
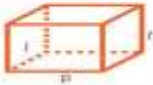

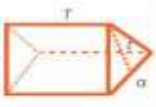
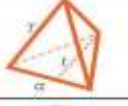
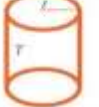




Nama : Rosa Larasati

NIM : 211001074

Kelas : 3D

MINGGU KE II-2 KECERDASAN BUATAN

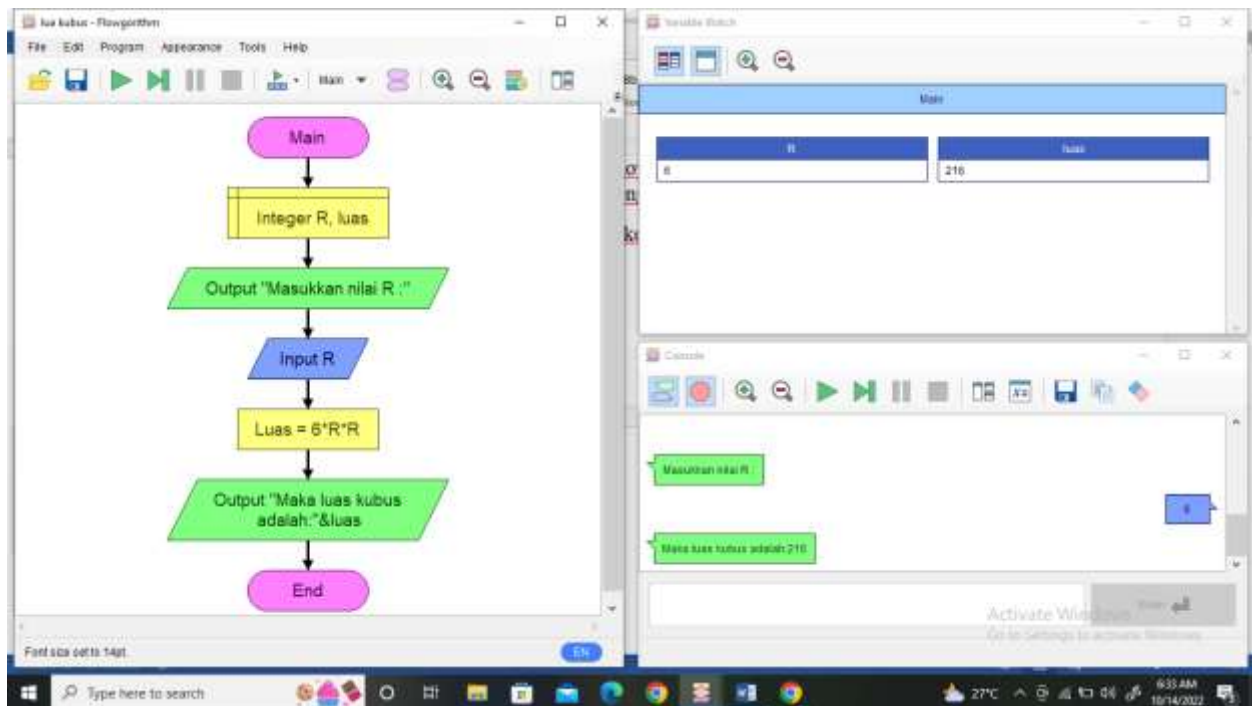
RUMUS LUAS PERMUKAAN DAN VOLUME BANGUN RUANG			zenius sejak 2004
NAMA BANGUN	RUMUS LUAS	RUMUS VOLUME (ISI)	
KUBUS 	$6 \times \text{Rusuk} \times \text{Rusuk}$ $6 R^2$	$\text{Rusuk} \times \text{Rusuk} \times \text{Rusuk}$ $R^3$	
BALOK 	$(2 \times p \times l) + (2 \times p \times t) + (2 \times l \times t)$ $2pl + 2pt + 2lt$	$\text{Luas alas} \times \text{Tinggi}$ $p \times l \times t$ $Plt$	
LIMAS SEGIEMPAT 	Jumlahkan Luas ke-5 Sisinya $LS_1 + LS_2 + LS_3 + LS_4 + LS_5$	$\frac{1}{3} \times \text{Luas alas} \times \text{Tinggi}$ $\frac{La \times T}{3}$ $\frac{1}{3} La T$	
PRISMA SEGITIGA 	$La = \text{Keliling Segitiga} \times \text{Tinggi Prisma}$ $LS = (S_1 + S_2 + S_3) \times T$ $Lp = \text{Kel Segitiga} \times T \text{ Prisma} + 2 \text{ Luas Segitiga}$ $LS = (S_1 + S_2 + S_3) \times T + a t$	$\text{Luas alas} \times \text{Tinggi}$ $\frac{1}{2} a \times t \times T$ $\frac{1}{2} a t T$	
LIMAS SEGITIGA 	Jumlahkan Luas ke-6 Sisinya $LS_1 + LS_2 + LS_3 + LS_4$	$\frac{1}{3} \times \text{Luas alas} \times \text{Tinggi}$ $\frac{\frac{1}{2} a \times t \times T}{3}$ $\frac{1}{6} a t T$	
SELINDER (TABUNG) 	$\text{Luas Selimut}$ $2 \pi r T$ $\text{Luas Permukaan}$ $2 \pi r T + 2 \pi r^2$	$\text{Luas alas} \times \text{Tinggi}$ $\pi r^2 T$	
KERUCUT 	$\text{Luas Selimut}$ $\pi r s$ $\text{Luas Permukaan}$ $\pi r s + \pi r^2$	$\frac{1}{3} \times \text{Luas alas} \times \text{Tinggi}$ $\frac{1}{3} \pi r^2 T$	
BOLA 	$\text{Luas Bola} = \text{Luas 4 lingkaran}$ $4 \pi r^2$	$\frac{4}{3} \pi r^3$	

Berdasarkan dari gambar rumus Luas dan Keliling Bangunan datar di atas:

1. Buatlah flowchart dengan menggunakan flowgorithm berdasarkan Setiap rumus Luas dan Keliling Ban gunan datar, Jalankan sesuai dengan inputan kalian sampai menemukan hasil.
2. Kemudian ketik ulang SC pada flowgorithm ke Vs- code, Jalakan sampai menemukan Hasil.

