

LAPORAN PRAKTIKUM

PEMROGRAMAN VISUAL

2023



Prepared By:

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Aplikasi perhitungan menggunakan konsep **Object Oriented Programming** (OOP)

1. Persegi Panjang

Source Code :

```
from tkinter import Frame, Label, Entry, Button, YES, BOTH, END, Tk, W

class Persegipanjang:
    def __init__(self, panjang, lebar):
        self.panjang = panjang
        self.lebar = lebar
    def luas(self):
        return self.panjang*self.lebar
    def keliling(self):
        return 2*(self.panjang+self.lebar)

class FrmPersegi:
    def __init__(self, parent, title):
        self.parent = parent
        self.parent.geometry("300x250")
        self.parent.title(title)
        self.parent.protocol("WM_DELETE_WINDOW", self.onKeluar)
        self.aturKomponen()

    def aturKomponen(self):
        Label(root, text="Menghitung Luas & Keliling Persegi
Panjang").pack()
        mainFrame = Frame(self.parent, bd=10)
        mainFrame.pack(fill=BOTH, expand=YES)

        # pasang Label
        Label(mainFrame, text='Panjang :').grid(row=0, column=0,
        sticky=W, padx=5, pady=5)
        Label(mainFrame, text="Lebar :").grid(row=1, column=0,
        sticky=W, padx=5, pady=5)
        Label(mainFrame, text="Luas :").grid(row=3, column=0,
        sticky=W, padx=5, pady=5)
        Label(mainFrame, text="Keliling :").grid(row=4, column=0,
        sticky=W, padx=5, pady=5)
```

```

# pasang textbox
self.txtPanjang = Entry(mainFrame)
self.txtPanjang.grid(row=0, column=1, padx=5, pady=5)
self.txtLebar = Entry(mainFrame)
self.txtLebar.grid(row=1, column=1, padx=5, pady=5)
self.txtLuas = Entry(mainFrame)
self.txtLuas.grid(row=3, column=1, padx=5, pady=5)
self.txtKel = Entry(mainFrame)
self.txtKel.grid(row=4, column=1, padx=5, pady=5)

# Pasang Button
self.btnHitung = Button(mainFrame, text='Hitung',
command=self.onHitung)
self.btnHitung.grid(row=2, column=1, padx=5, pady=5)
# fungsi untuk menghitung luas dan keliling persegi panjang

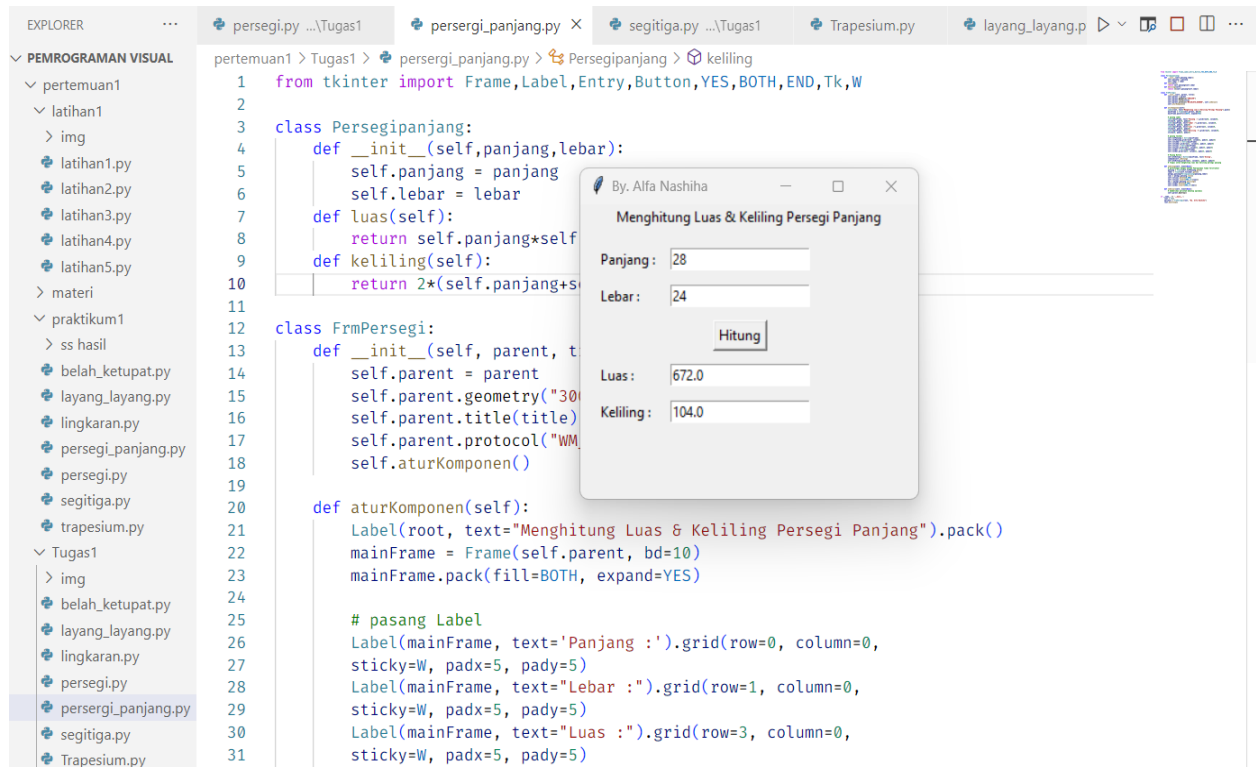
def onHitung(self, event=None):
    # perhitungan dengan metode Pemrograman Tidak Terstruktur
    panjang = float(self.txtPanjang.get())
    lebar = float(self.txtLebar.get())
    persegi_panjang=Persegipanjang(panjang,lebar)
    luas = persegi_panjang.luas()
    self.txtLuas.delete(0,END)
    self.txtLuas.insert(END,str(luas))
    kel = persegi_panjang.keliling()
    self.txtKel.delete(0,END)
    self.txtKel.insert(END,str(kel))

def onKeluar(self, event=None):
    # memberikan perintah menutup aplikasi
    self.parent.destroy()

if __name__ == '__main__':
    root = Tk()
    aplikasi = FrmPersegi(root, "By. Alfa Nashiha")
    root.mainloop()

