

PRAKTIKUM ALGORITMA DAN PEMROGRAMAN

TOPIK LANJUT (PROGRAM GUI)



DISUSUN OLEH :

NAMA : FAKHRI SETYO UTOMO

NIM : L200190180

PRODI INFORMATIKA

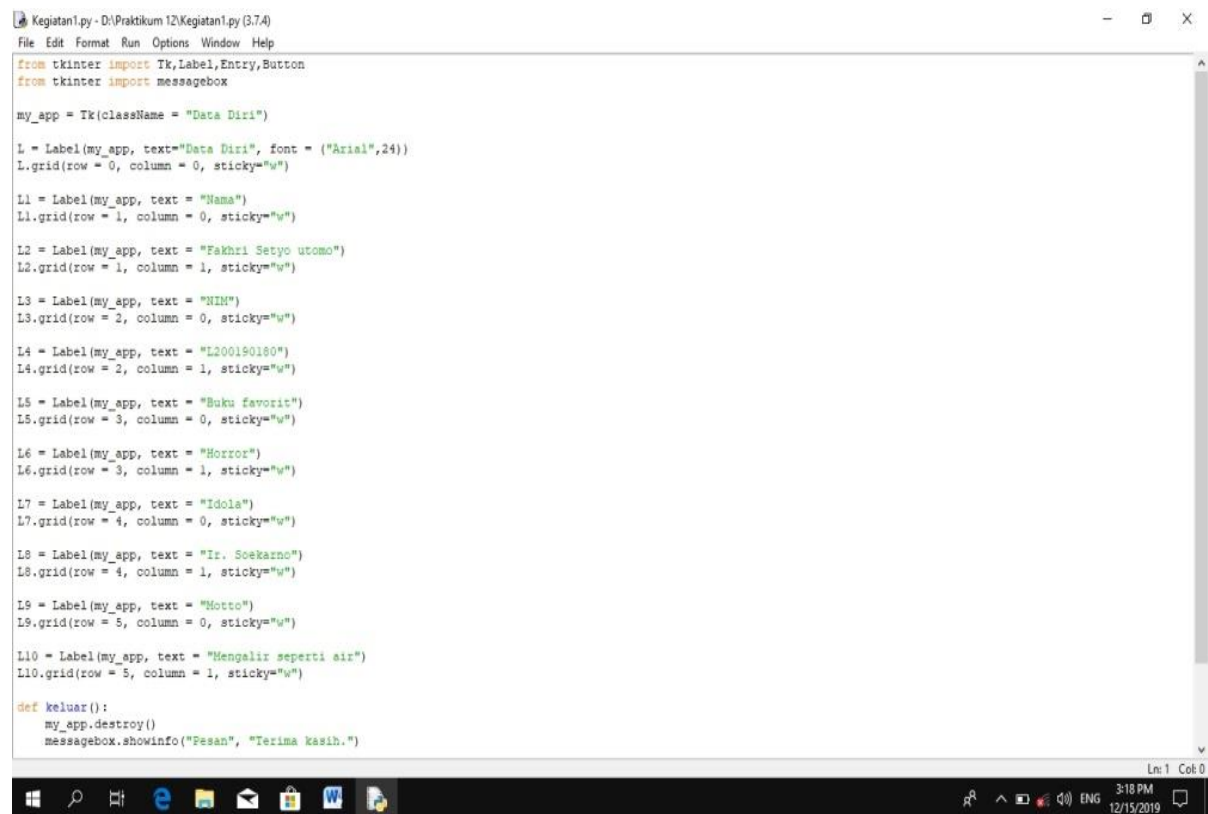
FAKULTAS KOMUNIKASI DAN INFORMATIKA

UNIVERSITAS MUHAMADIYAH SURAKARTA

2019/2020

Kegiatan 1.

