALAMAT MATKUL
V3922029 Mahesa Madiun PBO
V3922030 Farhan jambi APSI
V3922031 Bayu Mojokerjo WIRELESS
V3922032 Brian Magetan KWU
V3922033 Budi Jombang PRAKWEB
V3922034 Bagas Papua BASIS DATA
Operasi hasil kueri
Konsol

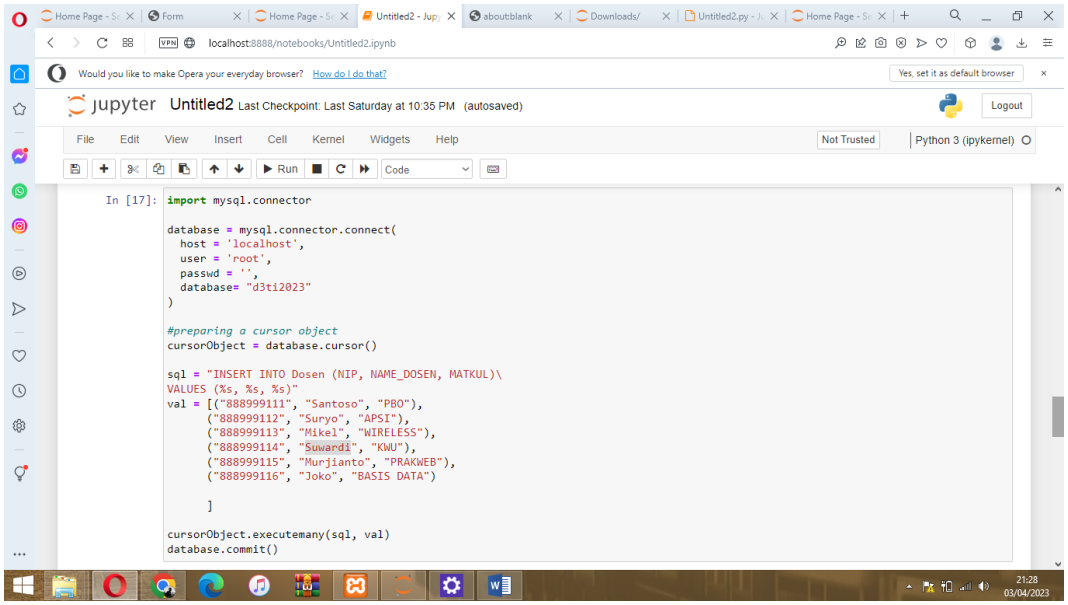

localhost:8888/notebooks/Untitled2.ipynb
jupyter Untitled2 Last Checkpoint: Last Saturday at 10:35 PM (autosaved)
Logout
File Edit View Insert Cell Kernel Widgets Help
Not Trusted
Python 3 (ipykernel)
Run
Code
In [14]:
import mysql.connector
database = mysql.connector.connect(
host = 'localhost',
user = 'root',
passwd = '',
database= "d3ti2023"
)
#preparing a cursor object
cursorObject = database.cursor()
#creating table
studentRecord ="""CREATE TABLE Dosen(
NIP VARCHAR(20) NOT NULL,
NAME_DOSEN VARCHAR(50) NOT NULL,
MATKUL VARCHAR(50)
)"""
# table created
cursorObject.execute(studentRecord)
# disconnecting from server
database.close()