```

Hasil Program Persegi Panjang ;



2. Segitiga

Source Code :

```
from tkinter import Frame, Label, Entry, Button, YES, BOTH, END, Tk, W

class segitiga:
    def __init__(self, sisia, sisib, sisic):
        self.sisia = sisia
        self.sisib = sisib
        self.sisic = sisic
    def luas(self):
        return 0.5*self.sisia*self.sisib
    def keliling(self):
        return self.sisia+self.sisib+self.sisic
class FrmSegitiga:

    def __init__(self, parent, title):
        self.parent = parent
        self.parent.geometry("300x250")
        self.parent.title(title)
        self.parent.protocol("WM_DELETE_WINDOW", self.onKeluar)
        self.aturKomponen()

    def aturKomponen(self):
        Label(root, text="Menghitung Luas & Keliling Belah Ketupat").pack()
        mainFrame = Frame(self.parent, bd=10)
        mainFrame.pack(fill=BOTH, expand=YES)

        # pasang Label

        Label(mainFrame, text='Alas :').grid(row=0, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text="Tinggi :").grid(row=1, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text="Sisi Miring :").grid(row=2, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text="Luas :").grid(row=4, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text="Keliling :").grid(row=5, column=0,
            sticky=W, padx=5, pady=5)
```

```

# pasang textbox
self.txtSisiA = Entry(mainFrame)
self.txtSisiA.grid(row=0, column=1, padx=5, pady=5)
self.txtSisiB = Entry(mainFrame)
self.txtSisiB.grid(row=1, column=1, padx=5, pady=5)
self.txtSisiC = Entry(mainFrame)
self.txtSisiC.grid(row=2, column=1, padx=5, pady=5)
self.txtLuasS = Entry(mainFrame)
self.txtLuasS.grid(row=4, column=1, padx=5, pady=5)
self.txtKel = Entry(mainFrame)
self.txtKel.grid(row=5, column=1, padx=5, pady=5)

# Pasang Button
self.btnHitung = Button(mainFrame, text='Hitung',
                        command=self.onHitung)
self.btnHitung.grid(row=3, column=1, padx=5, pady=5)

# fungsi untuk menghitung luas dan keliling segitiga
def onHitung(self, event=None):
    # perhitungan dengan metode Pemrograman Tidak Terstruktur
    sisia= int(self.txtSisiA.get())
    sisib= int(self.txtSisiB.get())
    sisic= int(self.txtSisiC.get())
    ks=segitiga(sisia,sisib,sisic)
    luas = ks.luas()
    self.txtLuasS.delete(0,END)
    self.txtLuasS.insert(END,str(luas))
    kel = ks.keliling()
    self.txtKel.delete(0,END)
    self.txtKel.insert(END,str(kel))

def onKeluar(self, event=None):
    # memberikan perintah menutup aplikasi
    self.parent.destroy()

if __name__ == '__main__':
    root = Tk()
    aplikasi = FrmSegitiga(root, "By. Alfa Nashiha")

root.mainloop()