Screenshot dari aplikasi Data Diri adalah sebagai berikut.



```
Kegiatan1.py - D:\Praktikum 12\Kegiatan1.py (3,74)
File Edit Format Run Options Window Help

from tkinter import Tk, Label, Entry, Button
from tkinter import messagebox

my_app = Tk(className = "Data Diri")

L = Label(my_app, text="Data Diri", font = ("Arial",24))
L.grid(row = 0, column = 0, sticky="w")

L1 = Label(my_app, text = "Nama")
L1.grid(row = 1, column = 0, sticky="w")

L2 = Label(my_app, text = "Fakhri Setyo utomo")
L2.grid(row = 1, column = 1, sticky="w")

L3 = Label(my_app, text = "NIM")
L3.grid(row = 2, column = 0, sticky="w")

L4 = Label(my_app, text = "L200190180")
L4.grid(row = 2, column = 1, sticky="w")

L5 = Label(my_app, text = "Buku favorit")
L5.grid(row = 3, column = 0, sticky="w")

L6 = Label(my_app, text = "Horror")
L6.grid(row = 3, column = 1, sticky="w")

L7 = Label(my_app, text = "Idola")
L7.grid(row = 4, column = 0, sticky="w")

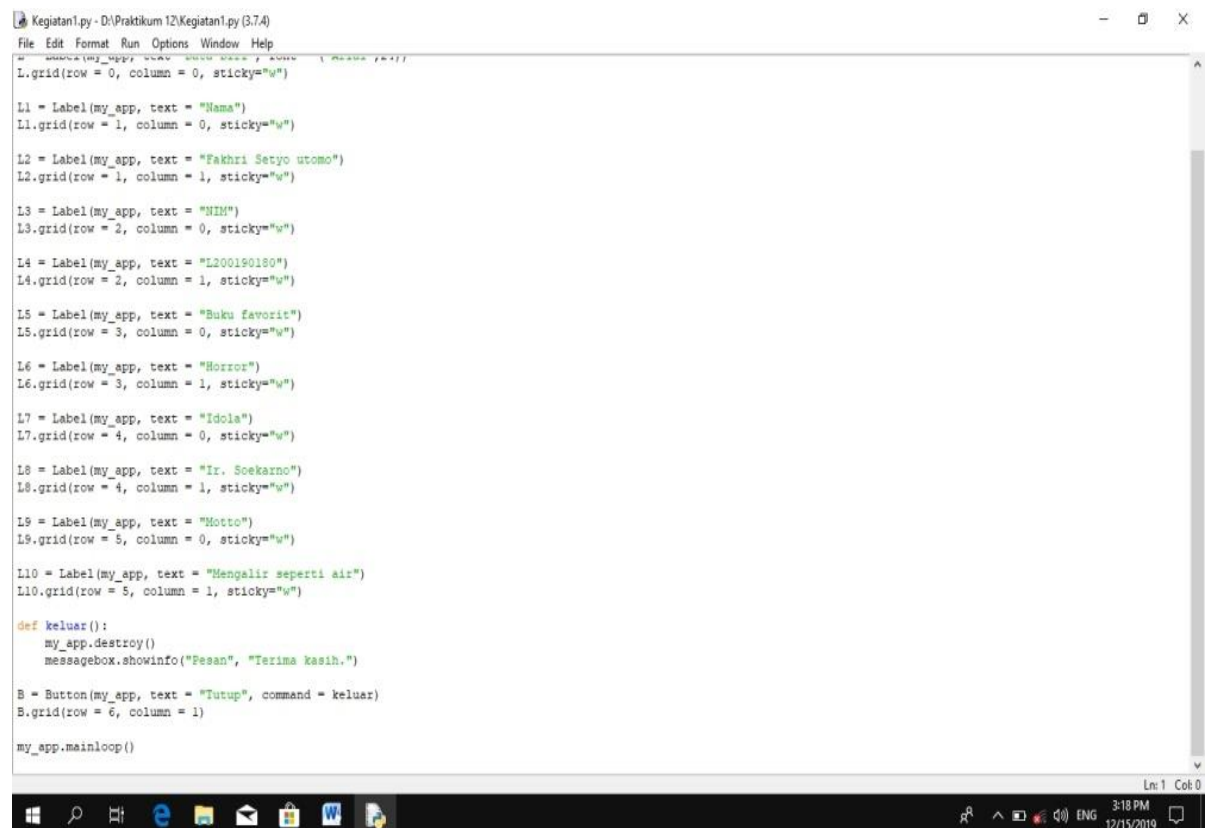
L8 = Label(my_app, text = "Ir. Soekarno")
L8.grid(row = 4, column = 1, sticky="w")

L9 = Label(my_app, text = "Motto")
L9.grid(row = 5, column = 0, sticky="w")

L10 = Label(my_app, text = "Mengalir seperti air")
L10.grid(row = 5, column = 1, sticky="w")

def keluar():
    my_app.destroy()
    messagebox.showinfo("Pesan", "Terima kasih.")

Ln: 1 Col: 0
```



```
Kegiatan1.py - D:\Praktikum 12\Kegiatan1.py (3,74)
File Edit Format Run Options Window Help

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from tkinter import messagebox

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L1 = Label(my_app, text = "Nama")
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L2 = Label(my_app, text = "Fakhri Setyo utomo")
L2.grid(row = 1, column = 1, sticky="w")

L3 = Label(my_app, text = "NIM")