## 1. KUBUS

- Luas Kubus



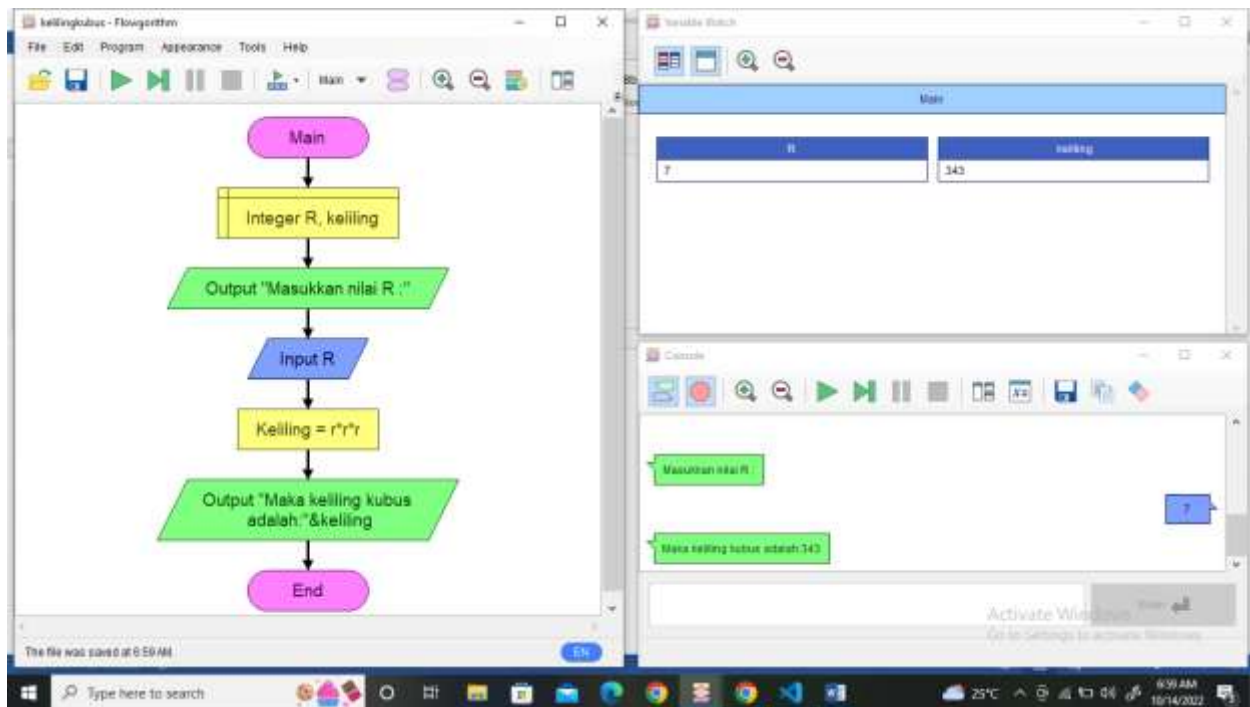
The image shows a Python script named `luaskubus.py` and its execution in a PowerShell terminal. The Python code is as follows:

```
1 print("Masukkan nilai R :")
2 r = int(input())
3 luas = 6 * r * r
4 print("Maka luas kubus adalah:" + str(luas))
5
```

The PowerShell terminal shows the execution of the script. The prompt is `PS C:\Users\ASUS> .\luaskubus.py`. The output is:

```
Masukkan nilai R :
6
Maka luas kubus adalah: 216
PS C:\Users\ASUS>
```

- Volume kubus



The image shows a Python script for calculating the volume of a cube, along with its execution output in a terminal window.

**Python Code:**

```

1 print("Masukkan nilai R :")
2 r = int(input())
3 keliling = r * r * r
4 print("Maka keliling kubus adalah:" + str(keliling))
5
  
```

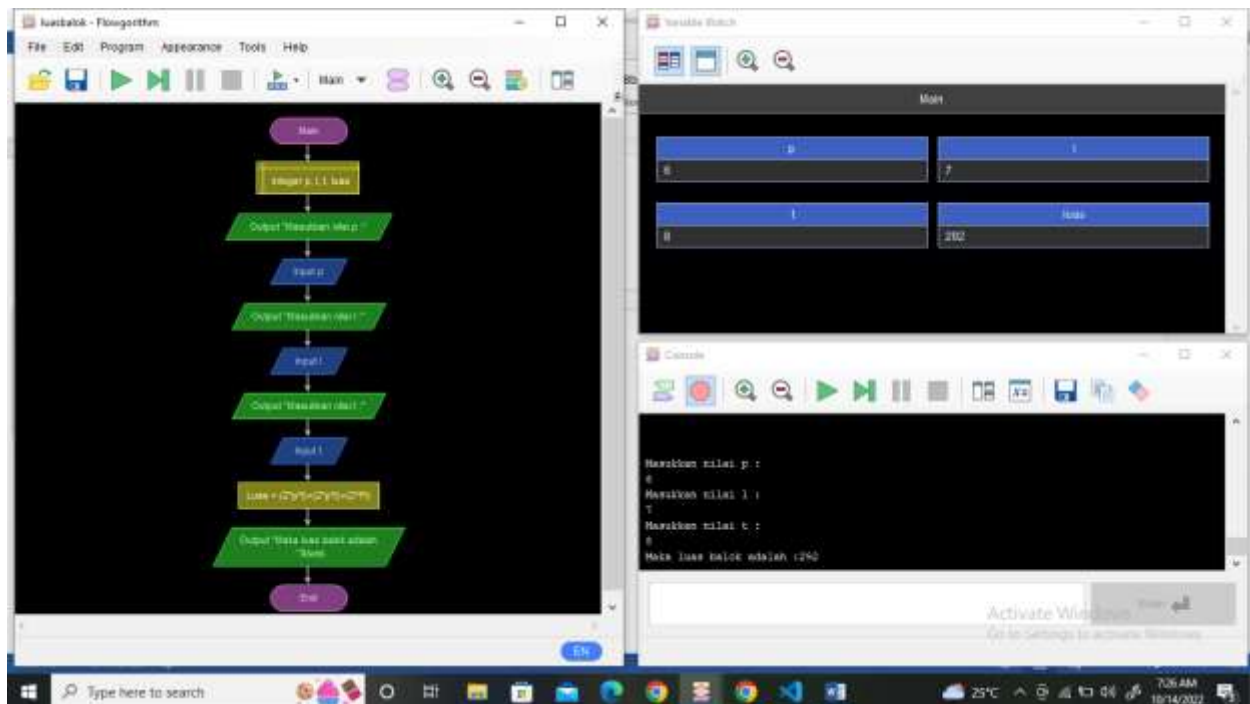
**Terminal Output:**

```

PS C:\Users\ASUS> python C:\Users\ASUS\AppData\Local\Programs\Python\Python38\python.exe c:\Users\ASUS\Documents\kelilingkubus.py
Masukkan nilai R :
7
Maka keliling kubus adalah:343
PS C:\Users\ASUS>
  
```

## 2. BALOK

- Luas Balok



The image shows a Python script in a code editor and its execution in a terminal window.

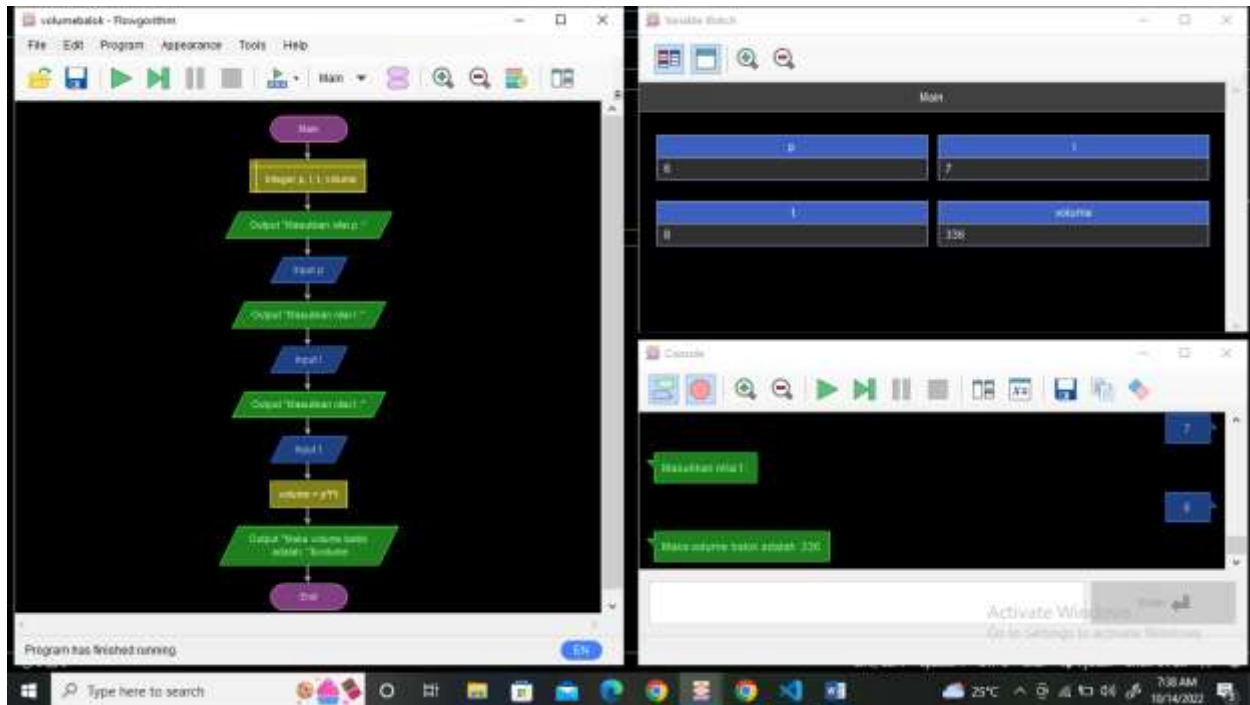
**Python Script (luasbalok.py):**

```
1 print("Masukkan nilai p :")
2 p = int(input())
3 print("Masukkan nilai l :")
4 l = int(input())
5 print("Masukkan nilai t :")
6 t = int(input())
7 luas = 2 * p * l + 2 * p * t + 2 * l * t
8 print("Maka luas balok adalah : " + str(luas))
9
```