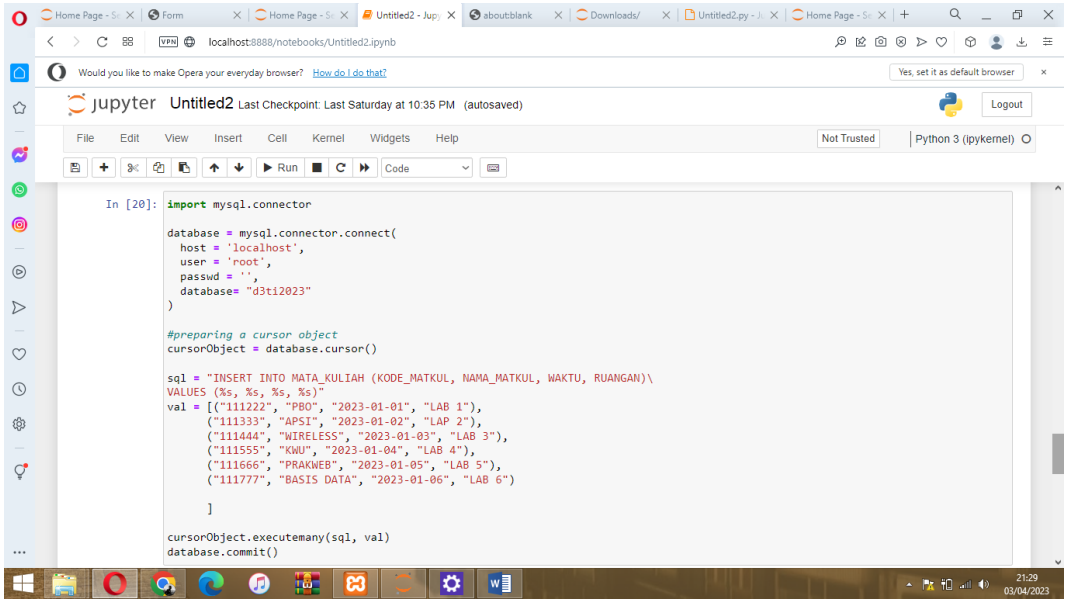

phpMyAdmin
Server: 127.0.0.1 » Database: d3ti2023 » Tabel: dosen
Jelajahi Struktur SQL Cari Tambahkan Ekspor Impor Hak Akses Operasi Pelacakan Trigger
Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.
Menampilkan baris 0 - 5 (total 6, Pencarian dilakukan dalam 0,0696 detik.)
SELECT * FROM `dosen`
Profil [Edit dikotak] [Ubah] [Jelaskan SQL] [Buat kode PHP] [Segarkan]
Tampilkan semua Jumlah baris: 25 Saring baris: Cari di tabel ini
Extra options
NIP NAME_DOSEN MATKUL
888999111 Santoso PBO
888999112 Suryo APSI
888999113 Mikel WIRELESS
888999114 Suwardi KWU
888999115 Murjianto PRAKWEB
888999116 Joko BASIS DATA
Operasi hasil kueri
Konsol