```

Hasil Program Segitiga ;

The image shows a Python IDE with a file explorer on the left and a code editor on the right. The file explorer lists files under 'PEMROGRAMAN VISUAL', including 'pertemuan1', 'latihan1', 'latihan2.py', 'latihan3.py', 'latihan4.py', 'latihan5.py', 'materi', 'praktikum1', 'ss hasil', 'belah_ketupat.py', 'layang_layang.py', 'lingkaran.py', 'persegi_panjang.py', 'persegi.py', 'segitiga.py', 'trapesium.py', 'Tugas1', 'img', 'belah_ketupat.py', 'layang_layang.py', 'lingkaran.py', 'persegi.py', 'persergi_panjang.py', 'segitiga.py', and 'Trapesium.py'. The code editor shows the following code:

```
1 from tkinter import Frame, Label, Entry, Button, YES, BOTH, END, Tk, W
2
3 class segitiga:
4     def __init__(self, sisia, sisib, sisic):
5         self.sisia = sisia
6         self.sisib = sisib
7         self.sisic = sisic
8     def luas(self):
9         return 0.5*self.sisia*self.sisib
10    def keliling(self):
11        return self.sisia+self.sisib+self.sisic
12
13 class FrmSegitiga:
14     def __init__(self, parent, title):
15         self.parent = parent
16         self.parent.geometry("300x300")
17         self.parent.title(title)
18         self.parent.protocol("WM_DELETE_WINDOW", self.close)
19         self.aturKomponen()
20
21     def aturKomponen(self):
22         Label(root, text="Menghitung Luas & Keliling Segitiga").pack()
23         mainFrame = Frame(self.parent, bd=10)
24         mainFrame.pack(fill=BOTH, expand=YES)
25
26         # pasang Label
27
28         Label(mainFrame, text='Alas :').grid(row=0, column=0,
29         sticky=W, padx=5, pady=5)
30         Label(mainFrame, text='Tinggi :').grid(row=1, column=0,
31         sticky=W, padx=5, pady=5)
```

A screenshot of the application window titled "Menghitung Luas & Keliling Segitiga" is overlaid on the code editor. The window contains input fields for "Alas" (20), "Tinggi" (8), and "Sisi Miring" (12). A "Hitung" button is located below these fields. The output fields show "Luas: 80.0" and "Keliling: 40".

3. Persegi / Bujur Sangkar

Source Code ;

```
from tkinter import Frame, Label, Entry, Button, YES, BOTH, END, Tk, W

class Persegi:
    def __init__(self, sisi):
        self.sisi = sisi
    def luas(self):
        return self.sisi**2
    def keliling(self):
        return 4*self.sisi

class FrmPersegi:

    def __init__(self, parent, title):
        self.parent = parent
        self.parent.geometry("300x200")
        self.parent.title(title)
        self.parent.protocol("WM_DELETE_WINDOW", self.onKeluar)
        self.aturKomponen()

    def aturKomponen(self):
        Label(root, text="Menghitung Luas & Keliling Belah Ketupat").pack()
        mainFrame = Frame(self.parent, bd=10)
        mainFrame.pack(fill=BOTH, expand=YES)

        # pasang Label
        Label(mainFrame, text="Sisi :").grid(row=2, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text="Luas :").grid(row=4, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text="Keliling :").grid(row=5, column=0,
            sticky=W, padx=5, pady=5)

        # pasang textbox
        self.txtSisi = Entry(mainFrame)
        self.txtSisi.grid(row=2, column=1, padx=5, pady=5)
        self.txtLuas = Entry(mainFrame)
        self.txtLuas.grid(row=4, column=1, padx=5, pady=5)
        self.txtKel = Entry(mainFrame)
        self.txtKel.grid(row=5, column=1, padx=5, pady=5)
```



```

# Pasang Button
self.btnHitung = Button(mainFrame, text='Hitung',
                        command=self.onHitung)
self.btnHitung.grid(row=3, column=1, padx=5, pady=5)

# fungsi untuk menghitung luas dan keliling segitiga
def onHitung(self, event=None):
    # perhitungan dengan metode Pemrograman Tidak Terstruktur
    SisiP= int(self.txtSisi.get())
    psg=Persegi(SisiP)
    luasP = psg.luas()
    self.txtLuas.delete(0,END)
    self.txtLuas.insert(END,str(luasP))
    kelilingP = psg.keliling()
    self.txtKel.delete(0,END)
    self.txtKel.insert(END,str(kelilingP))

def onKeluar(self, event=None):
    # memberikan perintah menutup aplikasi
    self.parent.destroy()

if __name__ == '__main__':
    root = Tk()
    aplikasi = FrmPersegi(root, "By. Alfa Nashiha")
    root.mainloop()