**Terminal Output:**

```
PS C:\Users\ASUS> python c:\Users\ASUS\Documents\luasbalok.py
Masukkan nilai p :
6
Masukkan nilai l :
7
Masukkan nilai t :
8
Maka luas balok adalah :292
PS C:\Users\ASUS>
```

- Volume Balok



The image shows a Python IDE with a code editor and a terminal. The code editor displays the following Python code:

```
1 print("Masukkan nilai p :")
2 p = int(input())
3 print("Masukkan nilai l :")
4 l = int(input())
5 print("Masukkan nilai t :")
6 t = int(input())
7 volume = p * l * t
8 print("Maka volume balok adalah : " + str(volume))
9
```

The terminal window shows the output of the program:

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

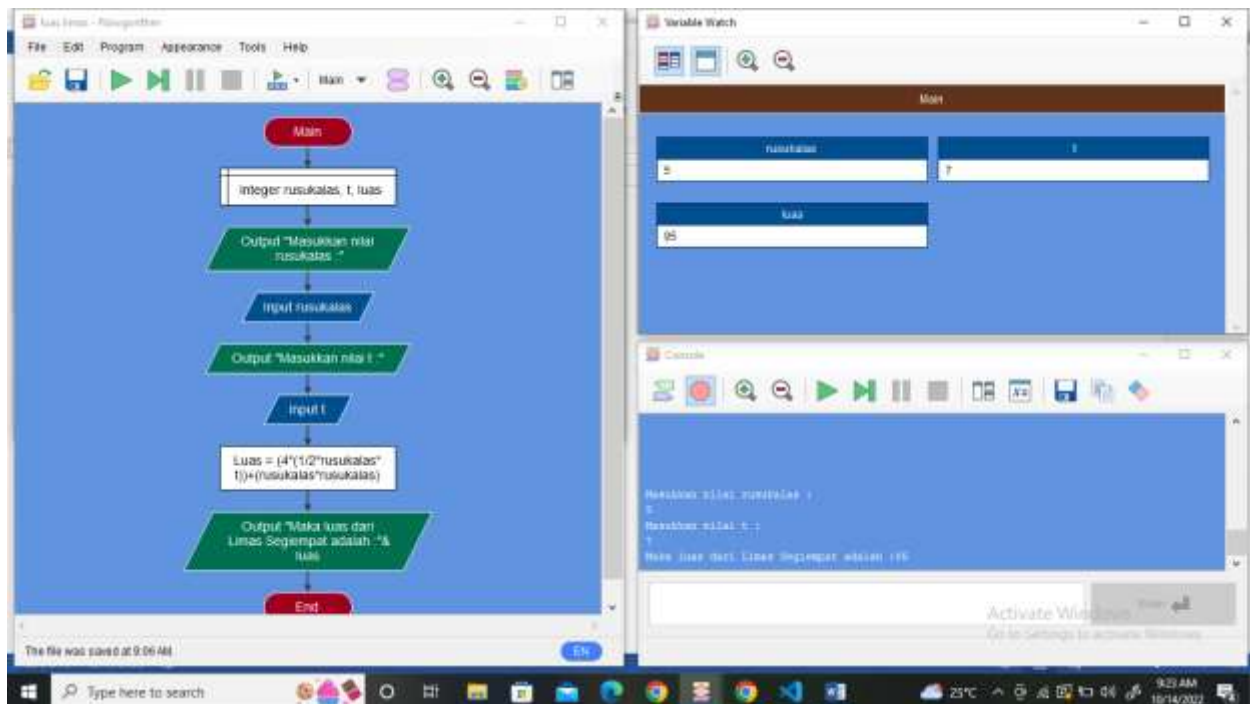
Try the new cross-platform PowerShell
https://aka.ms/powershell

PS C:\Users\ASUS> & C:\Users\ASUS\AppData\Local\Programs\Python\Python38\python.exe c:\Users\ASUS\Documents\volumebalok.py
Masukkan nilai p : 6
Masukkan nilai l : 7
Masukkan nilai t : 8
Maka volume balok adalah : 336
PS C:\Users\ASUS>
```



### 3. LIMAS SEGIEMPAT

- Luas Limas Segiempat



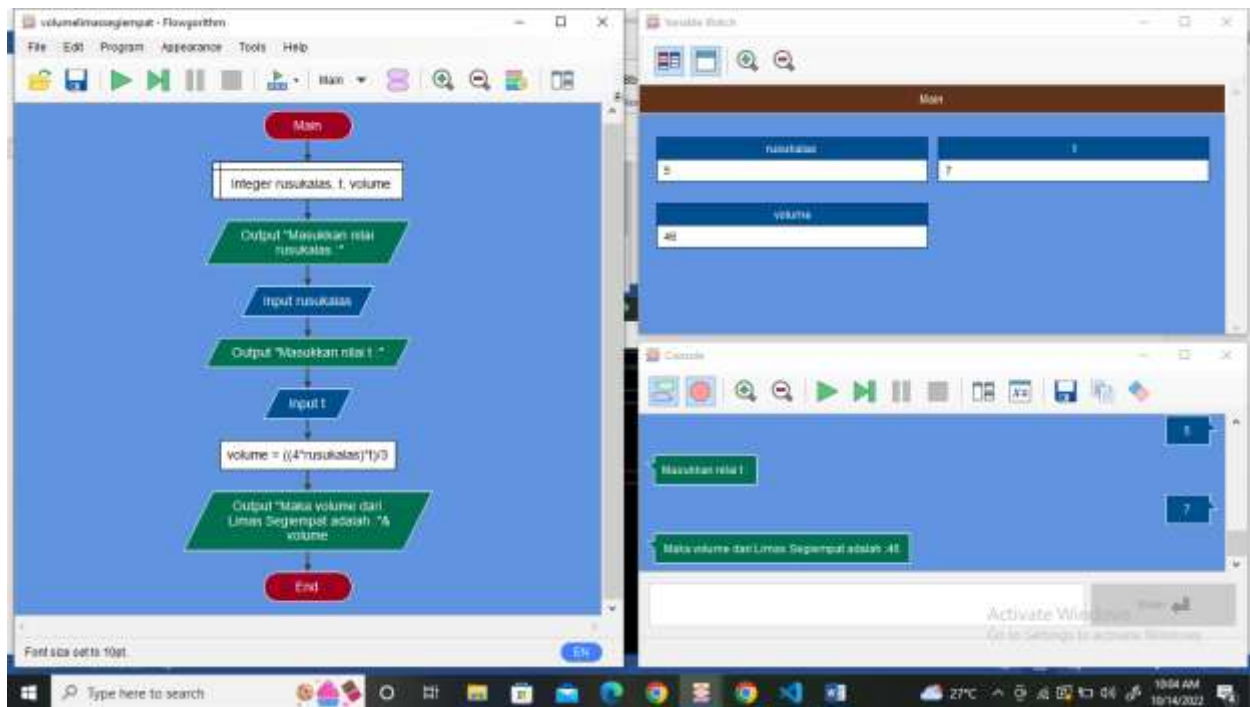
The screenshot shows the Python source code for the program. The code prompts the user for the side length of the square base and the height, then calculates the area using the formula:  $Luas = 4 * (\frac{1}{2} * rusukalas * t) + rusukalas * rusukalas$ . The output is displayed in the terminal window.