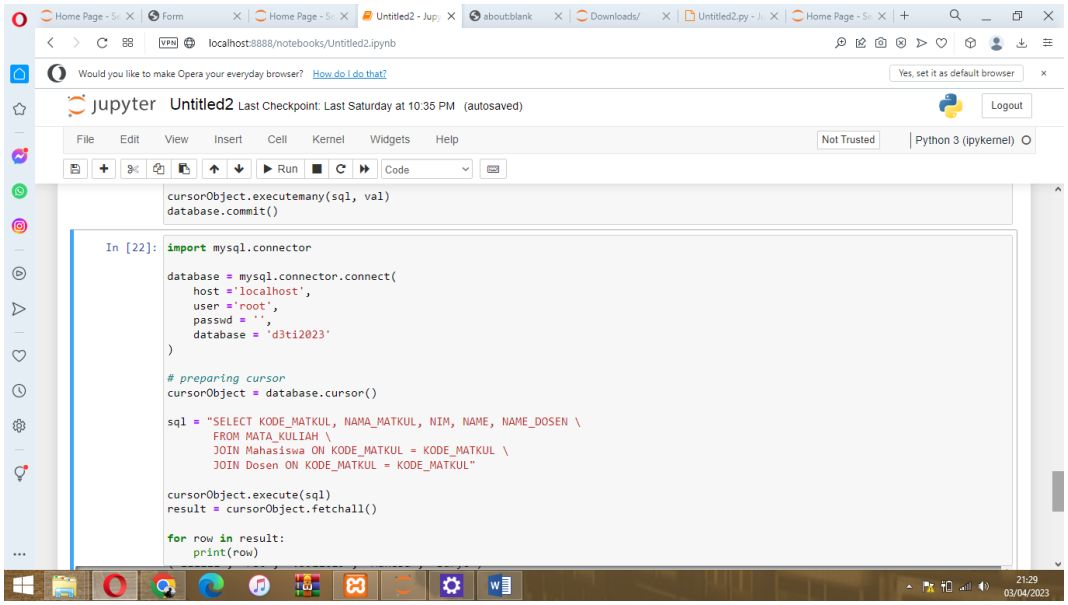

localhost:8888/notebooks/Untitled2.ipynb
jupyter Untitled2 Last Checkpoint: Last Saturday at 10:35 PM (autosaved)
Logout
File Edit View Insert Cell Kernel Widgets Help
Not Trusted
Python 3 (ipykernel)
Run
Code
In [15]:
import mysql.connector
database = mysql.connector.connect(
host = 'localhost',
user = 'root',
passwd = '',
database= "d3ti2023"
)
#preparing a cursor object
cursorObject = database.cursor()
#creating table
studentRecord ="""CREATE TABLE MATA_KULIAH(
KODE_MATKUL VARCHAR(10) NOT NULL,
NAMA_MATKUL VARCHAR(50)NOT NULL,
WAKTU DATE,
RUANGAN VARCHAR(10)
)"""
# table created
cursorObject.execute(studentRecord)
# disconnecting from server
database.close()

