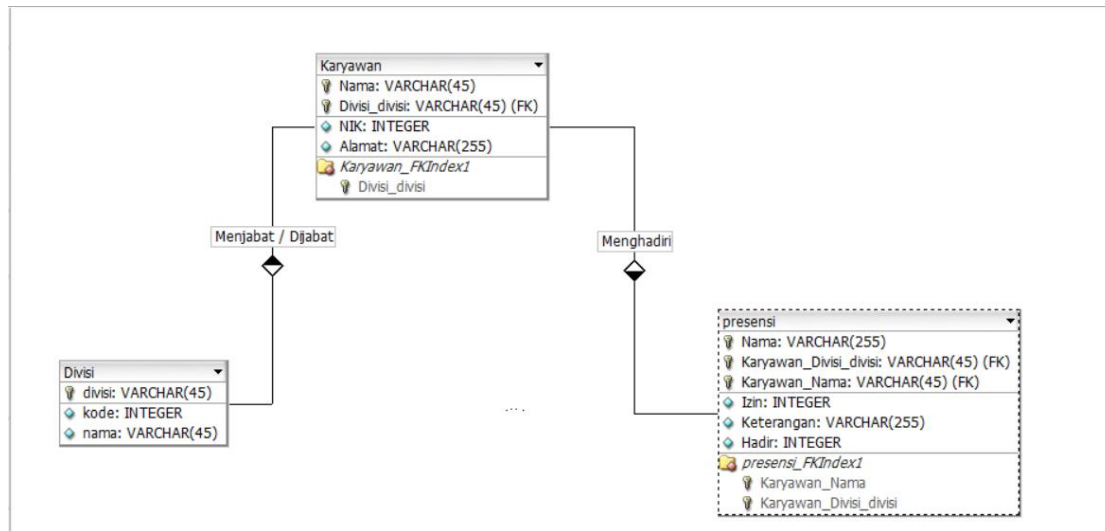Nama   : Danang Ady Saputro Widodo
NIM   : L200180205
Kelas   : H

Praktikum Modul 12

Membuat Database Perusahaan

Membuat Table Karyawan, Divisi, Presensi

```
tablekar.py - C:\WiMu Database\tablekar.py (3.6.5)
File  Edit  Format  Run  Options  Window  Help

import mysql.connector

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

cursor = mydb.cursor()

query = """
CREATE TABLE karyawan
(
    nik INT(10),
    nama VARCHAR(100),
    alamat VARCHAR(100)
)
"""

cursor.execute(query)

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

```
tablediv.py - C:\WiMu Database\tablediv.py (3.6.5)
File  Edit  Format  Run  Options  Window  Help

import mysql.connector

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

cursor = mydb.cursor()

query = """
CREATE TABLE divisi
(
    divisi VARCHAR(100),
    kode  INT(10),
    nama VARCHAR(100)
)
"""

cursor.execute(query)

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

File   Edit   Format   Run   Options   Window   Help

```python
import mysql.connector

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

cursor = mydb.cursor()

query = """
CREATE TABLE presensi
(
    Nama VARCHAR (45),
    Izin INT(10),
    Keterangan VARCHAR(100),
    Hadir INT(45)
)
"""

cursor.execute(query)

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

Membuat Kode CRUD Database

Aplikasi Manajemen Perusahaan.py - C:\WiMu Database\Aplikasi Manajemen Perusahaan.py (3.6.5)   —   □   ×

File   Edit   Format   Run   Options   Window   Help

```python
import tkinter as tk
import tkinter.messagebox
from tkinter import*
import mysql.connector
from karyawan_db import karyawan
from divisi_db import divisi
from presensi_db import presensi


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

c=db.cursor()

root = tk.Tk()

def CRUD():
    UI=FPage(root)
    cursor=db.cursor()

class FPage:
    def __init__(self, master):
        self.master = master
        self.master.geometry("400x400")
        self.master.config(bg = 'white')
        self.frame = Frame(self.master, bg = 'white')
        self.frame.pack()

        title = Label(self.frame, text='SELAMAT DATANG', font=('Times', 18, 'bold'))
        title.pack()
```