```
1 print("Masukkan nilai rusukalas :")
2 rusukalas = int(input())
3 print("Masukkan nilai t :")
4 t = int(input())
5 luas = 4 * (Float(1) / 2 * rusukalas * t) + rusukalas * rusukalas
6 print("Maka luas dari Limas Segiempat adalah : " + str(luas))
7
```

Terminal Output:

```
PS C:\Users\ASUS> python3 c:\Users\ASUS\Documents\limas segiempat.py
Masukkan nilai rusukalas :
5
Masukkan nilai t :
7
Maka luas dari Limas Segiempat adalah :95.0
PS C:\Users\ASUS>
```

- Volume Limas Segiempat



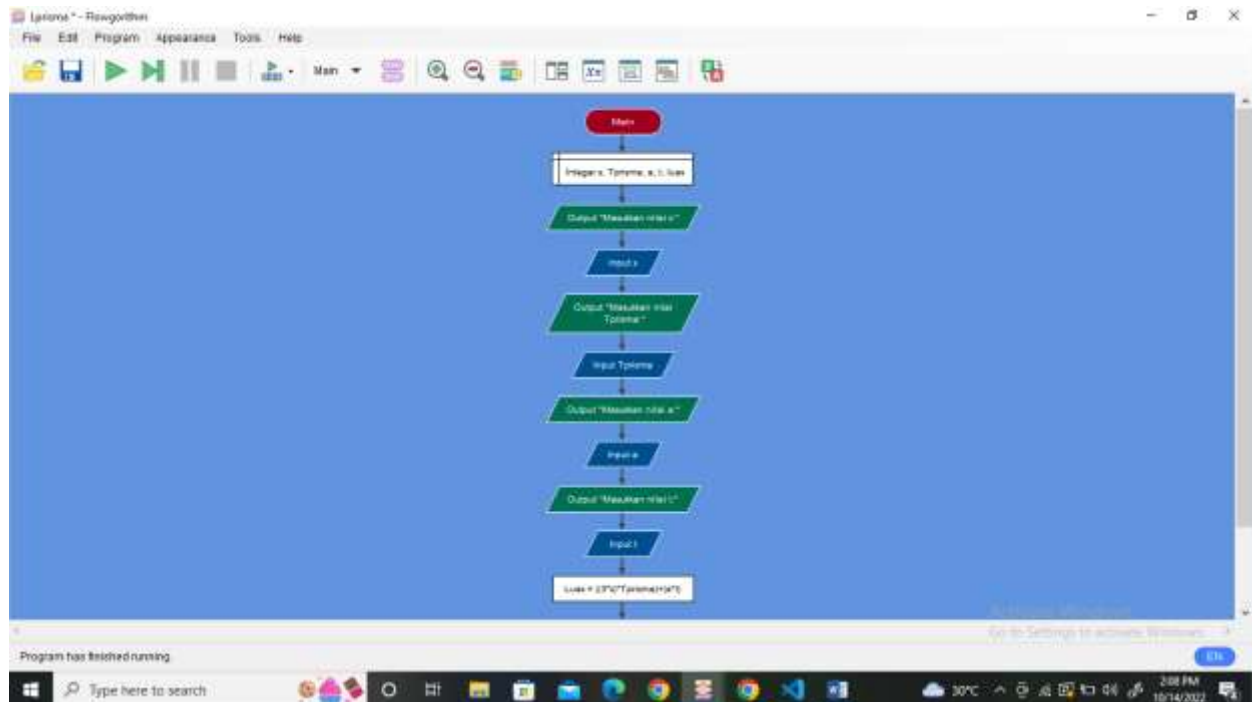
The image shows a Python IDE with a script named 'volumelimassegempat.py' and its execution output in the terminal. The Python code is as follows:

```
1 print("Masukkan nilai rusukalas :")
2 rusukalas = int(input())
3 print("Masukkan nilai t :")
4 t = int(input())
5 volume = float(4 * rusukalas * t) / 3
6 print("Maka volume dari Limas Segiempat adalah :"+str(volume))
7
```

The terminal output shows the program's execution with the same inputs and output as the GUI: 'Masukkan nilai rusukalas : 5', 'Masukkan nilai t : 7', and 'Maka volume dari Limas Segiempat adalah :48.000000000000004'.

## 4. PRISMA SEGITIGA

- Luas Prisma Segitiga



The screenshot shows the program's graphical user interface (GUI) and its console output. The GUI, titled 'Main', features a table with input fields for variables x, Tptama, s, l, and luas. The console window displays the program's execution flow, showing prompts for each input and the final calculated value for luas.

x	Tptama
5	8
9	10

luas  
210

Console Output:

```
Masukkan nilai x  
Masukkan nilai Tptama  
Masukkan nilai s  
Masukkan nilai l  
Maka luas prisma segitiga adalah 210
```



