

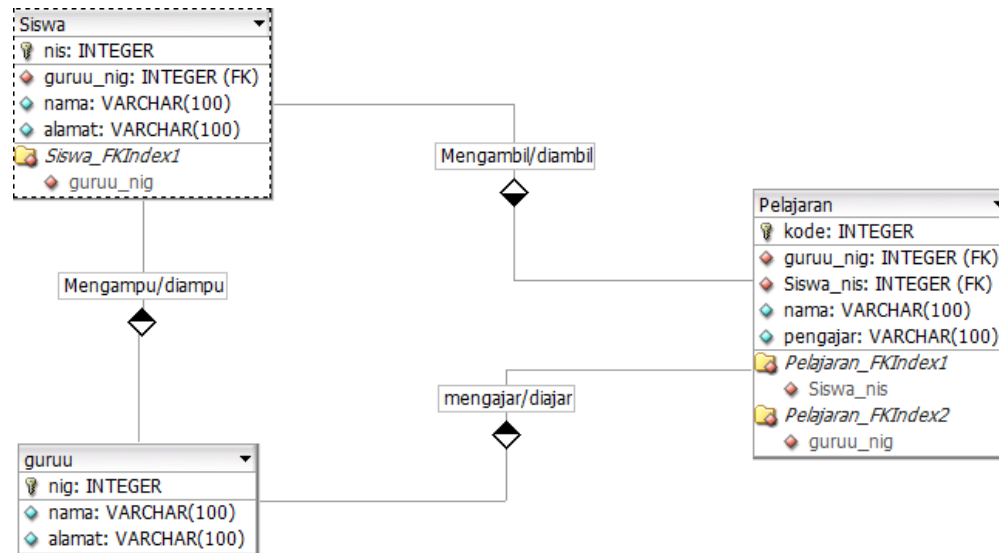
Nama :Yoga Ade P

NIM : L200180204

Kelas : H

Praktikum Modul 12

Membuat Sistem dengan Database



Mengkonekan database dengan mysql

```
connect.py - C:\proyek\connect.py (3.8.2)
File Edit Format Run Options Window Help
import mysql.connector

mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd=""
)

if mydb.is_connected():
    print("Connected")

Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 2
tel)] on win32
Type "help", "copyright", "credits" or "license()
>>>
===== RESTART: C:\proyek\conr
Connected
>>> |
```

Membuat database sekolah

```
create_con.py - C:\proyek\create_con.py (3.8.2)
File Edit Format Run Options Window Help

import mysql.connector

mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd=""
)

cursor = mydb.cursor()
cursor.execute("CREATE DATABASE sekolah")

print("Database sekolah sukses dibuat")
```

Membuat table siswa, guru, dan pelajaran

- Siswa

```
table_siswa.py - C:\proyek\table_siswa.py (3.8.2)
File Edit Format Run Options Window Help

import mysql.connector

mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd="",
    database="sekolah"
)

cursor = mydb.cursor()

query = """
CREATE TABLE siswa
(
    nis INT(10),
    nama VARCHAR(100),
    alamat VARCHAR(100)
)
"""

cursor.execute(query)

print("Table siswa sukses dibuat")
```

- Guru

table_guru.py - C:\proyek\table_guru.py (3.8.2)

File Edit Format Run Options Window Help

```
import mysql.connector

mydb = mysql.connector.connect (
    host="localhost",
    user="root",
    passwd="",
    database="sekolah"
)

cursor = mydb.cursor()

query = """
CREATE TABLE guruu
(
    nig INT(10),
    nama VARCHAR(100),
    alamat VARCHAR(100)
)
"""

cursor.execute(query)
```

- Pelajaran

<div>table_pelajaran.py - C:/proyek/table_pelajaran.py (3.8.2)</div> <div>File Edit Format Run Options Window Help</div> <pre>import mysql.connector mydb = mysql.connector.connect(host="localhost", user="root", passwd="", database="sekolah") cursor = mydb.cursor() query = """ CREATE TABLE pelajaran (kode INT(10), nama VARCHAR(100), pengajar VARCHAR(100)) """ cursor.execute(query) print("Table pelajaran sukses dibuat")</pre>	<div>Python 3.8.2 Shell</div> <div>File Edit Shell Debug Options Window Help</div> <pre>Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MS tel)] on win32 Type "help", "copyright", "credits" or "license()" for more i >>> ===== RESTART: C:/proyek/table_pelajaran.py = Table pelajaran sukses dibuat >>> </pre>
--	--