L3.grid(row = 2, column = 0, sticky="w")

L4 = Label(my_app, text = "L200190180")
L4.grid(row = 2, column = 1, sticky="w")

L5 = Label(my_app, text = "Buku favorit")
L5.grid(row = 3, column = 0, sticky="w")

L6 = Label(my_app, text = "Horror")
L6.grid(row = 3, column = 1, sticky="w")

L7 = Label(my_app, text = "Idola")
L7.grid(row = 4, column = 0, sticky="w")

L8 = Label(my_app, text = "Ir. Soekarno")
L8.grid(row = 4, column = 1, sticky="w")

L9 = Label(my_app, text = "Motto")
L9.grid(row = 5, column = 0, sticky="w")

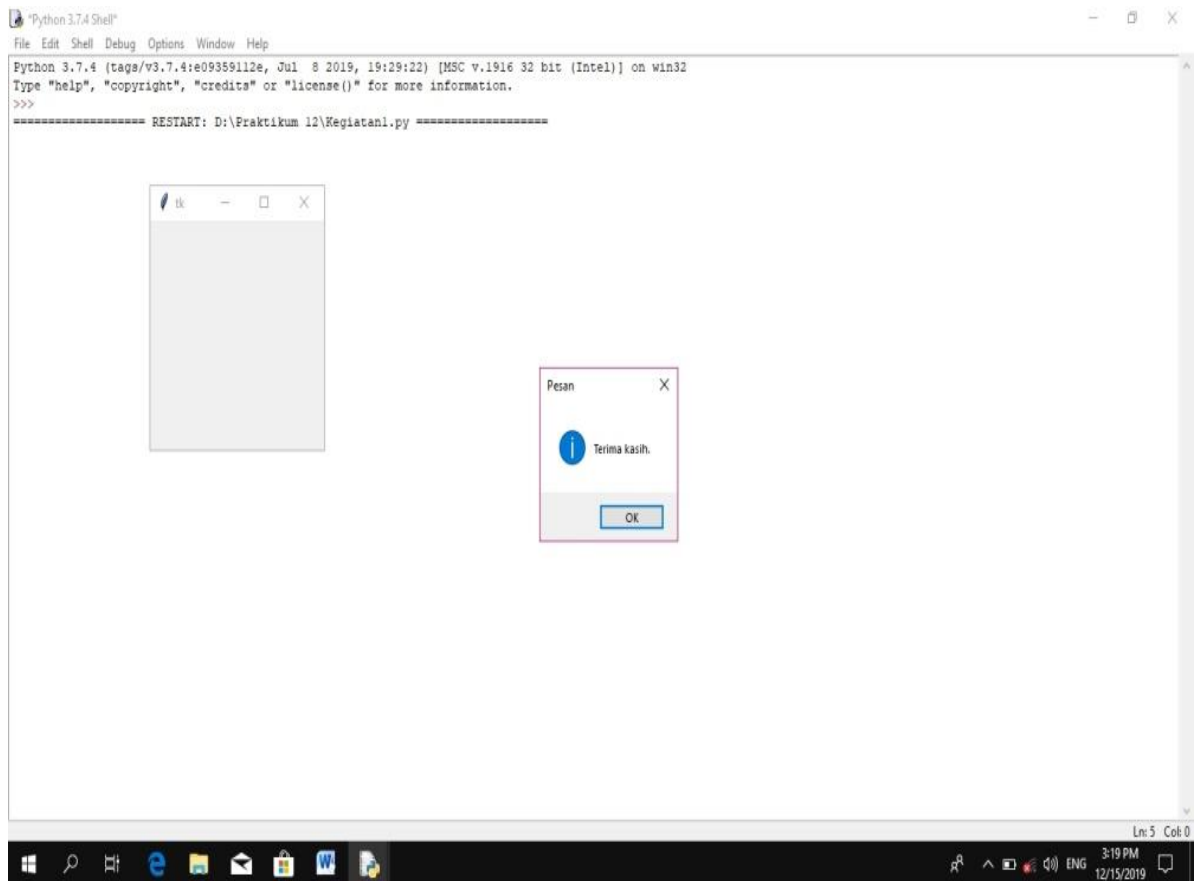
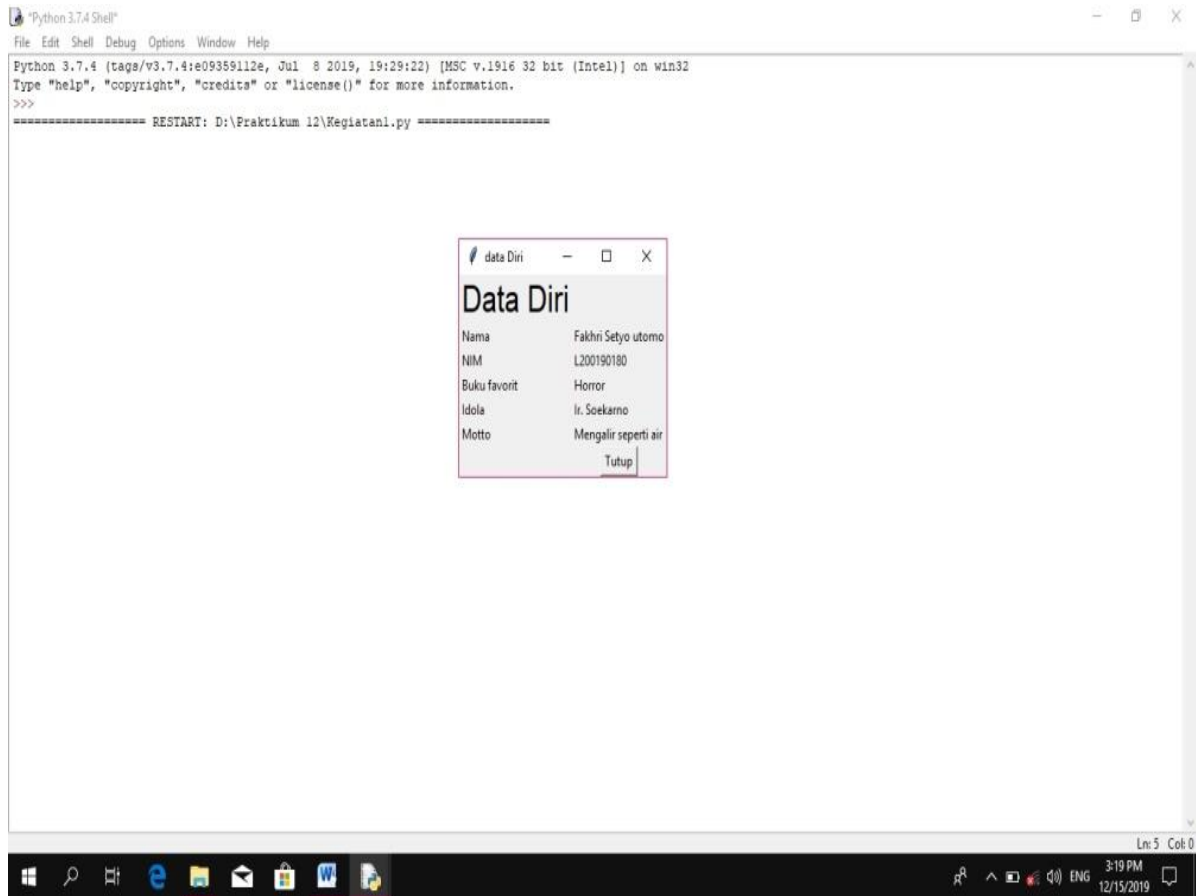
L10 = Label(my_app, text = "Mengalir seperti air")
L10.grid(row = 5, column = 1, sticky="w")

def keluar():
    my_app.destroy()
    messagebox.showinfo("Pesan", "Terima kasih.")

B = Button(my_app, text = "Tutup", command = keluar)
B.grid(row = 6, column = 1)

my_app.mainloop()

Ln: 1 Col: 0
```