```

1 print("Masukkan nilai s:")
2 s = int(input())
3 print("Masukkan nilai tprisma:")
4 tprisma = int(input())
5 print("Masukkan nilai a:")
6 a = int(input())
7 print("Masukkan nilai t:")
8 t = int(input())
9 luas = 3 * s * tprisma + a * t
10 print("Maka luas prisma segitiga adalah : " + str(luas))
11

```

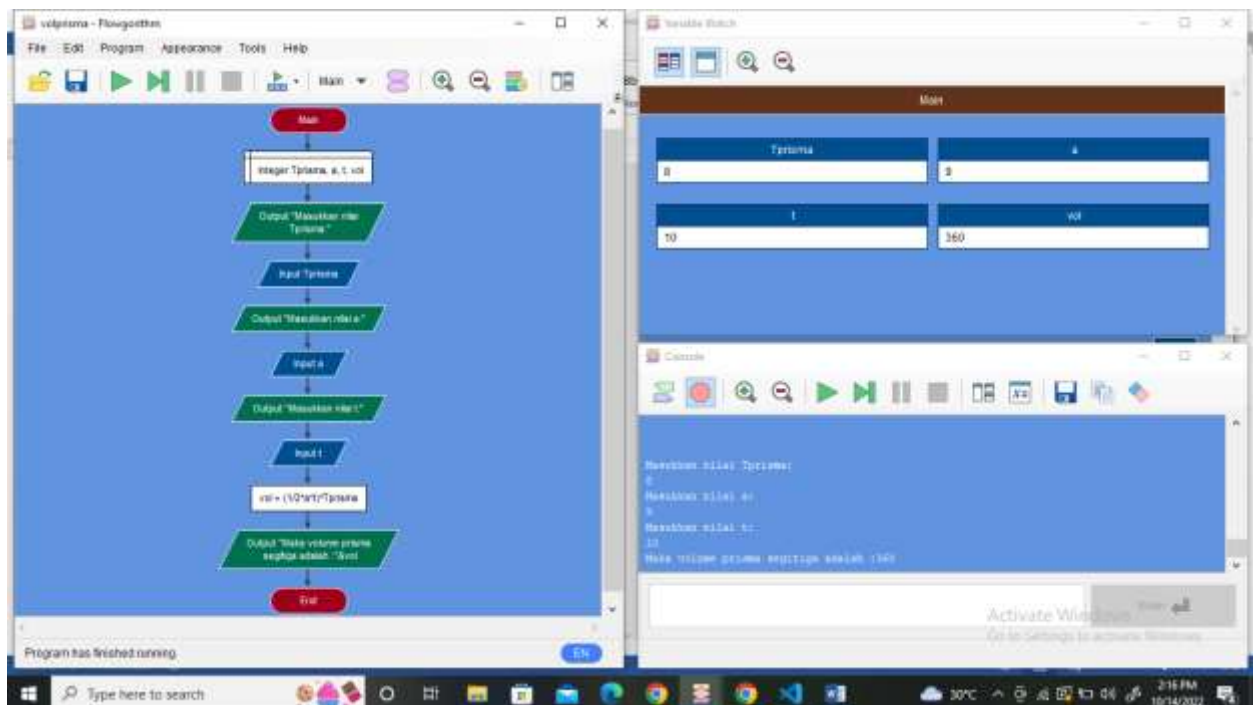
Terminal Output:

```

PS C:\Users\ASUS> python .\prisma.py
Masukkan nilai s:
5
Masukkan nilai tprisma:
8
Masukkan nilai a:
10
Masukkan nilai t:
10
Maka luas prisma segitiga adalah :230
PS C:\Users\ASUS>

```

- Volume Prisma Segitiga



```

1 print("Masukkan nilai tprisma:")
2 tprisma = int(input())
3 print("Masukkan nilai a:")
4 a = int(input())
5 print("Masukkan nilai l:")
6 l = int(input())
7 vol = float(l) / 2 * a * t * tprisma
8 print("Maka volume prisma segitiga adalah : " + str(vol))
9

```

Try the new cross-platform PowerShell <https://aka.ms/pscore6>

PS C:\Users\ASUS> & C:\Users\ASUS\AppData\Local\Programs\Python\Python310\python.exe c:\Users\ASUS\Documents\volprisma.py

Masukkan nilai tprisma:

8

Masukkan nilai a:

9

Masukkan nilai l:

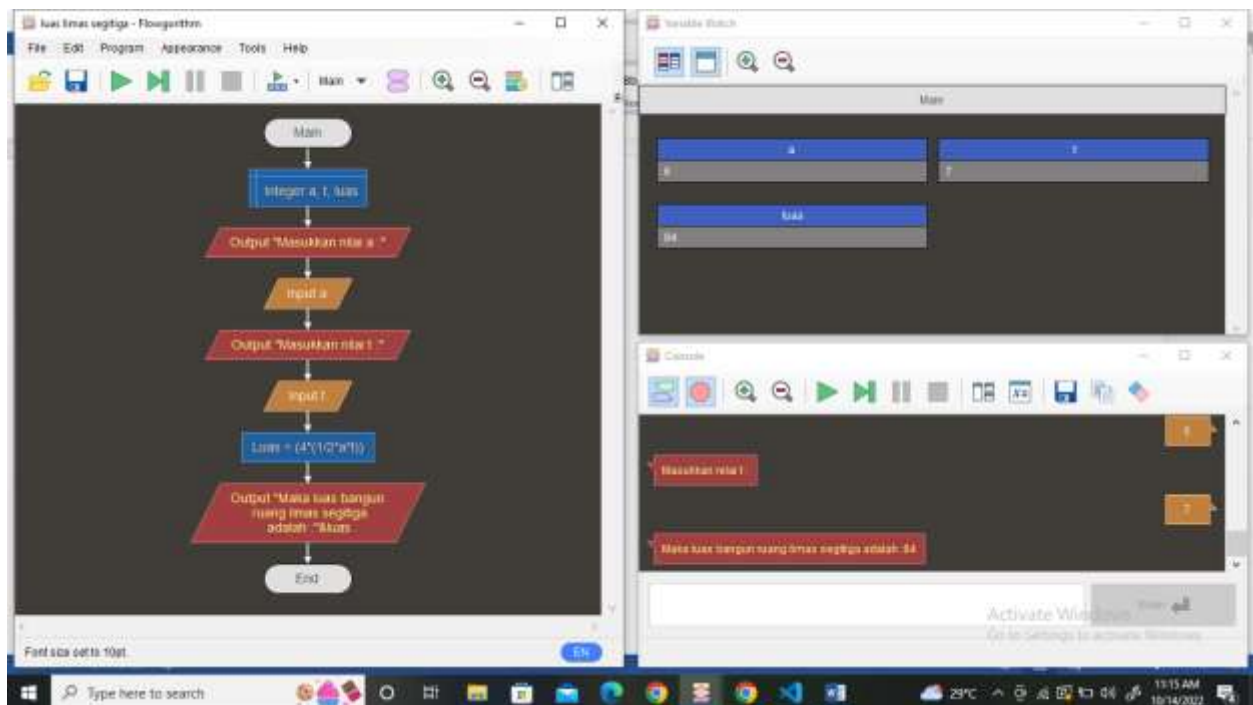
10

Maka volume prisma segitiga adalah : 360.0

PS C:\Users\ASUS> []

## 5. LIMAS SEGITIGA

- Luas Limas segitiga



The screenshot shows a Windows IDE with a Python script and its execution output. The script prompts for the base side length (a) and the height (t), calculates the area of the base triangle, and then calculates the lateral surface area of the pyramid.