- siswa

```
siswa.py - C:\proyek\Final database sekolah skutt\siswa.py (3.8.2)
File Edit Format Run Options Window Help

import tkinter as tk
import tkinter.messagebox
from tkinter import *
import mysql.connector

db = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd="",
    database="sekolah"
)

c=db.cursor()

class siswa:
    def __init__(self, master):
        self.master = master
        self.master.title("Database siswa")
        self.master.geometry('300x300')
        self.frame = Frame(self.master)
        self.frame.grid()

        title = Label(self.frame, text="Database Siswa", font=('Times', 16, 'bold'))
        l_nama = Label(self.frame, text="Nama", font=('Times', 12))
        l_nis = Label(self.frame, text="NIS", font=('Times', 12))
        l_alamat = Label(self.frame, text="Alamat", font=('Times', 12))

        title.grid(row=0, columnspan=4, pady=10)
        l_id.grid(row=1, column=0, sticky=W, padx=3)
        l_nama.grid(row=2, column=0, sticky=W, padx=3)
        l_nim.grid(row=3, column=0, sticky=W, padx=3)
        l_alamat.grid(row=4, column=0, sticky=W, padx=3)

        #Entry dan posisi
        self.e_id = Entry(self.frame, width=30)
        self.e_nama = Entry(self.frame, width=30)
        self.e_nim = Entry(self.frame, width=30)
        self.e_alamat = Entry(self.frame, width=30)
```

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```
siswa.py - C:\proyek\Final database sekolah skutt\siswa.py (3.8.2)
File Edit Format Run Options Window Help

#Entry dan posisi
self.e_id = Entry(self.frame, width=30)
self.e_nama = Entry(self.frame, width=30)
self.e_nim = Entry(self.frame, width=30)
self.e_alamat = Entry(self.frame, width=30)

self.e_id.grid(row=1, column=1, sticky=W, padx=10)
self.e_nama.grid(row=2, column=1, sticky=W, padx=10)
self.e_nim.grid(row=3, column=1, sticky=W, padx=10)
self.e_alamat.grid(row=4, column=1, sticky=W, padx=10)

#Button dan posisi
b_insert = Button(self.frame, text="Insert", command=self.insert_member)
b_update = Button(self.frame, text="Update", command=self.update_member)
b_show = Button(self.frame, text="Show", command=self.show_member)

b_insert.grid(row=5, column=0, pady=10, padx=10)
b_update.grid(row=5, column=1, pady=10, padx=10)
b_show.grid(row=7, column=1, pady=10, padx=10)

def insert_member(self):
    c = db.cursor()
    sql = f"INSERT INTO member (`nama`, `nis`, `alamat`)VALUES('{self.e_nama.g"
    c.execute(sql)
    db.commit()
    messagebox.showinfo("", "Entry Data Berhasil")

def update_member(self):
    c = db.cursor()
    e1=self.e_nama.get()
    e2=self.e_nis.get()
    e3=self.e_alamat.get()
    sql = f"UPDATE siswa SET nama=%s, nis=%s WHERE alamat=%s"
    val = (e1,e2,e3,e4)
    c.execute(sql,val)
    db.commit()
    messagebox.showinfo("", "Update Data Berhasil")

def show_member(self):
    show = Tk()