```

Hasil Program Persegi / Bujur Sangkar :

The image shows a Python IDE with a file explorer on the left and a code editor on the right. The file explorer lists several files under the 'PEMROGRAMAN VISUAL' folder, including 'persegi.py' which is currently selected. The code editor displays the Python code for a square calculator application. The code defines a 'Persegi' class with methods for calculating area and perimeter, and a 'FrmPersegi' class that creates a Tkinter window with input fields and a 'Hitung' button. A preview window titled 'Menghitung Luas & Keliling Persegi' is shown, displaying the calculated area (400) and perimeter (80) for a square with a side length of 20.

```
1 from tkinter import Frame, Label, Entry, Button, YES, BOTH, END, Tk, W
2
3
4 class Persegi:
5     def __init__(self, sisi):
6         self.sisi = sisi
7     def luas(self):
8         return self.sisi**2
9     def keliling(self):
10        return 4*self.sisi
11
12 class FrmPersegi:
13
14     def __init__(self, parent, title):
15         self.parent = parent
16         self.parent.geometry("300x300")
17         self.parent.title(title)
18         self.parent.protocol("WM_DELETE_WINDOW", self.aturKomponen())
19
20     def aturKomponen(self):
21
22         Label(root, text="Menghitung Luas & Keliling Persegi").pack()
23         mainFrame = Frame(self.parent, bd=10)
24         mainFrame.pack(fill=BOTH, expand=YES)
25
26         # pasang Label
27         Label(mainFrame, text="Sisi :").grid(row=2, column=0,
28             sticky=W, padx=5, pady=5)
29         Label(mainFrame, text="Luas :").grid(row=4, column=0,
30             sticky=W, padx=5, pady=5)
31         Label(mainFrame, text="Keliling :").grid(row=5, column=0,
```

By. Alfa Nashiha

Menghitung Luas & Keliling Persegi

Sisi: 20

Luas: 400

Keliling: 80

Hitung

4. Lingkaran

Source Code :

```
from tkinter import Frame, Label, Entry, Button, YES, BOTH, END, Tk, W

class lingkaran:
    def __init__(self, jari):
        self.jari = jari
    def luas(self):
        phi=3.14
        return phi* (self.jari**2)
    def keliling(self):
        phi=3.14
        return 2*phi*self.jari

class FrmLingkaran:

    def __init__(self, parent, title):
        self.parent = parent
        self.parent.geometry("300x200")
        self.parent.title(title)
        self.parent.protocol("WM_DELETE_WINDOW", self.onKeluar)
        self.aturKomponen()

    def aturKomponen(self):
        Label(root, text="Menghitung Luas & Keliling Belah Ketupat").pack()
        mainFrame = Frame(self.parent, bd=10)
        mainFrame.pack(fill=BOTH, expand=YES)

        # pasang Label
        Label(mainFrame, text='Jari-jari :').grid(row=0, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text='Luas :').grid(row=2, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text='Keliling :').grid(row=3, column=0,
            sticky=W, padx=5, pady=5)

        # pasang textbox
        self.txtJarijari = Entry(mainFrame)
        self.txtJarijari.grid(row=0, column=1, padx=5, pady=5)
        self.txtLuas = Entry(mainFrame)
        self.txtLuas.grid(row=2, column=1, padx=5, pady=5)
        self.txtKel = Entry(mainFrame)
        self.txtKel.grid(row=3, column=1, padx=5, pady=5)
```

```

# Pasang Button
self.btnHitung = Button(mainFrame, text='Hitung',
                        command=self.onHitung)
self.btnHitung.grid(row=1, column=1, padx=5, pady=5)

# fungsi untuk menghitung luas dan keliling lingkaran
def onHitung(self, event=None):
    # perhitungan dengan metode Pemrograman Tidak Terstruktur
    phi = 3.14
    jari= int(self.txtJarijari.get())
    kl=lingkaran(jari)

    luas = kl.luas()
    self.txtLuas.delete(0,END)
    self.txtLuas.insert(END,str(luas))

    kel = kl.keliling()
    self.txtKel.delete(0,END)
    self.txtKel.insert(END,str(kel))

def onKeluar(self, event=None):
    # memberikan perintah menutup aplikasi
    self.parent.destroy()

if __name__ == '__main__':
    root = Tk()
    aplikasi = FrmLingkaran(root, "By. Alfa Nashiha")
    root.mainloop()

