PRAKTIKUM ALGORITMA dan PEMROGRAMAN PRAKTIKUM 11: TOPIK LANJUT (PROGRAM GUI)



Disusun Oleh: AS'AD NIROT AHMADI L200220155

PROGRAM STUDI TEKNIK INFORMATIKA
FAKULTAS KOMUNIKASI DAN INFORMATIKA
UNIVERSITAS MUHAMMADIYAH SURAKARTA
TAHUN 2022/2023

Kegiatan 1. Menampilkan data diri

```
prak11.1.py - D:/Prak ALGOPRO/pyhton/prak11.1.py (3.10.7)
                                                                                  X
File Edit Format Run Options Window Help
from tkinter import Tk, Label, Entry, mainloop
from tkinter import LEFT, RIGHT
app = Tk(className = "Aplikasi dengan tabel")
l = Label(app, text='Data diri',
font=('Arial', 30, 'bold')).grid()
12 = Label(app, text='Nama')
12.grid(row=1, column=0)
e2 = Entry(app)
e2.grid(row=1, column=1)
13 = Label(app, text='NIM')
13.grid(row=2, column=0)
e3 = Entry(app)
e3.grid(row=2, column=1)
14 = Label(app, text='Buku favorit')
14.grid(row=3, column=0)
e4 = Entry(app)
e4.grid(row=3, column=1)
15 = Label(app, text='Idola di kalangan sahabat')
15.grid(row=4, column=0)
e5 = Entry(app)
e5.grid(row=4, column=1)
16 = Label(app, text='Motto')
16.grid(row=5, column=0)
e6 = Entry(app)
e6.grid(row=5, column=1)
app, mainloop()
```

Kode program:

```
from tkinter import Tk, Label, Entry, mainloop
from tkinter import LEFT, RIGHT
app = Tk(className = "Aplikasi dengan tabel")
1 = Label(app, text='Data diri',
font=('Arial', 30, 'bold')).grid()
12 = Label(app, text='Nama')
12.grid(row=1, column=0)
e2 = Entry(app)
e2.grid(row=1, column=1)
13 = Label(app, text='NIM')
13.grid(row=2, column=0)
e3 = Entry(app)
e3.grid(row=2, column=1)
14 = Label(app, text='Buku favorit')
14.grid(row=3, column=0)
e4 = Entry(app)
e4.grid(row=3, column=1)
15 = Label(app, text='Idola di kalangan sahabat')
15.grid(row=4, column=0)
e5 = Entry(app)
e5.grid(row=4, column=1)
16 = Label(app, text='Motto')
16.grid(row=5, column=0)
e6 = Entry(app)
e6.grid(row=5, column=1)
app,mainloop()
```

Kegiatan 2. Membuat kalkulator sederhana

```
def hapus():
    strl.set(0)
    str2.set(0)
    c.set(0)
b1 = Button(app, text='+', command=plus)
b1.grid(row=2, column=0)
b1.grid(padx=25, pady =10)
b2 = Button(app, text='-', command=min)
b2.grid(row=2, column=1)
b2.grid(padx=25, pady =10)
b3 = Button(app, text='x', command=kali)
b3.grid(row=2, column=2)
b3.grid(padx=25, pady =10)
b4 = Button(app, text=':', command=bagi)
b4.grid(row=2, column=3)
b4.grid(padx=25, pady =10)
b5 = Button(app, text='Hapus', command=hapus)
b5.grid(row=4, columnspan=3)
b5.grid(padx=25, pady =10)
13 = Label(app, text='Hasil').grid(row=3, column=0)
e3 = Entry(app, textvariable=c)
e3.grid(row=3, column=1)
e3.grid(padx=15, pady=10)
app, mainloop()
```