Kegiatan 2.

Screenshot dari kalkulator sederhana adalah sebagai berikut



```
Kegiatan2.py - D:\Praktikum 12\Kegiatan2.py (3.7.4)
File Edit Format Run Options Window Help

from tkinter import Tk, Label, Entry, Button, IntVar
from tkinter import messagebox

my_app = Tk(className = "Kalkulator Sederhana")

L = Label(my_app, text = "Angka 1")
L.grid(row = 0, column = 0, sticky="w")

angka1 = IntVar()
E = Entry(my_app, textvariable = angka1)
E.grid(row = 0, column = 1, columnspan = 3)

L1 = Label(my_app, text = "Angka 2")
L1.grid(row = 1, column = 0, sticky="w")

angka2 = IntVar()
E1 = Entry(my_app, textvariable = angka2)
E1.grid(row = 1, column = 1, columnspan = 3)

H = Label(my_app, text = "Hasil")
H.grid(row = 3, column = 0, sticky="w")

H1 = Label(my_app)
H1.grid(row = 3, column = 2, sticky="w")

def Hitung(op):
    if op == '+':
        hasil = angka1.get()+angka2.get()
    elif op == '-':
        hasil = angka1.get()-angka2.get()
    elif op == '*':
        hasil = angka1.get()*angka2.get()
    elif op == '/':
        hasil = angka1.get()/angka2.get()

    H1.config(text = hasil)

B1 = Button(my_app, text = "+", width="8", command = lambda:Hitung('+'))
B1.grid(row = 2, column = 0)

B2 = Button(my_app, text = "-", width="8", command = lambda:Hitung('-'))
B2.grid(row = 2, column = 1)
```



```
E1.grid(row = 0, column = 1, columnspan = 3)

L1 = Label(my_app, text = "Angka 2")
L1.grid(row = 1, column = 0, sticky="w")

angka2 = IntVar()
E1 = Entry(my_app, textvariable = angka2)
E1.grid(row = 1, column = 1, columnspan = 3)

H = Label(my_app, text = "Hasil")
H.grid(row = 3, column = 0, sticky="w")

H1 = Label(my_app)
H1.grid(row = 3, column = 2, sticky="w")