```

Hasil Program Lingkaran ;

The screenshot displays a Python IDE with a file explorer on the left and a code editor on the right. The file explorer shows a project named 'PEMROGRAMAN VISUAL' with a folder 'pertemuan1' containing a subfolder 'latihan1'. The 'latihan1' folder contains several Python files, including 'lingkaran.py', which is currently selected. The code editor shows the following code:

```
1 from tkinter import Frame, Label, Entry, Button, YES, BOTH, END, Tk, W
2
3 class lingkaran:
4     def __init__(self, jari):
5         self.jari = jari
6     def luas(self):
7         phi=3.14
8         return phi*(self.jari**2)
9     def keliling(self):
10        phi=3.14
11        return 2*phi*self.jari
12
13 class FrmLingkaran:
14
15     def __init__(self, parent, title):
16         self.parent = parent
17         self.parent.geometry("300x300")
18         self.parent.title(title)
19         self.parent.protocol("WM_DELETE_WINDOW", self.close)
20         self.aturKomponen()
21
22     def aturKomponen(self):
23         Label(root, text="Menghitung Luas & Keliling Lingkaran").pack()
24         mainFrame = Frame(self.parent, bd=10)
25         mainFrame.pack(fill=BOTH, expand=YES)
26
27         # pasang Label
28         Label(mainFrame, text='Jari-jari :').grid(row=0, column=0,
29             sticky=W, padx=5, pady=5)
30         Label(mainFrame, text='Luas :').grid(row=2, column=0,
31             sticky=W, padx=5, pady=5)
```

The execution window, titled 'Menghitung Luas & Keliling Lingkaran', shows the results of the program. It contains three input fields: 'Jari-jari' with the value '12', 'Luas' with the value '452.16', and 'Keliling' with the value '75.36'. A 'Hitung' button is located between the 'Jari-jari' and 'Luas' fields.

5. Trapezium

Source Code :

```
from tkinter import Frame, Label, Entry, Button, YES, BOTH, END, Tk, W

class Trapezium:
    def __init__(self, sisia, sisib, tinggi, sisim):
        self.sisia = sisia
        self.sisib = sisib
        self.tinggi = tinggi
        self.sisim = sisim
    def luas(self):
        return 0.5*(self.sisia*self.sisib)*self.tinggi
    def keliling(self):
        return self.sisia+self.sisib+self.tinggi+self.sisim

class FrmTrapezium:
    def __init__(self, parent, title):
        self.parent = parent
        self.parent.geometry("300x270")
        self.parent.title(title)
        self.parent.protocol("WM_DELETE_WINDOW", self.onKeluar)
        self.aturKomponen()

    def aturKomponen(self):
        Label(root, text="Menghitung Luas & Keliling Belah Ketupat").pack()
        mainFrame = Frame(self.parent, bd=10)
        mainFrame.pack(fill=BOTH, expand=YES)

        # pasang Label
        Label(mainFrame, text='Sisi Atas :').grid(row=0, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text='Sisi Bawah :').grid(row=1, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text='Sisi Miring :').grid(row=2, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text='Tinggi :').grid(row=3, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text='Luas :').grid(row=5, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text='Keliling :').grid(row=6, column=0,
            sticky=W, padx=5, pady=5)
```

```

# pasang textbox
self.txtSisiA = Entry(mainFrame)
self.txtSisiA.grid(row=0, column=1, padx=5, pady=5)
self.txtSisiB = Entry(mainFrame)
self.txtSisiB.grid(row=1, column=1, padx=5, pady=5)
self.txttinggi = Entry(mainFrame)
self.txttinggi.grid(row=2, column=1, padx=5, pady=5)
self.txtsisiM = Entry(mainFrame)
self.txtsisiM.grid(row=3, column=1, padx=5, pady=5)
self.txtLuas = Entry(mainFrame)
self.txtLuas.grid(row=5, column=1, padx=5, pady=5)
self.txtKel = Entry(mainFrame)
self.txtKel.grid(row=6, column=1, padx=5, pady=5)

# Pasang Button
self.btnHitung = Button(mainFrame, text='Hitung',
                        command=self.onHitung)
self.btnHitung.grid(row=4, column=1, padx=5, pady=5)

# fungsi untuk menghitung luas dan keliling lingkaran
def onHitung(self, event=None):
    # perhitungan dengan metode Pemrograman Tidak Terstruktur

    sA= int(self.txtSisiA.get())
    sB= int(self.txtSisiB.get())
    tinggi= int(self.txttinggi.get())
    sisim= int(self.txtsisiM.get())
    kt=Trapesium(sA,sB,tinggi,sisim)

    luas = kt.luas()
    self.txtLuas.delete(0,END)
    self.txtLuas.insert(END,str(luas))

    kel = kt.keliling()
    self.txtKel.delete(0,END)
    self.txtKel.insert(END,str(kel))

def onKeluar(self, event=None):
    # memberikan perintah menutup aplikasi
    self.parent.destroy()

if __name__ == '__main__':
    root = Tk()
    aplikasi = FrmTrapesium(root, "By. Alfa Nashiha")
    root.mainloop()