Ln: 1 Col: 0
```

```
*siswa.py - C:\proyek\Final database sekolah skutt\siswa.py (3.8.2)*
File Edit Format Run Options Window Help
import tkinter as tk
import tkinter.messagebox
from tkinter import *
import mysql.connector

db = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd="",
    database="sekolah"
)

c=db.cursor()

class siswa:
    def __init__(self, master):
        self.master = master
        self.master.title("Database siswa")
        self.master.geometry('300x300')
        self.frame = Frame(self.master)
        self.frame.grid()

        title = Label(self.frame, text="Database Siswa", font=('Times', 16, 'bold'))
        l_nama = Label(self.frame, text="Nama", font=('Times', 12))
        l_nis = Label(self.frame, text="NIS", font=('Times', 12))
        l_alamat = Label(self.frame, text="Alamat", font=('Times', 12))

        title.grid(row=0, columnspan=4, pady=10)
        l_id.grid(row=1, column=0, sticky=W, padx=3)
        l_nama.grid(row=2, column=0, sticky=W, padx=3)
        l_nim.grid(row=3, column=0, sticky=W, padx=3)
        l_alamat.grid(row=4, column=0, sticky=W, padx=3)

        #Entry dan posisi
        self.e_id = Entry(self.frame, width=30)
        self.e_nama = Entry(self.frame, width=30)
        self.e_nim = Entry(self.frame, width=30)
        self.e_alamat = Entry(self.frame, width=30)

Ln: 1 Col: 0
```

File Edit Format Run Options Window Help

```
import tkinter as tk
import tkinter.messagebox
from tkinter import *
import mysql.connector

db = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd="",
    database="sekolah"
)

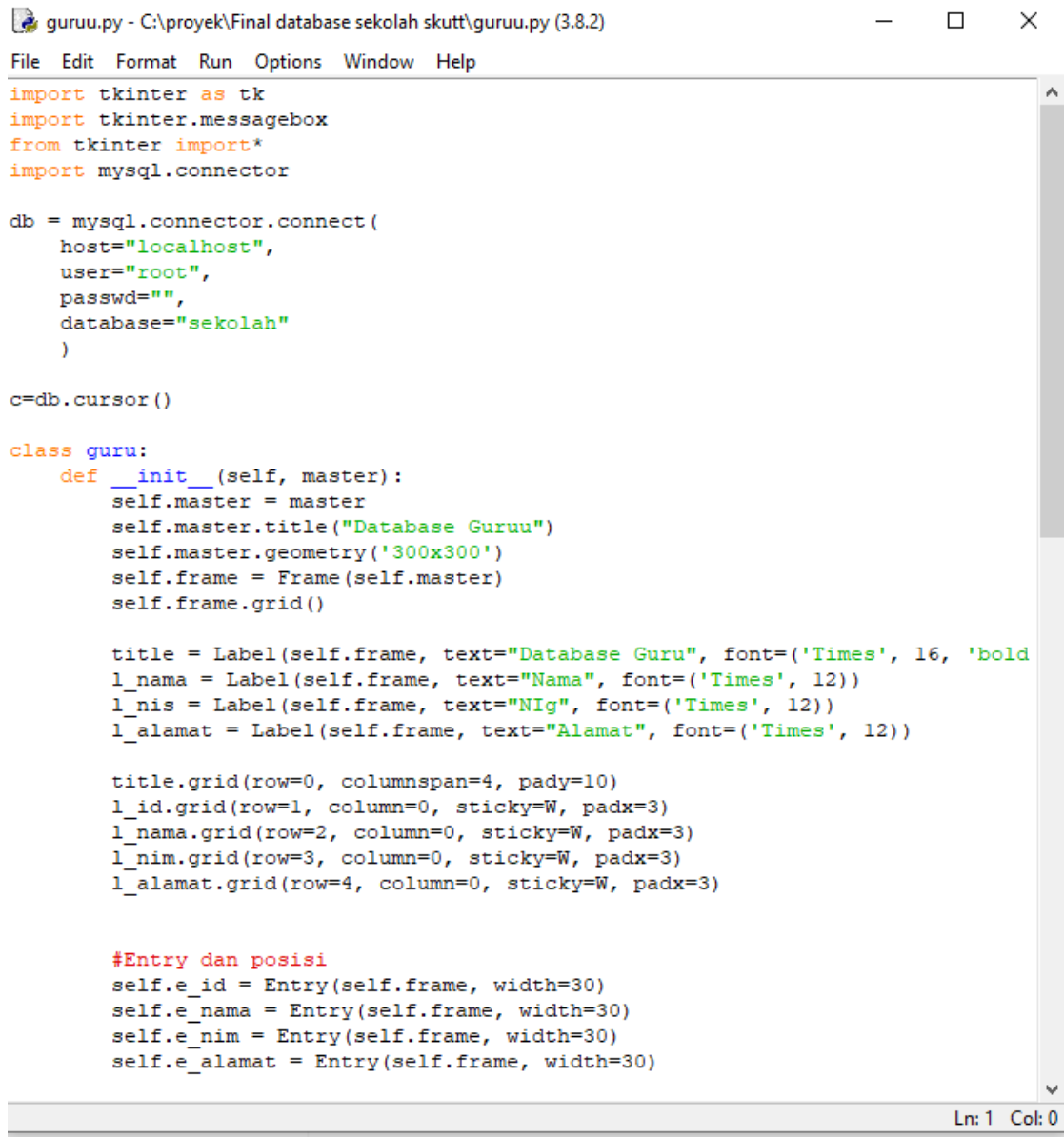
c=db.cursor()