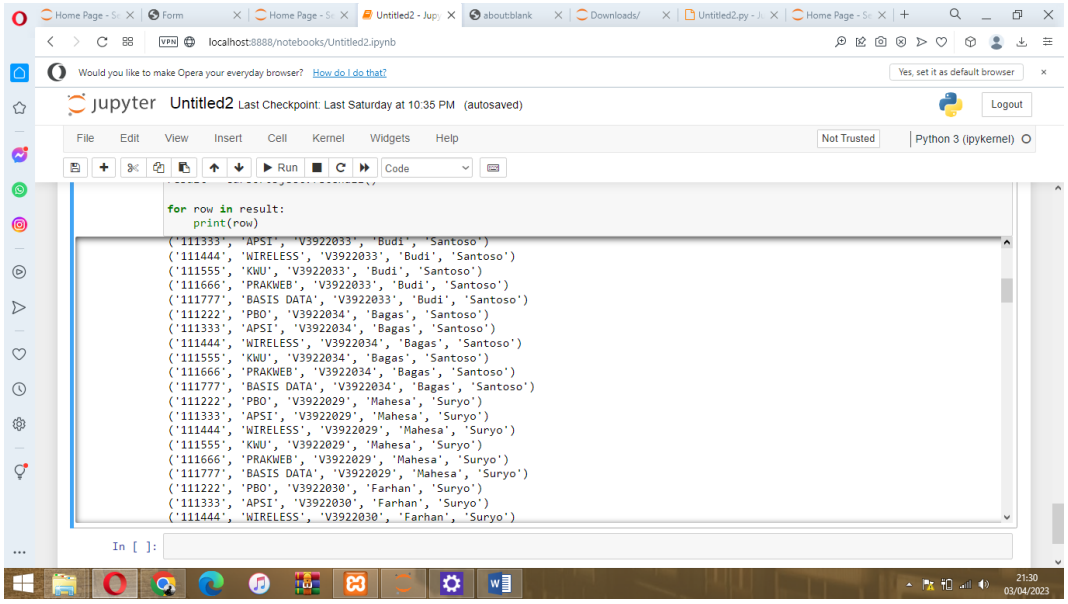

phpMyAdmin
Server: 127.0.0.1 » Database: d3ti2023 » Tabel: mata_kuliah
Jelajahi Struktur SQL Cari Tambahkan Ekspor Impor Hak Akses Operasi Pelacakan Trigger
Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.
Menampilkan baris 0 - 5 (total 6, Pencarian dilakukan dalam 0,0179 detik.)
SELECT * FROM `mata_kuliah`
Profil [Edit dikotak] [Ubah] [Jelaskan SQL] [Buat kode PHP] [Segarkan]
Tampilkan semua Jumlah baris: 25 Saring baris: Cari di tabel ini
Extra options
KODE_MATKUL NAMA_MATKUL WAKTU RUANGAN
111222 PBO 2023-01-01 LAB 1
111333 APSI 2023-01-02 LAP 2
111444 WIRELESS 2023-01-03 LAB 3
111555 KWU 2023-01-04 LAB 4
111666 PRAKWEB 2023-01-05 LAB 5
111777 BASIS DATA 2023-01-06 LAB 6
Operasi hasil kueri


jupyter Untitled2 Last Checkpoint: Last Saturday at 10:35 PM (autosaved)
Logout
File Edit View Insert Cell Kernel Widgets Help
Not Trusted
Python 3 (ipykernel)
In [16]:
import mysql.connector
database = mysql.connector.connect(
host = 'localhost',
user = 'root',
passwd = '',
database= "d3ti2023"
)
#preparing a cursor object
cursorObject = database.cursor()
sql = "INSERT INTO Mahasiswa (NIM, NAME, ALAMAT, MATKUL)\
VALUES (%s, %s, %s, %s)"
val = [("V3922029", "Mahesa", "Madiun", "PBO"),
("V3922030", "Farhan", "jambi", "APSI"),
("V3922031", "Bayu", "Mojokerjo", "WIRELESS"),
("V3922032", "Brian", "Magetan", "KWU"),
("V3922033", "Budi", "Jombang", "PRAKWEB"),
("V3922034", "Bagas", "Papua", "BASIS DATA")
]
cursorObject.executemany(sql, val)
database.commit()


Untitled2 - Jupy
localhost:8888/notebooks/Untitled2.ipynb
Would you like to make Opera your everyday browser? How do I do that?
Yes, set it as default browser
jupyter Untitled2 Last Checkpoint: Last Saturday at 10:35 PM (autosaved)
Logout
File Edit View Insert Cell Kernel Widgets Help
Not Trusted
Python 3 (ipykernel)
Run
Code
In [17]:
import mysql.connector
database = mysql.connector.connect(
host = 'localhost',
user = 'root',
passwd = '',
database= "d3ti2023"
)
#preparing a cursor object
cursorObject = database.cursor()
sql = "INSERT INTO Dosen (NIP, NAME_DOSEN, MATKUL)\
VALUES (%s, %s, %s)"
val = [("888999111", "Santoso", "PBO"),
("888999112", "Suryo", "APSI"),
("888999113", "Mikel", "WIRELESS"),
("888999114", "Suwardi", "KWU"),
("888999115", "Murjianto", "PRAKWEB"),
("888999116", "Joko", "BASIS DATA")
]
cursorObject.executemany(sql, val)
database.commit()
21:28
03/04/2023


Untitled2 - Jupy
localhost:8888/notebooks/Untitled2.ipynb
Would you like to make Opera your everyday browser? How do I do that?
Yes, set it as default browser
jupyter Untitled2 Last Checkpoint: Last Saturday at 10:35 PM (autosaved)
Logout
File Edit View Insert Cell Kernel Widgets Help
Not Trusted
Python 3 (ipykernel)
Run
Code
In [20]:
import mysql.connector
database = mysql.connector.connect(
host = 'localhost',
user = 'root',
passwd = '',
database= "d3ti2023"
)
#preparing a cursor object
cursorObject = database.cursor()
sql = "INSERT INTO MATA_KULIAH (KODE_MATKUL, NAMA_MATKUL, WAKTU, RUANGAN)\
VALUES (%s, %s, %s, %s)"
val = [("111222", "PBO", "2023-01-01", "LAB 1"),
("111333", "APSI", "2023-01-02", "LAP 2"),
("111444", "WIRELESS", "2023-01-03", "LAB 3"),
("111555", "KWU", "2023-01-04", "LAB 4"),
("111666", "PRAKWEB", "2023-01-05", "LAB 5"),
("111777", "BASIS DATA", "2023-01-06", "LAB 6")
]
cursorObject.executemany(sql, val)
database.commit()
21:29
03/04/2023