```

Hasil Program Trapesium :

The image shows a Python IDE with a file explorer on the left and a code editor on the right. The file explorer shows a project named 'PEMROGRAMAN VISUAL' with a folder 'pertemuan1' containing a subfolder 'latihan1' and a file 'Trapesium.py'. The code editor shows the following code:

```
1 from tkinter import Frame, Label, Entry, Button, YES, BOTH, END, Tk, W
2
3 class Trapesium:
4     def __init__(self, sisia, sisib, tinggi, sisim):
5         self.sisia = sisia
6         self.sisib = sisib
7         self.tinggi = tinggi
8         self.sisim = sisim
9     def luas(self):
10        return 0.5*(self.sisia+
11    def keliling(self):
12        return self.sisia+self.
13
14 class FrmTrapesium:
15     def __init__(self, parent,
16         self.parent = parent
17         self.parent.geometry("3
18         self.parent.title(title
19         self.parent.protocol("W
20         self.aturKomponen()
21
22     def aturKomponen(self):
23         Label(root, text="Menghitung Luas & Trapesium").pack()
24         mainFrame = Frame(self.parent, bd=10)
25         mainFrame.pack(fill=BOTH, expand=YES)
26
27         # pasang Label
28         Label(mainFrame, text='Sisi Atas :').grid(row=0, column=0,
29             sticky=W, padx=5, pady=5)
30         Label(mainFrame, text='Sisi Bawah :').grid(row=1, column=0,
31             sticky=W, padx=5, pady=5)
```

The GUI window titled 'Menghitung Luas & Trapesium' is shown with the following input fields and values:

- Sisi Atas: 12
- Sisi Bawah: 18
- Sisi Miring: 6
- Tinggi: 8
- Luas: 648.0
- Keliling: 44

A 'Hitung' button is located between the input fields and the output fields.