```
1 print("Masukkan nilai a :")
2 a = int(input())
3 print("Masukkan nilai t :")
4 t = int(input())
5 luas = 4 * (float(a) / 2 * a * t)
6 print("Maka luas bangun ruang limas segitiga adalah : " + str(luas))
7
```

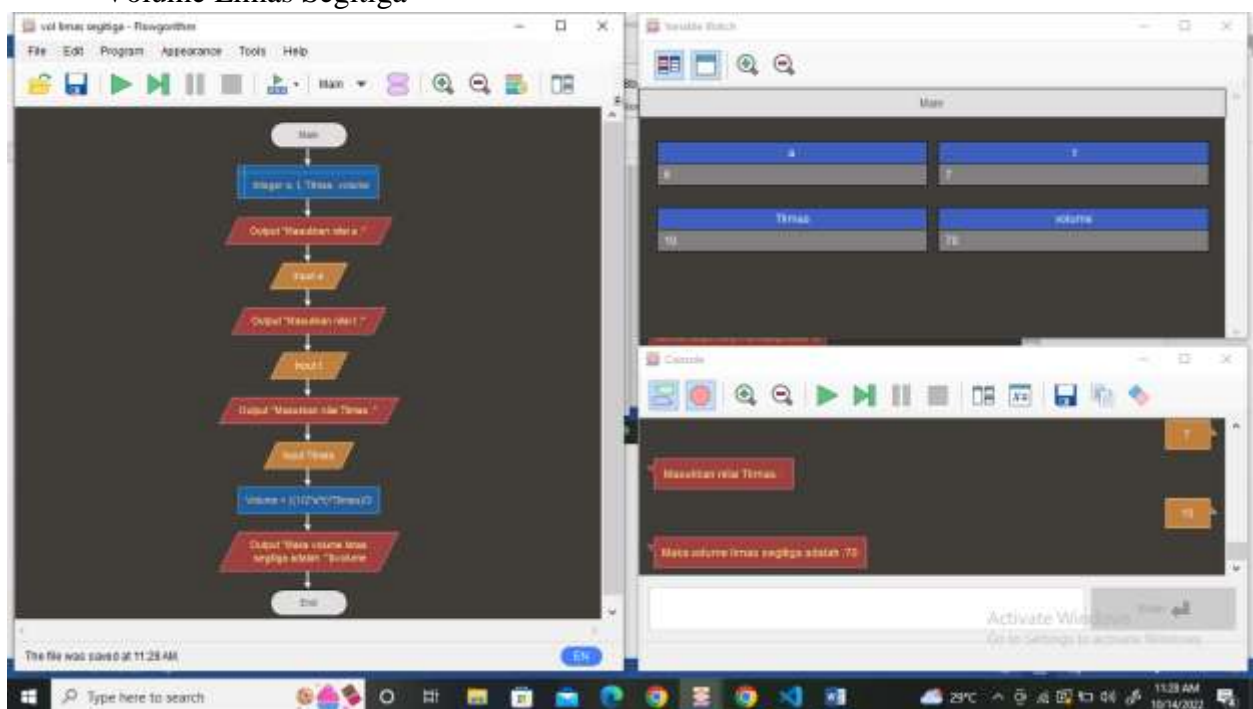
The terminal output shows the user inputting 6 for 'a' and 7 for 't', resulting in a lateral surface area of 84.0.

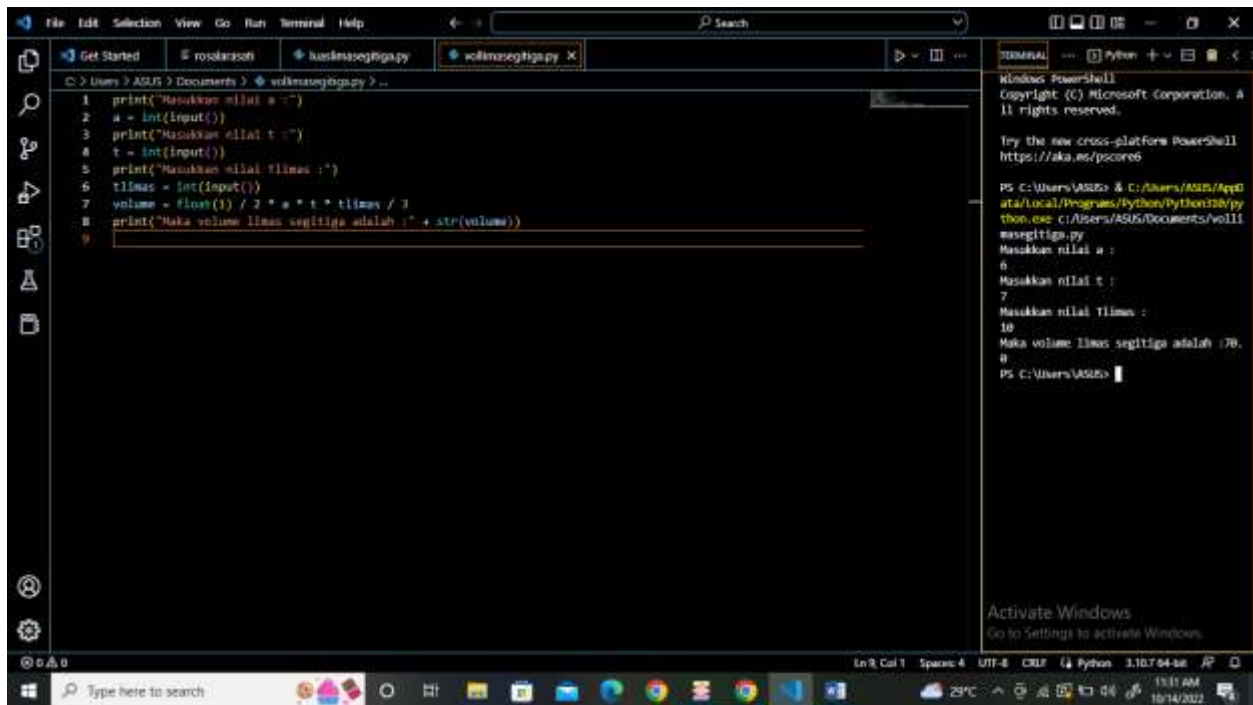
```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell
https://aka.ms/powershell