```python
    def __init__(self, master):
        self.master = master
        self.master.geometry("400x400")
        self.master.config(bg = 'white')
        self.frame = Frame(self.master, bg = 'white')
        self.frame.pack()

        title = Label(self.frame, text='SELAMAT DATANG', font=('Times', 18, 'bold'))
        title.pack()
        title2 = Label(self.frame, text='Pilih Menu', font=('Times', 14))
        title2.pack(pady=20)
        btnKaryawan = Button(self.frame, text="Karyawan", font=(18), command=self.karyawan)
        btnKaryawan.pack(anchor=CENTER, pady=10, ipadx=9)
        btnDivisi = Button(self.frame, text="Divisi", font=(18), command=self.divisi)
        btnDivisi.pack(anchor=CENTER, pady=10, ipadx=20)
        btnPresensi = Button(self.frame, text="Presensis", font=(18), command=self.presensi)
        btnPresensi.pack(anchor=CENTER, pady=10, ipadx=15)

    def karyawan(self):
        self.karyawanr=Toplevel(self.master)
        self.UI=karyawan(self.karyawan)

    def divisi(self):
        self.divisi=Toplevel(self.master)
        self.UI=divisi(self.divisi)

    def presensi(self):
        self.presensi=Toplevel(self.master)
        self.UI=presensi(self.presensi)
```

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

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

c=db.cursor()

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

        title = Label(self.frame, text="Database Karyawan", font=('Times', 16, 'bold'))
        l_nama = Label(self.frame, text="Nama", font=('Times', 12))
        l_nik = Label(self.frame, text="NIK ", font=('Times', 12))
        l_alamat = Label(self.frame, text="Alamat", font=('Times', 12))

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


        #Entry dan posisi
```

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

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

    #Button dan posisi
    b_insert = Button(self.frame, text="Insert", command=self.insert_karyawan)
    b_update = Button(self.frame, text="Update", command=self.update_karyawan)
    b_show = Button(self.frame, text="Show", command=self.show_karyawan)

    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_karyawan(self):
    c = db.cursor()
    sql =f"INSERT INTO karyawan (`nama`,`nik`, `alamat`)VALUES('{self.e_id.get()}','{self.e_nama.get(
    c.execute(sql)
    db.commit()
    messagebox.showinfo("","Entry Data Berhasil")

def update_karyawan(self):
    c = db.cursor()
    e1=self.e_nama.get()
    e2=self.e_nik.get()
    e3=self.e_alamat.get()
    sql =f"UPDATE karyawan SET nama=%s ,alamat=%s where nik=%s "
    val = (e1,e2,e3)
    c.execute(sql,val)
```

```python
def update_karyawan(self):
    c = db.cursor()
    e1=self.e_nama.get()
    e2=self.e_nik.get()
    e3=self.e_alamat.get()
    sql =f"UPDATE karyawan SET nama=%s ,alamat=%s where nik=%s "
    val = (e1,e2,e3)
    c.execute(sql,val)
    db.commit()
    messagebox.showinfo("","Update Data Berhasil")

def show_karyawan(self):
    show = Tk()
    show.title("Data Karyawan")
    Label(show, text="Nama").grid(row=0, column=0, sticky=W)
    Label(show, text="NIK").grid(row=0, column=1, sticky=W)
    Label(show, text="Alamat").grid(row=0, column=2, sticky=W)

    sql="select*from karyawan"
    c.execute(sql)
    divisi = c.fetchall()

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

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

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

c=db.cursor()

class presensi:
    def __init__(self, master):
        self.master = master
        self.master.geometry('450x250')
        self.frame = Frame(self.master)
        self.frame.grid()

        title = Label(self.frame, text="Pendataan Presensi Karyawan", font=('Times', 16, 'bold'))
        l_nama = Label(self.frame, text="Nama Karyawan", font=('Times', 12))
        l_izin = Label(self.frame, text="Izin", font=('Times', 12))
        l_keterangan = Label(self.frame, text="Keterangan", font=('Times', 12))
        l_hadir= Label(self.frame, text="Hadir", font=('Times', 12))

        title.grid(row=0, columnspan=4, pady=10)
        l_nama.grid(row=1, column=0, sticky=W, padx=3)
        l_izin.grid(row=2, column=0, sticky=W, padx=3)
        l_keterangan.grid(row=3, column=0, sticky=W, padx=3)
        l_hadir.grid(row=4, column=0, sticky=W, padx=3)
```

```python
        #Entry dan posisi
        self.e_nama = Entry(self.frame, width=30)
        self.e_izin = Entry(self.frame, width=30)
        self.e_keterangan = Entry(self.frame, width=30)
        self.e_hadir = Entry(self.frame, width=30)

        self.e_nama.grid(row=1, column=1, sticky=W, padx=10)
        self.e_izin.grid(row=2, column=1, sticky=W, padx=10)
        self.e_keterangan.grid(row=3, column=1, sticky=W, padx=10)
        self.e_hadir.grid(row=4, column=1, sticky=W, padx=10)

        #Button dan posisi
        b_insert = Button(self.frame, text="Insert", command=self.insert_presensi)
        b_update = Button(self.frame, text="Update", command=self.update_presensi)
        b_show = Button(self.frame, text="Show", command=self.show_presensi)