6. Layang-layang

Source Code ;

```
from tkinter import Frame, Label, Entry, Button, YES, BOTH, END, Tk, W

class Layang:
    def __init__(self, diagonal1, diagonal2, sisi1, sisi2):
        self.diagonal1 = diagonal1
        self.diagonal2 = diagonal2
        self.sisi1 = sisi1
        self.sisi2 = sisi2

    def luas(self):
        return 0.5*self.diagonal1*self.diagonal2
    def keliling(self):
        return 2*(self.sisi1+self.sisi2)

class FrmLayangLayang:

    def __init__(self, parent, title):
        self.parent = parent
        self.parent.geometry("300x270")
        self.parent.title(title)
        self.parent.protocol("WM_DELETE_WINDOW", self.onKeluar)
        self.aturKomponen()

    def aturKomponen(self):
        Label(root, text="Menghitung Luas & Keliling Belah Ketupat").pack()
        mainFrame = Frame(self.parent, bd=10)
        mainFrame.pack(fill=BOTH, expand=YES)

        # pasang Label
        Label(mainFrame, text="Diagonal 1 :").grid(row=1, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text="Diagonal 2 :").grid(row=2, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text="Sisi Atas :").grid(row=3, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text="Sisi Bawah :").grid(row=4, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text="Luas :").grid(row=6, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text="Keliling :").grid(row=7, column=0,
            sticky=W, padx=5, pady=5)
```

```

# pasang textbox
self.txtDiagonal1 = Entry(mainFrame)
self.txtDiagonal1.grid(row=1, column=1, padx=5, pady=5)
self.txtDiagonal2 = Entry(mainFrame)
self.txtDiagonal2.grid(row=2, column=1, padx=5, pady=5)
self.txtSisiA = Entry(mainFrame)
self.txtSisiA.grid(row=3, column=1, padx=5, pady=5)
self.txtSisiB = Entry(mainFrame)
self.txtSisiB.grid(row=4, column=1, padx=5, pady=5)
self.txtLuas = Entry(mainFrame)
self.txtLuas.grid(row=6, column=1, padx=5, pady=5)
self.txtKel = Entry(mainFrame)
self.txtKel.grid(row=7, column=1, padx=5, pady=5)

# Pasang Button
self.btnHitung = Button(mainFrame, text='Hitung',
                        command=self.onHitung)
self.btnHitung.grid(row=5, column=1, padx=5, pady=5)

# fungsi untuk menghitung luas dan keliling segitiga
def onHitung(self, event=None):
    # perhitungan dengan metode Pemrograman Tidak Terstruktur
    d1= int(self.txtDiagonal1.get())
    d2= int(self.txtDiagonal2.get())
    sa = int(self.txtSisiA.get())
    sb = int(self.txtSisiB.get())
    komponenlayang=Layang(d1,d2,sa,sb)

    luas = komponenlayang.luas()
    self.txtLuas.delete(0,END)
    self.txtLuas.insert(END,str(luas))

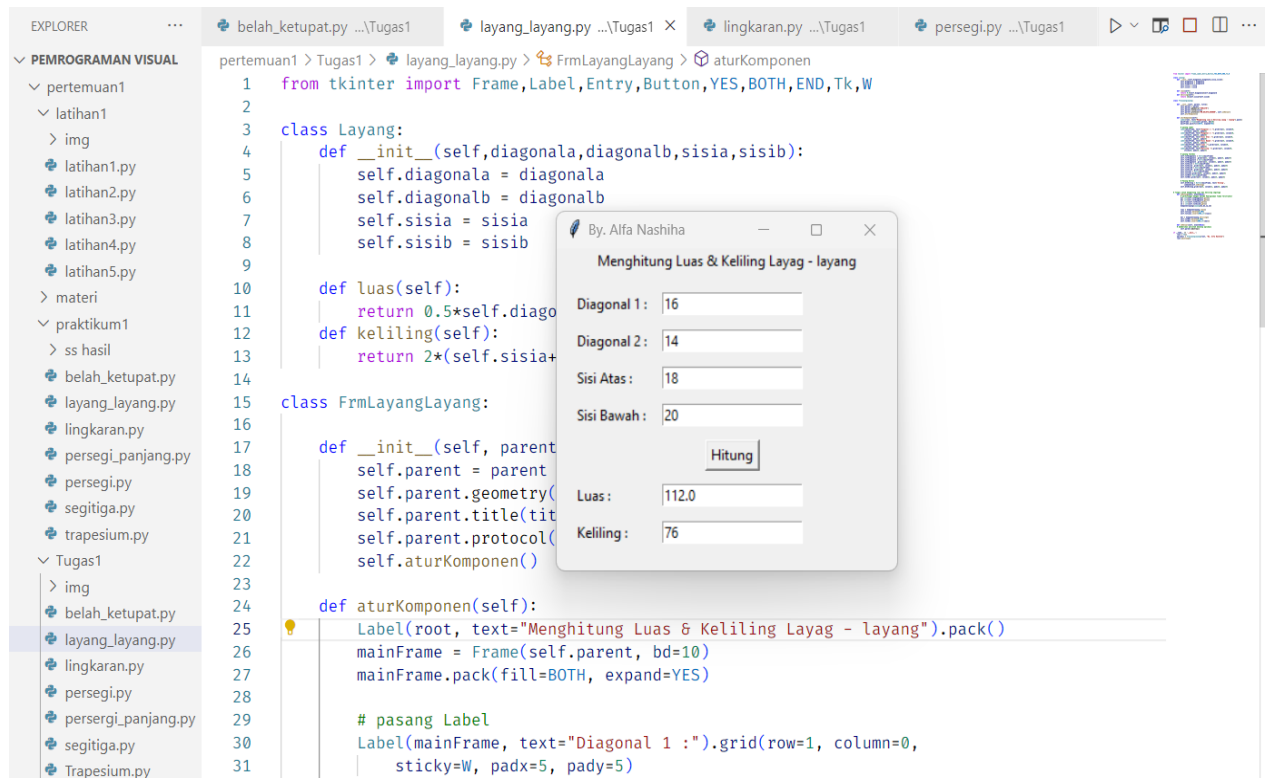
    kel = komponenlayang.keliling()
    self.txtKel.delete(0,END)
    self.txtKel.insert(END,str(kel))

def onKeluar(self, event=None):
    # memberikan perintah menutup aplikasi
    self.parent.destroy()

if __name__ == '__main__':
    root = Tk()
    aplikasi = FrmLayangLayang(root, "By. Alfa Nashiha")
    root.mainloop()