PS C:\Users\ASUS> & C:\Users\ASUS\AppData\Local\Programs\Python\Python38\python.exe c:\Users\ASUS\Documents\luas1
luassegitiga.py
Masukkan nilai a :
6
Masukkan nilai t :
7
Maka luas bangun ruang limas segitiga
adalah :84.0
PS C:\Users\ASUS>
```

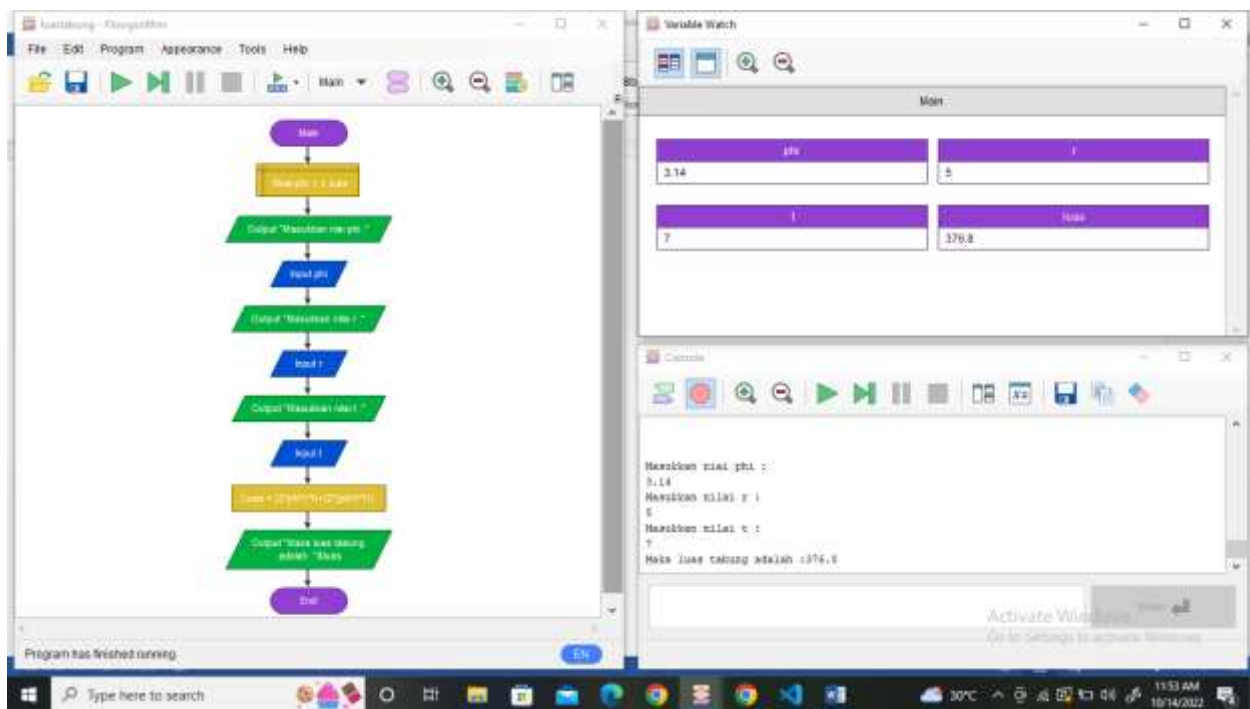
- Volume Limas Segitiga

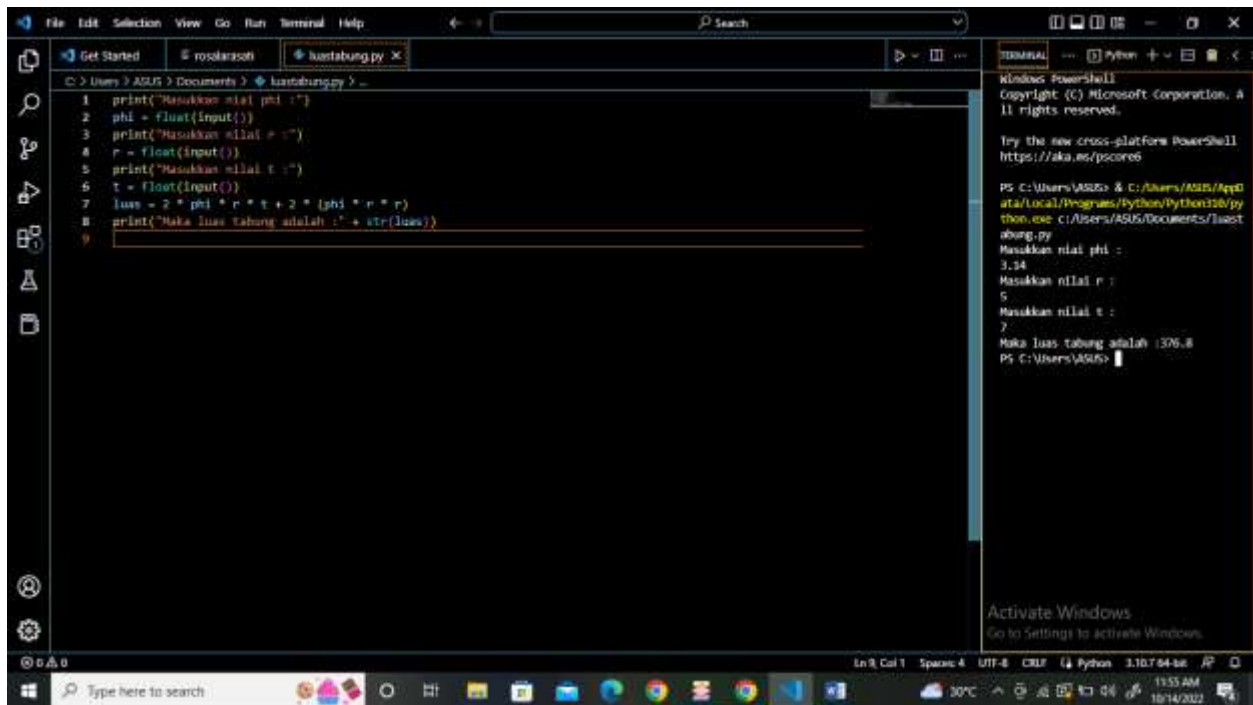




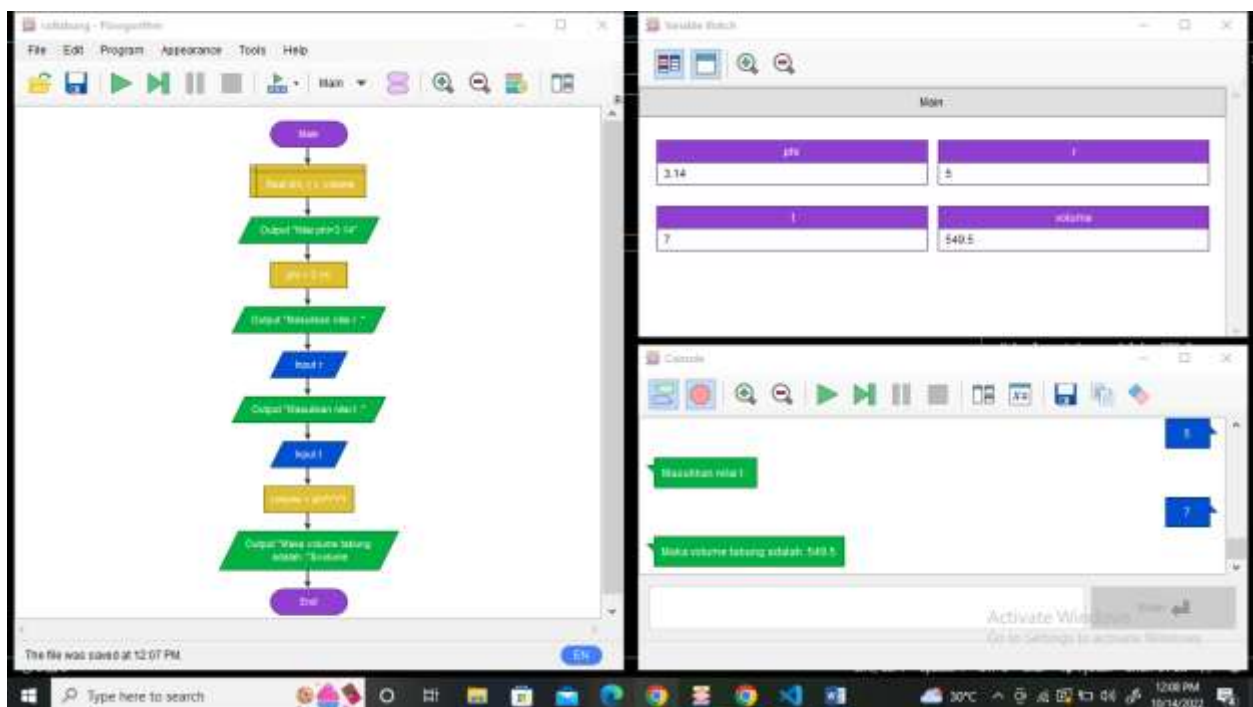
## 6. SILINDER (TABUNG)

- Luas Tabung





- Volume Tabung



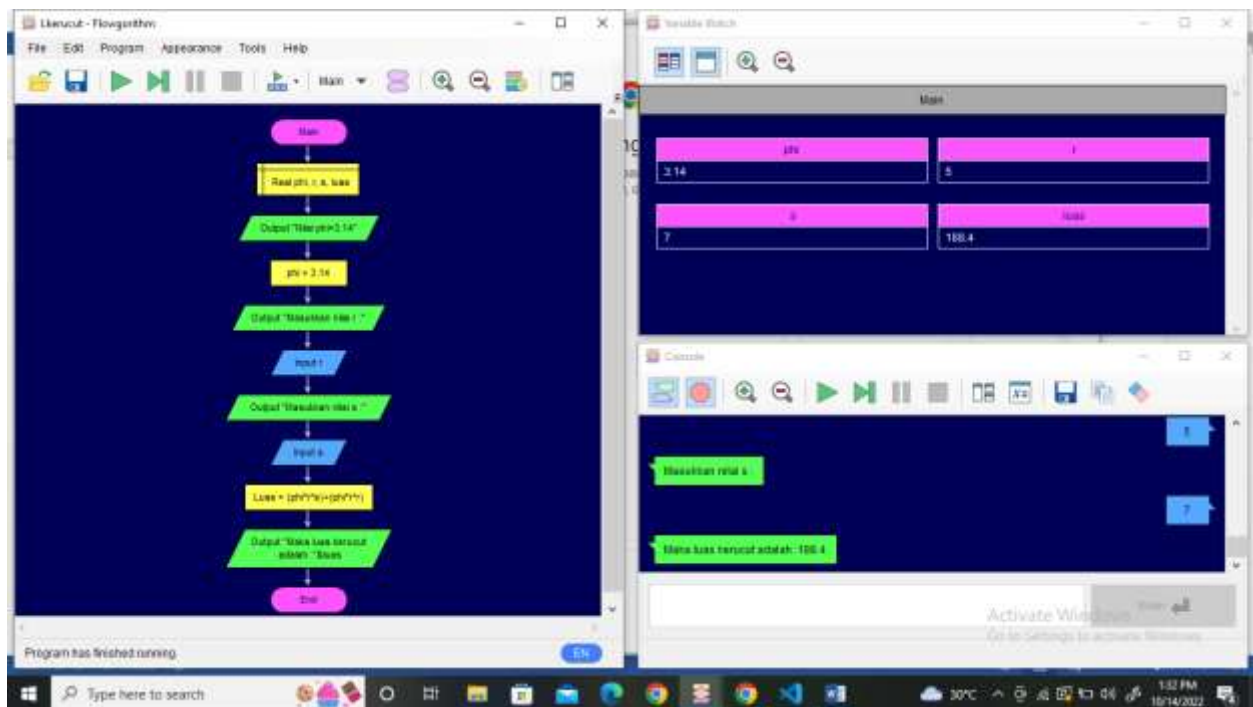