localhost:8888/notebooks/Untitled2.ipynb
Would you like to make Opera your everyday browser? How do I do that?
Yes, set it as default browser
jupyter Untitled2 Last Checkpoint: Last Saturday at 10:35 PM (autosaved)
Logout
File Edit View Insert Cell Kernel Widgets Help
Not Trusted
Python 3 (ipykernel)
Run
Code
cursorObject.executemany(sql, val)
database.commit()
In [22]:
import mysql.connector
database = mysql.connector.connect(
host ='localhost',
user ='root',
passwd = '',
database = 'd3ti2023'
)
# preparing cursor
cursorObject = database.cursor()
sql = "SELECT KODE_MATKUL, NAMA_MATKUL, NIM, NAME, NAME_DOSEN \
FROM MATA_KULIAH \
JOIN Mahasiswa ON KODE_MATKUL = KODE_MATKUL \
JOIN Dosen ON KODE_MATKUL = KODE_MATKUL"
cursorObject.execute(sql)
result = cursorObject.fetchall()
for row in result:
print(row)
21:29
03/04/2023


localhost:8888/notebooks/Untitled2.ipynb
Would you like to make Opera your everyday browser? How do I do that?
Yes, set it as default browser
jupyter Untitled2 Last Checkpoint: Last Saturday at 10:35 PM (autosaved)
Logout
File Edit View Insert Cell Kernel Widgets Help
Not Trusted
Python 3 (ipykernel)
Run
Code
for row in result:
print(row)
('111333', 'APSI', 'V3922033', 'Budi', 'Santoso')
('111444', 'WIRELESS', 'V3922033', 'Budi', 'Santoso')
('111555', 'KWU', 'V3922033', 'Budi', 'Santoso')
('111666', 'PRAKWEB', 'V3922033', 'Budi', 'Santoso')
('111777', 'BASIS DATA', 'V3922033', 'Budi', 'Santoso')
('111222', 'PBO', 'V3922034', 'Bagas', 'Santoso')
('111333', 'APSI', 'V3922034', 'Bagas', 'Santoso')
('111444', 'WIRELESS', 'V3922034', 'Bagas', 'Santoso')
('111555', 'KWU', 'V3922034', 'Bagas', 'Santoso')
('111666', 'PRAKWEB', 'V3922034', 'Bagas', 'Santoso')
('111777', 'BASIS DATA', 'V3922034', 'Bagas', 'Santoso')
('111222', 'PBO', 'V3922029', 'Mahesa', 'Suryo')
('111333', 'APSI', 'V3922029', 'Mahesa', 'Suryo')
('111444', 'WIRELESS', 'V3922029', 'Mahesa', 'Suryo')
('111555', 'KWU', 'V3922029', 'Mahesa', 'Suryo')
('111666', 'PRAKWEB', 'V3922029', 'Mahesa', 'Suryo')
('111777', 'BASIS DATA', 'V3922029', 'Mahesa', 'Suryo')
('111222', 'PBO', 'V3922030', 'Farhan', 'Suryo')
('111333', 'APSI', 'V3922030', 'Farhan', 'Suryo')
('111444', 'WIRELESS', 'V3922030', 'Farhan', 'Suryo')
In [ ]:
21:30
03/04/2023