class delete_siswa:
    def __init__(self, master):
        self.master = master
        self.frame = Frame(self.master)
        self.frame.grid()

        self.e_delete = Label(self.frame, text="Pilih nis")
        self.e_delete.grid(row=2, column=0, columnspan=2, pady=10, padx=10)
        self.e_nis = Entry(self.frame, width=30)
        self.e_nis.grid(row=4, column=0, columnspan=2, pady=10, padx=10)
        self.b_delete = Button(self.frame, text="Hapus", command=self.delete)
        self.b_delete.grid(row=6, column=0, columnspan=2, pady=10, padx=10)

    def delete(self):
        c=db.cursor()
        e1=self.e_id.get()
        sql = "DELETE FROM siswa WHERE nis=%s"
        val=(e1, )
        c.execute(sql, val)
        db.commit()
        messagebox.showinfo("", "Data Berhasil Dihapus")
```


- Guruu



```
guruu.py - C:\proyek\Final database sekolah skutt\guruu.py (3.8.2)
File Edit Format Run Options Window Help

import tkinter as tk
import tkinter.messagebox
from tkinter import *
import mysql.connector

db = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd="",
    database="sekolah"
)

c=db.cursor()

class guru:
    def __init__(self, master):
        self.master = master
        self.master.title("Database Guruu")
        self.master.geometry('300x300')
        self.frame = Frame(self.master)
        self.frame.grid()

        title = Label(self.frame, text="Database Guru", font=('Times', 16, 'bold'))
        l_nama = Label(self.frame, text="Nama", font=('Times', 12))
        l_nis = Label(self.frame, text="Nis", font=('Times', 12))
        l_alamat = Label(self.frame, text="Alamat", font=('Times', 12))

        title.grid(row=0, columnspan=4, pady=10)
        l_id.grid(row=1, column=0, sticky=W, padx=3)
        l_nama.grid(row=2, column=0, sticky=W, padx=3)
        l_nim.grid(row=3, column=0, sticky=W, padx=3)
        l_alamat.grid(row=4, column=0, sticky=W, padx=3)

        #Entry dan posisi
        self.e_id = Entry(self.frame, width=30)
        self.e_nama = Entry(self.frame, width=30)
        self.e_nim = Entry(self.frame, width=30)
        self.e_alamat = Entry(self.frame, width=30)
```

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guruu.py - C:\proyek\Final database sekolah skutt\guruu.py (3.8.2)

File Edit Format Run Options Window Help

```
#Entry dan posisi
self.e_id = Entry(self.frame, width=30)
self.e_nama = Entry(self.frame, width=30)
self.e_nim = Entry(self.frame, width=30)
self.e_alamat = Entry(self.frame, width=30)

self.e_id.grid(row=1, column=1, sticky=W, padx=10)
self.e_nama.grid(row=2, column=1, sticky=W, padx=10)
self.e_nim.grid(row=3, column=1, sticky=W, padx=10)
self.e_alamat.grid(row=4, column=1, sticky=W, padx=10)