def Hitung(op):
    if op == '+':
        hasil = angka1.get()+angka2.get()
    elif op == '-':
        hasil = angka1.get()-angka2.get()
    elif op == '*':
        hasil = angka1.get()*angka2.get()
    elif op == '/':
        hasil = angka1.get()/angka2.get()

    H1.config(text = hasil)

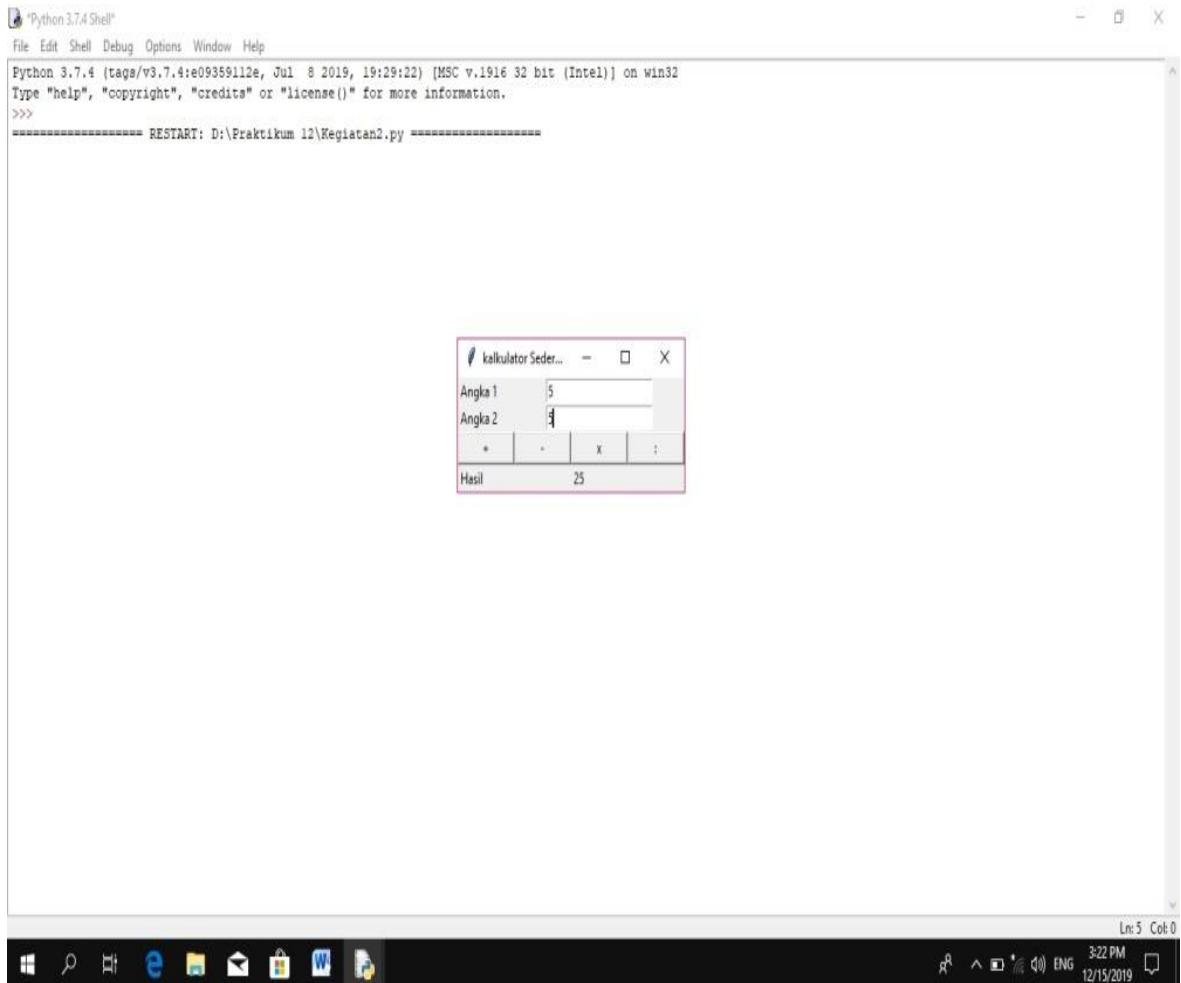
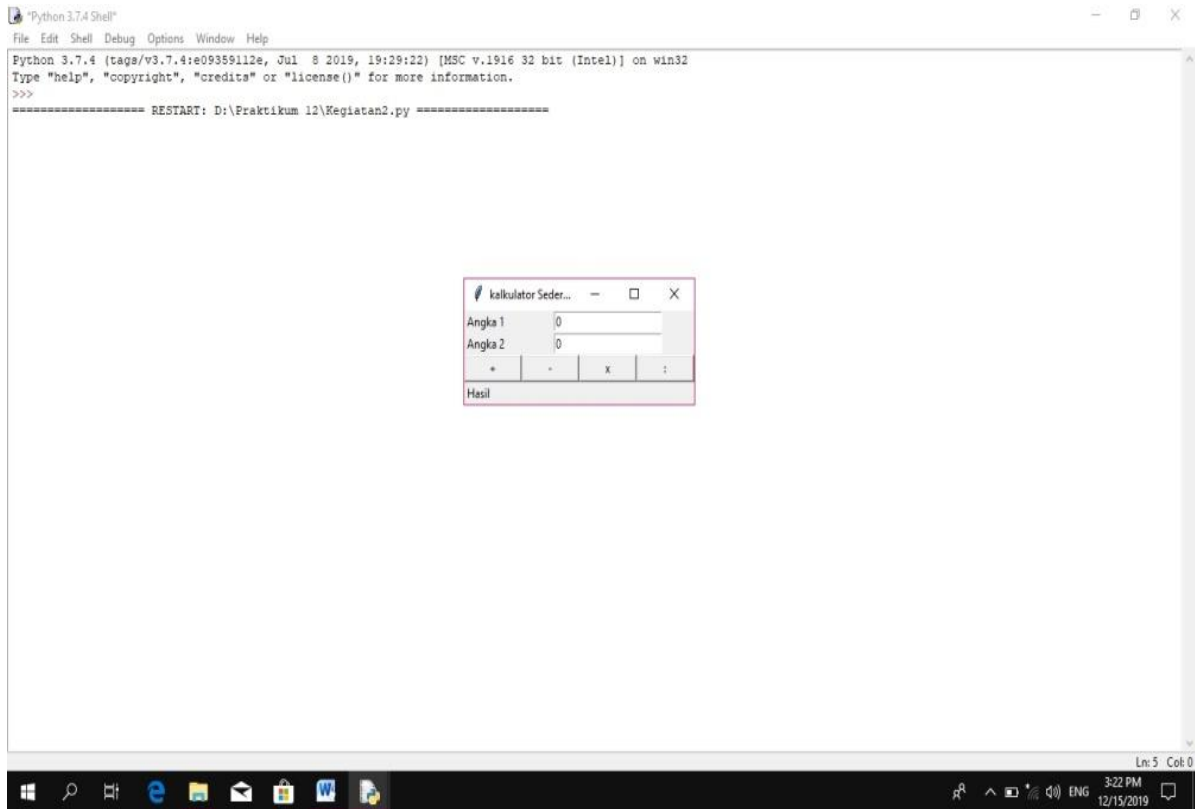
B1 = Button(my_app, text = "+", width="8", command = lambda:Hitung('+'))
B1.grid(row = 2, column = 0)

B2 = Button(my_app, text = "-", width="8", command = lambda:Hitung('-'))
B2.grid(row = 2, column = 1)

B3 = Button(my_app, text = "x", width="8", command = lambda:Hitung('*'))
B3.grid(row = 2, column = 2)

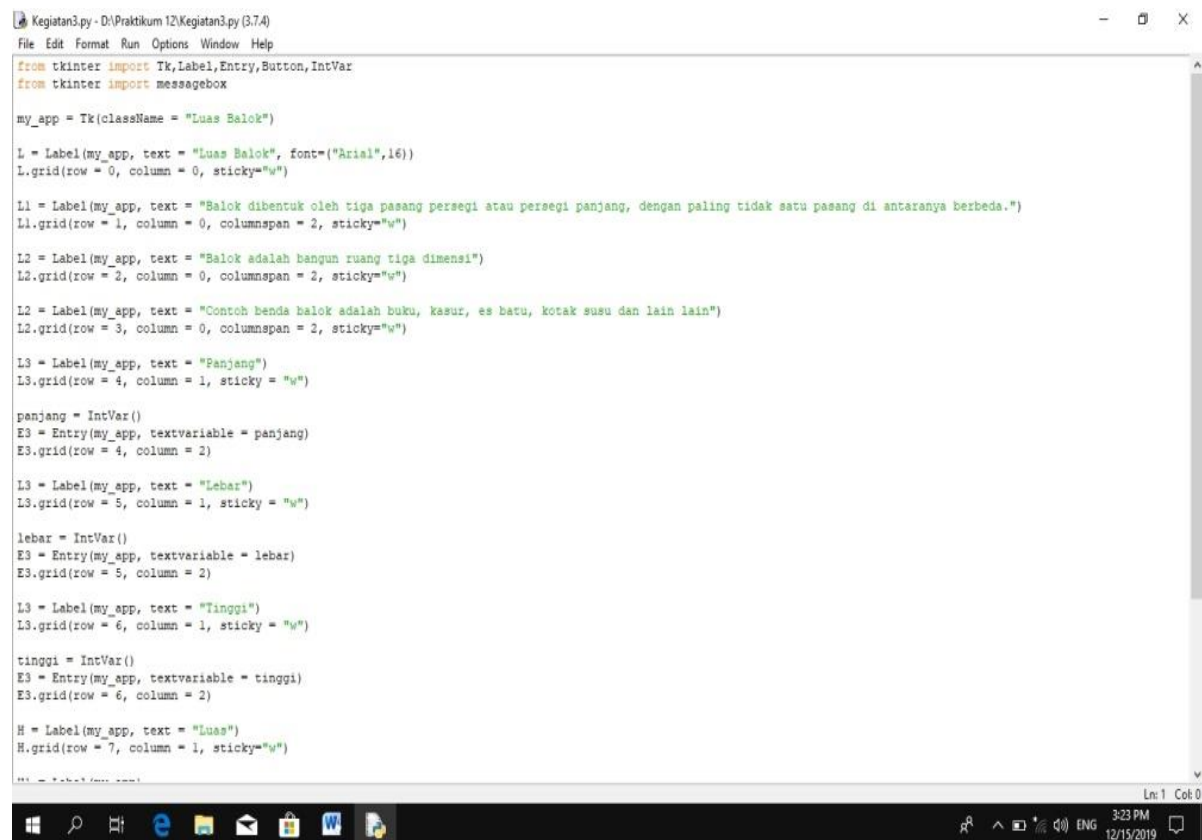
B4 = Button(my_app, text = ":", width="8", command = lambda:Hitung('/'))
B4.grid(row = 2, column = 3)

my_app.mainloop()
```