Kode program:

```
from tkinter import*
app = Tk()
11 = Label(app, text='Angka 1')
11.grid(row=0, column=0)
str1 = StringVar()
e1 = Entry(app, textvariable=str1)
e1.grid(row=0, column=1)
12 = Label(app, text='Angka 2')
12.grid(row=1, column=0)
str2 = StringVar()
e2 = Entry(app, textvariable=str2)
e2.grid(row=1, column=1)
c = StringVar()
def plus(*args):
  a = str1.get()
  b = str2.get()
  tambah = int(a) + int(b)
  c.set(tambah)
def min(*args):
  a = str1.get()
  b = str2.get()
  kurang = int(a) - int(b)
  c.set(kurang)
def kali(*args):
  a = str1.get()
  b = str2.get()
  kali = int(a) * int(b)
  c.set(kali)
def bagi(*args):
  a = str1.get()
  b = str2.get()
```

```
bagi = int(a) / int(b)
  c.set(bagi)
def hapus():
  str1.set(0)
  str2.set(0)
  c.set(0)
b1 = Button(app, text='+', command=plus)
b1.grid(row=2, column=0)
b1.grid(padx=25, pady = 10)
b2 = Button(app, text='-', command=min)
b2.grid(row=2, column=1)
b2.grid(padx=25, pady = 10)
b3 = Button(app, text='x', command=kali)
b3.grid(row=2, column=2)
b3.grid(padx=25, pady = 10)
b4 = Button(app, text=':', command=bagi)
b4.grid(row=2, column=3)
b4.grid(padx=25, pady = 10)
b5 = Button(app, text='Hapus', command=hapus)
b5.grid(row=4, columnspan=3)
b5.grid(padx=25, pady = 10)
13 = Label(app, text='Hasil').grid(row=3, column=0)
e3 = Entry(app, textvariable=c)
e3.grid(row=3, column=1)
e3.grid(padx=15, pady=10)
app, mainloop()
```

Kegiatan 3. Menghitung luas bangun geometri

```
X
prak11.3.py - D:/Prak ALGOPRO/pyhton/prak11.3.py (3.10.7)
<u>File Edit Format Run Options Window Help</u>
from tkinter import*
app = Tk()
l = Label(app, text='Data diri',
font=('Arial', 30, 'bold')).grid(row=0, column=0)
la = Label(app, text='bangun yang saya dapat adalah piramid yang merupakan bangu
la.grid()
11 = Label(app, text='Sisi alas:')
11.grid(row=10, column=0)
str1 = StringVar()
e1 = Entry(app, textvariable=str1)
e1.grid(row=10, column=1)
12 = Label(app, text='Tinggi Segitiga:')
12.grid(row=15, column=0)
str2 = StringVar()
e2 = Entry(app, textvariable=str2)
e2.grid(row=15, column=1)
c = StringVar()
def hitung(*args):
    a = str1.get()
    b = str2.get()
    luasAlas = int(a) * int(a)
    sisiTegak= int(a) * int(b)/2
    luasPiramid = luasAlas + (4*sisiTegak)
    c.set(luasPiramid)
b1 = Button(app, text='Hitung luas', command = hitung)
b1.grid(row=20, column=0)
b1.grid(padx=25, pady =15)
13 = Label(app, text='Luas').grid(row=20, column=1)
e3 = Entry(app, textvariable=c)
e3.grid(row=20, column=2)
app, mainloop()
                                                                              Ln: 8 Col: 9
```

Kode program:

```
from tkinter import*
app = Tk()
1 = Label(app, text='Data diri',
font=('Arial', 30, 'bold')).grid(row=0, column=0)
la = Label(app, text='bangun yang saya dapat adalah piramid yang merupakan bangun ruang limas
segi empat')
la.grid()
11 = Label(app, text='Sisi alas:')
11.grid(row=10, column=0)
str1 = StringVar()
e1 = Entry(app, textvariable=str1)
e1.grid(row=10, column=1)
12 = Label(app, text='Tinggi Segitiga:')
12.grid(row=15, column=0)
str2 = StringVar()
e2 = Entry(app, textvariable=str2)
e2.grid(row=15, column=1)
c = StringVar()
def hitung(*args):
  a = str1.get()
  b = str2.get()
  luasAlas = int(a) * int(a)
  sisiTegak = int(a) * int(b)/2
  luasPiramid = luasAlas + (4*sisiTegak)
  c.set(luasPiramid)
b1 = Button(app, text='Hitung luas', command = hitung)
b1.grid(row=20, column=0)
b1.grid(padx=25, pady=15)
13 = Label(app, text='Luas').grid(row=20, column=1)
e3 = Entry(app, textvariable=c)
e3.grid(row=20, column=2)
app, mainloop()
```