#Button dan posisi
b_insert = Button(self.frame, text="Insert", command=self.insert_data)
b_update = Button(self.frame, text="Update", command=self.update_data)
b_show = Button(self.frame, text="Show", command=self.show_data)

b_insert.grid(row=5, column=0, pady=10, ipadx=10)
b_update.grid(row=5, column=1, pady=10, ipadx=10)
b_show.grid(row=7, column=1, pady=10, ipadx=10)

def insert_data(self):
    c = db.cursor()
    sql = f"INSERT INTO siswa (`nama`, `nig`, `alamat`)VALUES('{self.e_nama.ge
    c.execute(sql)
    db.commit()
    messagebox.showinfo("", "Entry Data Berhasil")

def update_data(self):
    c = db.cursor()
    e1=self.e_nama.get()
    e2=self.e_nig.get()
    e3=self.e_alamat.get()
    sql = f"UPDATE guruu SET nama=%s, nig=%s WHERE alamat=%s"
    val = (e1,e2,e3,e4)
    c.execute(sql,val)
    db.commit()
    messagebox.showinfo("", "Update Data Berhasil")

def show_data(self):
    show = Tk()
```

Ln: 1 Col: 0

```
def insert_data(self):
    c = db.cursor()
    sql = f"INSERT INTO siswa (`nama`, `nig`, `alamat`)VALUES('{self.e_nama.ge
    c.execute(sql)
    db.commit()
    messagebox.showinfo("", "Entry Data Berhasil")

def update_data(self):
    c = db.cursor()
    e1=self.e_nama.get()
    e2=self.e_nig.get()
    e3=self.e_alamat.get()
    sql = f"UPDATE guruu SET nama=%s, nig=%s WHERE alamat=%s"
    val = (e1,e2,e3,e4)
    c.execute(sql,val)
    db.commit()
    messagebox.showinfo("", "Update Data Berhasil")

def show_data(self):
    show = Tk()
    show.title("Data Guru")
    Label(show, text="Nama").grid(row=0, column=1, sticky=W)
    Label(show, text="NIG").grid(row=0, column=2, sticky=W)
    Label(show, text="Alamat").grid(row=0, column=3, sticky=W)

    sql="select*from guruu"
    c.execute(sql)
    Member = c.fetchall()

    for i in range(len(guruu)):
        for j in range(len(guruu[i])):
            teks=Entry(show)
            teks.grid(row=i+1,column=j)
            teks.insert(END,data[i][j])
```

```
deleteguruu.py - C:\proyek\Final database sekolah skutt\deleteguruu.py (3.8.2)
File Edit Format Run Options Window Help

import tkinter as tk
import tkinter.messagebox
from tkinter import *
import mysql.connector

db = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd="",
    database="sekolah"
)

c=db.cursor()

class delete_data:
    def __init__(self, master):
        self.master = master
        self.frame = Frame(self.master)
        self.frame.grid()

        self.e_delete = Label(self.frame, text="Pilih nig ")
        self.e_delete.grid(row=2, column=0, columnspan=2, pady=10, padx=10)
        self.e_nig = Entry(self.frame, width=30)
        self.e_nig.grid(row=4, column=0, columnspan=2, pady=10, padx=10)
        self.b_delete = Button(self.frame, text="Hapus", command=self.delete)
        self.b_delete.grid(row=6, column=0, columnspan=2, pady=10, padx=10)

    def delete(self):
        c=db.cursor()
        e1=self.e_id.get()
        sql = "DELETE FROM guruu WHERE nig=%s"
        val=(e1, )
        c.execute(sql, val)
        db.commit()
        messagebox.showinfo("", "Data Berhasil Dihapus")