```

Hasil Program Layang-layang :



7. Belah Ketupat

Source Code :

```
from tkinter import Frame, Label, Entry, Button, YES, BOTH, END, Tk, W

class BelahK:
    def __init__(self, diagonal1, diagonal2, sisi):
        self.diagonal1 = diagonal1
        self.diagonal2 = diagonal2
        self.sisi = sisi
    def luas(self):
        return 0.5*self.diagonal1*self.diagonal2
    def keliling(self):
        return 4*self.sisi

class FrmBelahketupat:
    def __init__(self, parent, title):
        self.parent = parent
        self.parent.geometry("300x250")
        self.parent.title(title)
        self.parent.protocol("WM_DELETE_WINDOW", self.onKeluar)
        self.aturKomponen()

    def aturKomponen(self):
        Label(root, text="Menghitung Luas & Keliling Belah Ketupat").pack()
        mainFrame = Frame(self.parent, bd=10)
        mainFrame.pack(fill=BOTH, expand=YES)

        # pasang Label
        Label(mainFrame, text='Diagonal 1 :').grid(row=0, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text='Diagonal 2 :').grid(row=1, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text='Sisi :').grid(row=2, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text='Luas :').grid(row=4, column=0,
            sticky=W, padx=5, pady=5)
        Label(mainFrame, text='Keliling :').grid(row=5, column=0,
            sticky=W, padx=5, pady=5)

        # pasang textbox
        self.txtDiagonal1 = Entry(mainFrame)
        self.txtDiagonal1.grid(row=0, column=1, padx=5, pady=5)
        self.txtDiagonal2 = Entry(mainFrame)
        self.txtDiagonal2.grid(row=1, column=1, padx=5, pady=5)
        self.txtSisi = Entry(mainFrame)
```

```

        self.txtSisi.grid(row=2, column=1, padx=5, pady=5)
        self.txtLuas = Entry(mainFrame)
        self.txtLuas.grid(row=4, column=1, padx=5, pady=5)
        self.txtKel = Entry(mainFrame)
        self.txtKel.grid(row=5, column=1, padx=5, pady=5)

    # Pasang Button
    self.btnHitung = Button(mainFrame, text='Hitung',
                            command=self.onHitung)
    self.btnHitung.grid(row=3, column=1, padx=5, pady=5)

# fungsi untuk menghitung luas dan keliling lingkaran
def onHitung(self, event=None):
    # perhitungan dengan metode Pemrograman Tidak Terstruktur

    d1= int(self.txtDiagonal1.get())
    d2= int(self.txtDiagonal2.get())
    sisi= int(self.txtSisi.get())
    komponenbelah= BelahK(d1,d2,sisi)
    luas = komponenbelah.luas()
    self.txtLuas.delete(0,END)
    self.txtLuas.insert(END,str(luas))

    kel = komponenbelah.keliling()
    self.txtKel.delete(0,END)
    self.txtKel.insert(END,str(kel))

def onKeluar(self, event=None):
    # memberikan perintah menutup aplikasi
    self.parent.destroy()

if __name__ == '__main__':
    root = Tk()
    aplikasi = FrmBelahketupat(root, "By. Alfa Nashiha")
    root.mainloop()

```

Hasil Program Belah Ketupat ;