        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=5, column=2, pady=10, ipadx=10)

def insert_presensi(self):
    c = db.cursor()
    sql =f"INSERT INTO peminjaman (`namaFK`,`izinFK`,`keterangan`, `hadir`)VALUES('{self.e_nama.ge
    c.execute(sql)
    db.commit()
    messagebox.showinfo("","Entry Data Berhasil")

def update_presensi(self):
    c = db.cursor()
    e1=self.e_nama.get()
    e2=self.e_hadir.get()

    sql =f"UPDATE Presensi SET hadirFK=%s where namaFK=%s"
```

```python
        db.commit()
        messagebox.showinfo("","Entry Data Berhasil")

    def update_presensi(self):
        c = db.cursor()
        e1=self.e_nama.get()
        e2=self.e_hadir.get()

        sql =f"UPDATE Presensi SET hadirFK=%s where namaFK=%s"
        val = (e1,e2)
        c.execute(sql,val)
        db.commit()
        messagebox.showinfo("","Update Data Berhasil")

    def show_presensi(self):
        presensi = Tk()
        presensi.title("Presensi Karyawan")
        Label(presensi, text="Nama").grid(row=0, column=0, sticky=W)
        Label(presensi, text="izin").grid(row=0, column=1, sticky=W)
        Label(presensi, text="Keterangan").grid(row=0, column=2, sticky=W)
        Label(presensi, text="Hadir").grid(row=0, column=3, sticky=W)


        sql="select*from peminjaman_pengembalian"
        c.execute(sql)
        presensi = c.fetchall()

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

```python
import tkinter as tk
import tkinter.messagebox
from tkinter import*
import mysql.connector
from delete_divisi_db import delete_divisi

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

c=db.cursor()

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

        title = Label(self.frame, text="Database Divisi", font=('Times', 16, 'bold'))
        l_divisi= Label(self.frame, text="Nama Divisi", font=('Times', 12))
        l_kode = Label(self.frame, text="Kode Divisi", font=('Times', 12))
        l_nama = Label(self.frame, text="Nama Karyawan", font=('Times', 12))


        title.grid(row=0, columnspan=4, pady=10)
        l_divisi.grid(row=1, column=0, sticky=W, padx=3)
        l_kode.grid(row=2, column=0, sticky=W, padx=3)
        l_nama.grid(row=3, column=0, sticky=W, padx=3)
```

```python
    #Entry dan posisi
    self.e_divisi = Entry(self.frame, width=30)
    self.e_kode = Entry(self.frame, width=30)
    self.e_nama = Entry(self.frame, width=30)


    self.e_divisi.grid(row=1, column=1, sticky=W, padx=10)
    self.e_kode.grid(row=2, column=1, sticky=W, padx=10)
    self.e_nama.grid(row=3, column=1, sticky=W, padx=10)


    #Button dan posisi
    b_insert = Button(self.frame, text="Insert", command=self.insert_divisi)
    b_update = Button(self.frame, text="Update", command=self.update_divisi)
    b_show = Button(self.frame, text="Show", command=self.show_divisi)
    b_delete = Button(self.frame, text="Delete", command=self.delete_divisi)


    b_insert.grid(row=6, column=0, pady=10, ipadx=10)
    b_update.grid(row=6, column=1, pady=10, ipadx=10)
    b_show.grid(row=7, column=1, pady=10, ipadx=10)
    b_delete.grid(row=7, column=0, pady=10, ipadx=10)

def insert_divisi(self):
    cursor = db.cursor()
    sql =f"INSERT INTO divisi (`divisi`,`kode`,`nama` ,)VALUES('{self.e_divisi.get()}','{self.e_kode.get()
    cursor.execute(sql)
    db.commit()
    messagebox.showinfo("","Entry Data Berhasil")


def update_divisi(self):
```

```python
    def update_divisi(self):
        c = db.cursor()
        e1=self.e_divisi.get()
        e2=self.e_kode.get()
        e3=self.e_nama.get()
        sql =f"UPDATE divisi SET divisi=%s, nama=%s ,kode=%s"
        val = (e1,e2,e3)
        c.execute(sql,val)
        db.commit()
        messagebox.showinfo("","Update Data Berhasil")

    def show_divisi(self):
        show = Tk()
        show.title("Data Divisi")
        Label(show, text="Divisi").grid(row=0, column=0, sticky=W)
        Label(show, text="Kode").grid(row=0, column=1, sticky=W)
        Label(show, text="Nama").grid(row=0, column=2, sticky=W)


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

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

    def delete_divisi(self):
        self.delete_divisi=Toplevel(self.master)
        self.UI=delete_divisi(self.delete_divisi)
```

Eksekusi Program