Ln: 1 Col: 0
```

- Pelajaran



```
pelajaran.py - C:\proyek\Final database sekolah skutt\pelajaran.py (3.8.2)
File Edit Format Run Options Window Help

import tkinter as tk
import tkinter.messagebox
from tkinter import *
import mysql.connector

db = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd="",
    database="sekolah"
)

c=db.cursor()

class pelajaran:
    def __init__(self, master):
        self.master = master
        self.master.title("Database pelajaran")
        self.master.geometry('300x300')
        self.frame = Frame(self.master)
        self.frame.grid()

        title = Label(self.frame, text="Database pelajaran", font=('Times', 16),
        l_kode = Label(self.frame, text="Kode", font=('Times', 12))
        l_nama = Label(self.frame, text="Nama", font=('Times', 12))
        l_pengajar = Label(self.frame, text="Pengajar", font=('Times', 12))

        title.grid(row=0, columnspan=4, pady=10)
        l_id.grid(row=1, column=0, sticky=W, padx=3)
        l_nama.grid(row=2, column=0, sticky=W, padx=3)
        l_nim.grid(row=3, column=0, sticky=W, padx=3)
        l_alamat.grid(row=4, column=0, sticky=W, padx=3)

        #Entry dan posisi
        self.e_id = Entry(self.frame, width=30)
        self.e_nama = Entry(self.frame, width=30)
        self.e_nim = Entry(self.frame, width=30)
        self.e_alamat = Entry(self.frame, width=30)

Ln: 1 Col: 0
```

```
#Entry dan posisi
self.e_id = Entry(self.frame, width=30)
self.e_nama = Entry(self.frame, width=30)
self.e_nim = Entry(self.frame, width=30)
self.e_alamat = Entry(self.frame, width=30)

self.e_id.grid(row=1, column=1, sticky=W, padx=10)
self.e_nama.grid(row=2, column=1, sticky=W, padx=10)
self.e_nim.grid(row=3, column=1, sticky=W, padx=10)
self.e_alamat.grid(row=4, column=1, sticky=W, padx=10)

#Button dan posisi
b_insert = Button(self.frame, text="Insert", command=self.insert_data)
b_update = Button(self.frame, text="Update", command=self.update_data)
b_show = Button(self.frame, text="Show", command=self.show_data)

b_insert.grid(row=5, column=0, pady=10, padx=10)
b_update.grid(row=5, column=1, pady=10, padx=10)
b_show.grid(row=7, column=1, pady=10, padx=10)

def insert_data(self):
    c = db.cursor()
    sql = "INSERT INTO pelajaran (`kode`, `nama`, `pengajar`)VALUES('{self.e_k"
    c.execute(sql)
    db.commit()
    messagebox.showinfo("", "Entry Data Berhasil")

def update_data(self):
    c = db.cursor()
    e1=self.e_kode.get()
    e2=self.e_nama.get()
    e3=self.e_pengajar.get()
    sql = "UPDATE pelajaran SET kode=%s, nama=%s WHERE pengajar=%s"
    val = (e1,e2,e3,e4)
    c.execute(sql,val)
    db.commit()
    messagebox.showinfo("", "Update Data Berhasil")

def show_data(self):
    show = Tk()
```

```
def insert_data(self):
    c = db.cursor()
    sql = "INSERT INTO pelajaran (`kode`, `nama`, `pengajar`) VALUES ('{self.e_k
    c.execute(sql)
    db.commit()
    messagebox.showinfo("", "Entry Data Berhasil")

def update_data(self):
    c = db.cursor()
    e1=self.e_kode.get()
    e2=self.e_nama.get()
    e3=self.e_pengajar.get()
    sql = "UPDATE pelajaran SET kode=%s, nama=%s WHERE pengajar=%s"
    val = (e1,e2,e3,e4)
    c.execute(sql,val)
    db.commit()
    messagebox.showinfo("", "Update Data Berhasil")

def show_data(self):
    show = Tk()
    show.title("Data Guru")
    Label(show, text="Nama").grid(row=0, column=1, sticky=W)
    Label(show, text="NIG").grid(row=0, column=2, sticky=W)
    Label(show, text="Alamat").grid(row=0, column=3, sticky=W)

    sql="select*from pelajaran"
    c.execute(sql)
    Member = c.fetchall()

    for i in range(len(pelajaran)):
        for j in range(len(pelajaran[i])):
            teks=Entry(show)
            teks.grid(row=i+1,column=j)
            teks.insert(END,data[i][j])
```