Kegiatan 3.

Screenshot dari aplikasi Bangun Geometri adalah sebagai berikut



```
Kegiatan3.py - D:\Praktikum 12\Kegiatan3.py (3.7.4)
File Edit Format Run Options Window Help

from tkinter import Tk,Label,Entry,Button,IntVar
from tkinter import messagebox

my_app = Tk(className = "Luas Balok")

L = Label(my_app, text = "Luas Balok", font=("Arial",16))
L.grid(row = 0, column = 0, sticky="w")

L1 = Label(my_app, text = "Balok dibentuk oleh tiga pasang persegi atau persegi panjang, dengan paling tidak satu pasang di antaranya berbeda.")
L1.grid(row = 1, column = 0, columnspan = 2, sticky="w")

L2 = Label(my_app, text = "Balok adalah bangun ruang tiga dimensi")
L2.grid(row = 2, column = 0, columnspan = 2, sticky="w")

L2 = Label(my_app, text = "Contoh benda balok adalah buku, kasur, es batu, kotak susu dan lain lain")
L2.grid(row = 3, column = 0, columnspan = 2, sticky="w")

L3 = Label(my_app, text = "Panjang")
L3.grid(row = 4, column = 1, sticky = "w")

panjang = IntVar()
E3 = Entry(my_app, textvariable = panjang)
E3.grid(row = 4, column = 2)

L3 = Label(my_app, text = "Lebar")
L3.grid(row = 5, column = 1, sticky = "w")

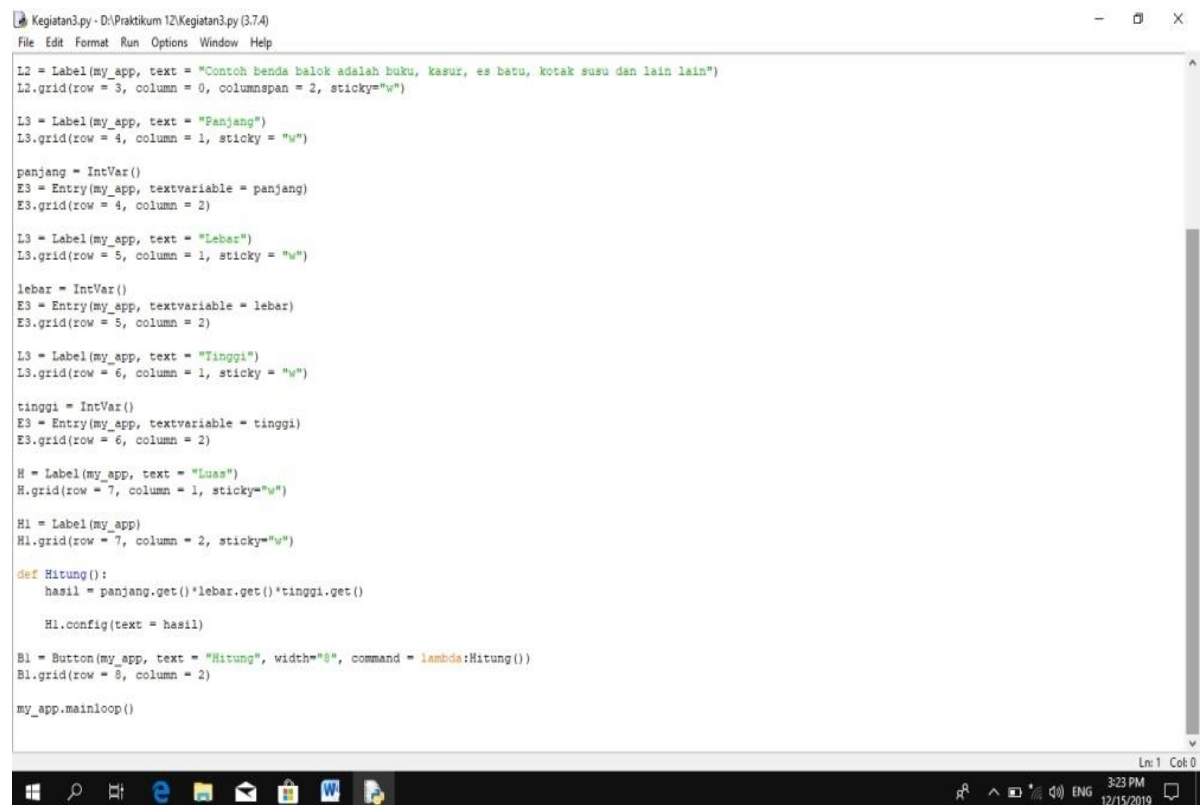
lebar = IntVar()
E3 = Entry(my_app, textvariable = lebar)
E3.grid(row = 5, column = 2)

L3 = Label(my_app, text = "Tinggi")
L3.grid(row = 6, column = 1, sticky = "w")

tinggi = IntVar()
E3 = Entry(my_app, textvariable = tinggi)
E3.grid(row = 6, column = 2)

H = Label(my_app, text = "Luas")
H.grid(row = 7, column = 1, sticky="w")

my_app.mainloop()
```



```
Kegiatan3.py - D:\Praktikum 12\Kegiatan3.py (3.7.4)
File Edit Format Run Options Window Help

L2 = Label(my_app, text = "Contoh benda balok adalah buku, kasur, es batu, kotak susu dan lain lain")
L2.grid(row = 3, column = 0, columnspan = 2, sticky="w")

L3 = Label(my_app, text = "Panjang")
L3.grid(row = 4, column = 1, sticky = "w")

panjang = IntVar()
E3 = Entry(my_app, textvariable = panjang)
E3.grid(row = 4, column = 2)

L3 = Label(my_app, text = "Lebar")
L3.grid(row = 5, column = 1, sticky = "w")

lebar = IntVar()
E3 = Entry(my_app, textvariable = lebar)
E3.grid(row = 5, column = 2)

L3 = Label(my_app, text = "Tinggi")
L3.grid(row = 6, column = 1, sticky = "w")

tinggi = IntVar()
E3 = Entry(my_app, textvariable = tinggi)
E3.grid(row = 6, column = 2)

H = Label(my_app, text = "Luas")
H.grid(row = 7, column = 1, sticky="w")

H1 = Label(my_app)
H1.grid(row = 7, column = 2, sticky="w")

def Hitung():
    hasil = panjang.get()*lebar.get()*tinggi.get()

    H1.config(text = hasil)

B1 = Button(my_app, text = "Hitung", width="8", command = lambda:Hitung())
B1.grid(row = 8, column = 2)

my_app.mainloop()
```