```
1 print("Nilai phi=3.14")
2 phi = 3.14
3 print("Masukkan nilai r :")
4 r = float(input())
5 print("Masukkan nilai t :")
6 t = float(input())
7 volume = phi * r * r * t
8 print("Maka volume tabung adalah : " + str(volume))
9
```

Windows PowerShell  
Copyright (C) Microsoft Corporation. All rights reserved.  
Try the new cross-platform PowerShell  
<https://aka.ms/powershell>  
PS C:\Users\ASUS > C:\Users\ASUS\AppData\Local\Programs\Python\Python38\python.exe c:/Users/ASUS/Documents/volatung.py  
Nilai phi=3.14  
Masukkan nilai r :  
5  
Masukkan nilai t :  
7  
Maka volume tabung adalah :549.5  
PS C:\Users\ASUS>

## 7. KERUCUT

- Luas Kerucut



The image shows a Windows IDE with a Python script and its execution output in a terminal.

```

1 print("Nilai phi=3.14")
2 phi = 3.14
3 print("Masukkan nilai r :")
4 r = float(input())
5 print("Masukkan nilai s :")
6 s = float(input())
7 luas = phi * r * s + phi * r * r
8 print("Maka luas kerucut adalah : " + str(luas))
9

```

Terminal Output:

```

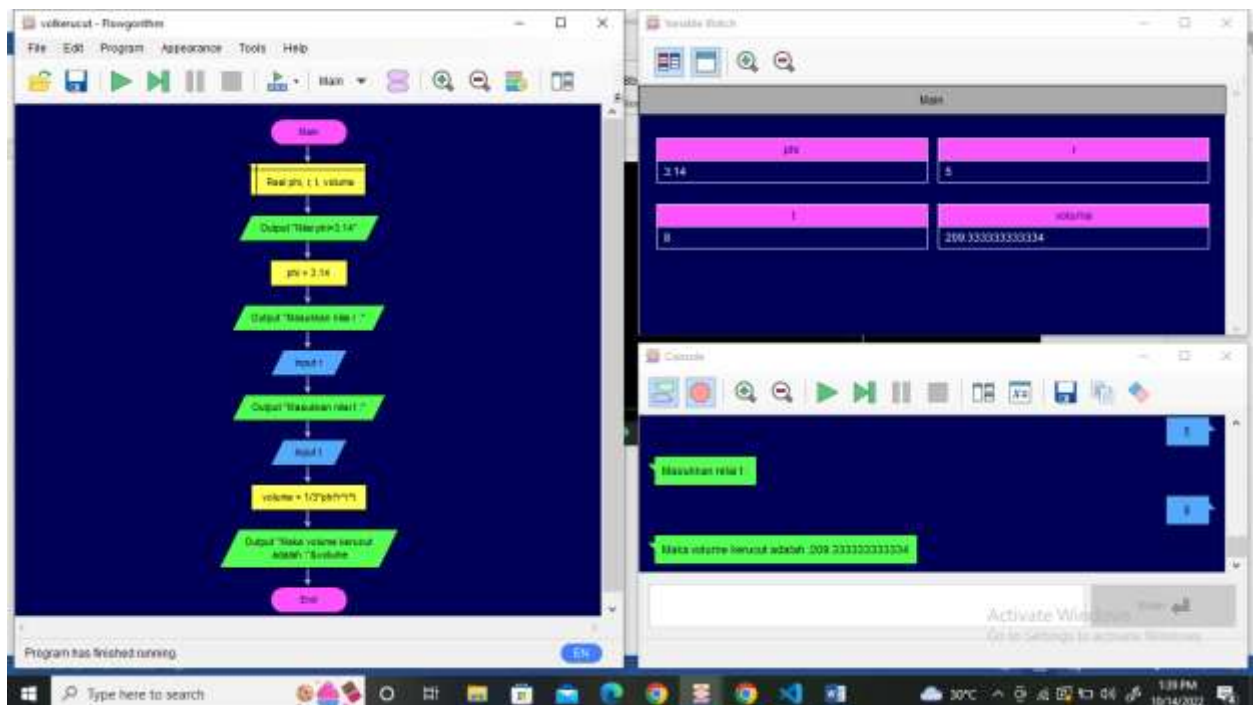
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell
https://aka.ms/pscore6

PS C:\Users\ASUS> & C:\Users\ASUS\AppData\Local\Programs\Python\Python38\python.exe c:\Users\ASUS\Documents\kerucut.py
Nilai phi=3.14
Masukkan nilai r :
5
Masukkan nilai s :
7
Maka luas kerucut adalah :188.4
PS C:\Users\ASUS>

```

- Volume Kerucut



```
1 print("Nilai phi=3.14")
2 phi = 3.14
3 print("Masukkan nilai r :")
4 r = float(input())
5 print("Masukkan nilai t :")
6 t = float(input())
7 volume = float(1) / 3 * phi * r * r * t
8 print("Maka volume kerucut adalah : " + str(volume))
9
```

Windows PowerShell  
Copyright (C) Microsoft Corporation. All rights reserved.  
Try the new cross-platform PowerShell  
<https://aka.ms/pscore6>  
PS C:\Users\ASUS > C:\Users\ASUS\AppData\Local\Programs\Python\Python38\python.exe c:/Users/ASUS/Documents/volkerct.py  
Nilai phi=3.14  
Masukkan nilai r :  
5  
Masukkan nilai t :  
8  
Maka volume kerucut adalah :889.333334  
PS C:\Users\ASUS>

## 8. BOLA