```
deletepelajaran.py - C:\proyek\Final database sekolah skutt\deletepelajaran.py (3.8.2)
File Edit Format Run Options Window Help

import tkinter as tk
import tkinter.messagebox
from tkinter import *
import mysql.connector

db = mysql.connector.connect(
    host="localhost",
    user="root",
    passwd="",
    database="sekolah"
)

c=db.cursor()

class delete_data:
    def __init__(self, master):
        self.master = master
        self.frame = Frame(self.master)
        self.frame.grid()

        self.e_delete = Label(self.frame, text="Pilih kode pelajaran ")
        self.e_delete.grid(row=2, column=0, columnspan=2, pady=10, padx=10)
        self.e_nig = Entry(self.frame, width=30)
        self.e_nig.grid(row=4, column=0, columnspan=2, pady=10, padx=10)
        self.b_delete = Button(self.frame, text="Hapus", command=self.delete)
        self.b_delete.grid(row=6, column=0, columnspan=2, pady=10, padx=10)

    def delete(self):
        c=db.cursor()
        e1=self.e_id.get()
        sql = "DELETE FROM pelajaran WHERE kode=%s"
        val=(e1, )
        c.execute(sql, val)
        db.commit()
        messagebox.showinfo("", "Data Berhasil Dihapus")

Ln: 1 Col: 0
```


Eksekusi Program

Database Siswa

Database Siswa

Nama

Nis

Alamat

Database guru

Database Guru

Nama

Nig

Alamat

Database Pelajaran

Database Pelajaran

Kode

Nama

Pengajar

Data Siswa

Nama	Nis	Alamat
Septian H	200500002	Jl. Garuda III/32 RT.005/03
Amalia	200500003	Jl. Ciak RT.004/01 No.18
Neymar	200500004	Gg. Subur Ujung No.12 RT.012/015

Data Guru

Nama	NIG	Alamat
Sugeng Riyadi	200501	Jl. Mendungan III/32 RT.005/02
Sartono B	200502	Jl. Hj.Muslich RT.004/01 No.18
Nur Hidayat	200503	Gg. Subur Ujung RT.012/015

Data Pelajaran

Kode	Nama	Pengajar
22	Pkn	Sartono
33	Matematika	Isbani
44	Sejarah	Sugeng Riyadi

Localhost / 127.0.0.1: phpMyAdmin

Server: 127.0.0.1 Database: sekolah Table: guru

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 2 (3 total. Query took 0.0006 seconds)

```
SELECT * FROM 'guru'
```

Options

idg	nama	alamat
200501	Sugeng Riyadi	Jl. Mendungan III/32 RT 005/02
200502	Sartono	Jl. H. Muslich RT 004/01 No. 18
200503	Nur Hidayat	Gg. Subur Ujung RT 012/015

Query results operations

Bookmark this SQL query

Label: ☐ Let every user access this bookmark

Localhost / 127.0.0.1: phpMyAdmin

Server: 127.0.0.1 Database: sekolah Table: pelajaran

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 2 (3 total. Query took 0.0007 seconds)

```
SELECT * FROM 'pelajaran'
```

Options

kode	nama	pengajar
22	Pkn	Sartono
33	Matematika	Iskani
44	Sejarah	Sugeng Riyadi

Query results operations

Bookmark this SQL query

Label: ☐ Let every user access this bookmark

Localhost / 127.0.0.1

Server: 127.0.0.1 Database: sekolah Table: siswa

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 2 (3 total. Query took 0.0006 seconds)

SELECT * FROM 'siswa'

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

Show all | Number of rows: 25 | Filter rows: Search this table

Options

nis	nama	alamat
200500002	Septian H. J.	Garuda III/32 RT.005/03
200500003	Amalia	Jl. Ciak RT.004/01 No.18
200500004	Neymar	Gg. Subur Ujung No.12 RT.012/015

Show all | Number of rows: 25 | Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

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Console