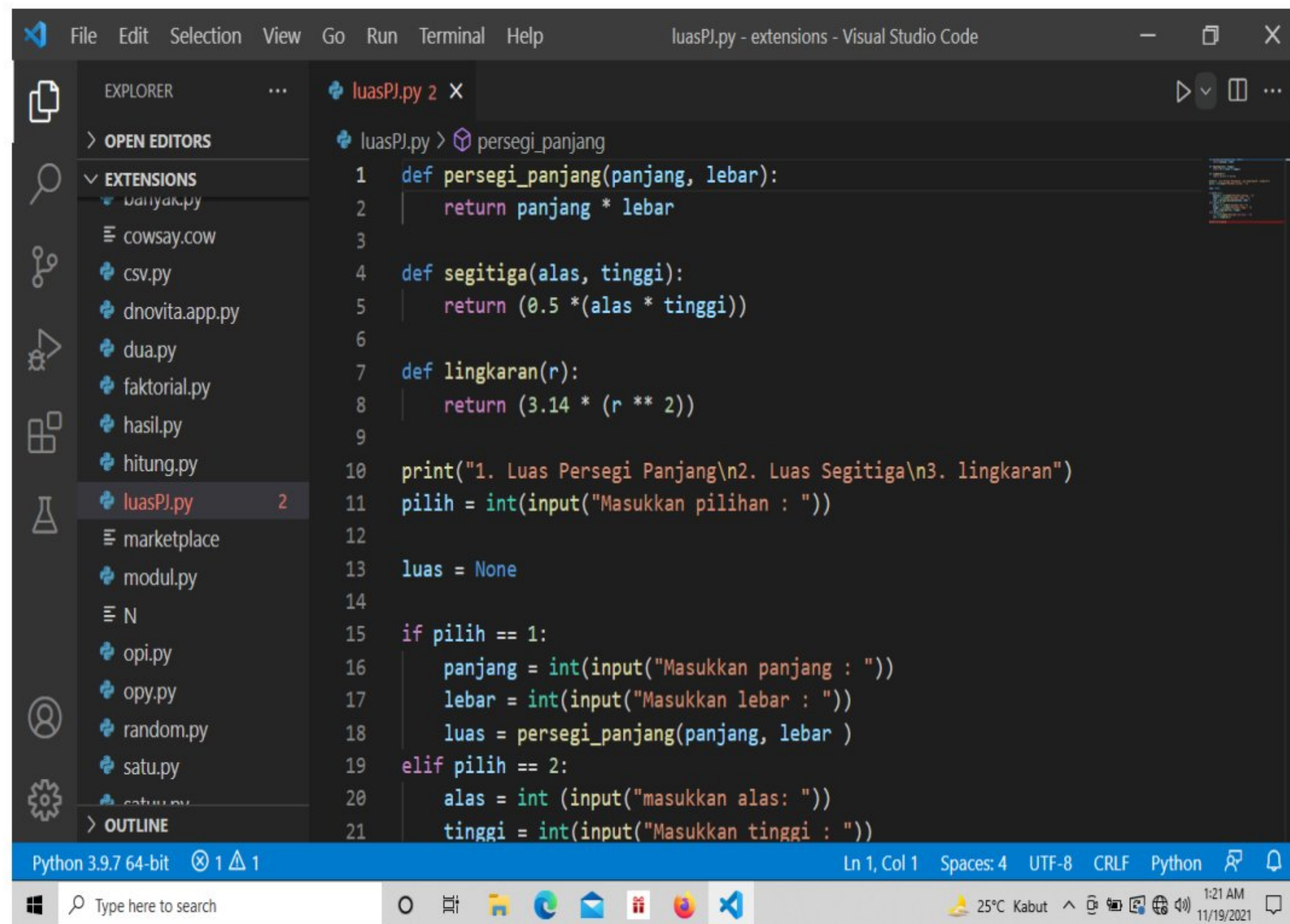


## PRAK PYTHON V

1. Program menghitung luas persegi panjang, segitiga, dan lingkaran dengan menggunakan prosedur.

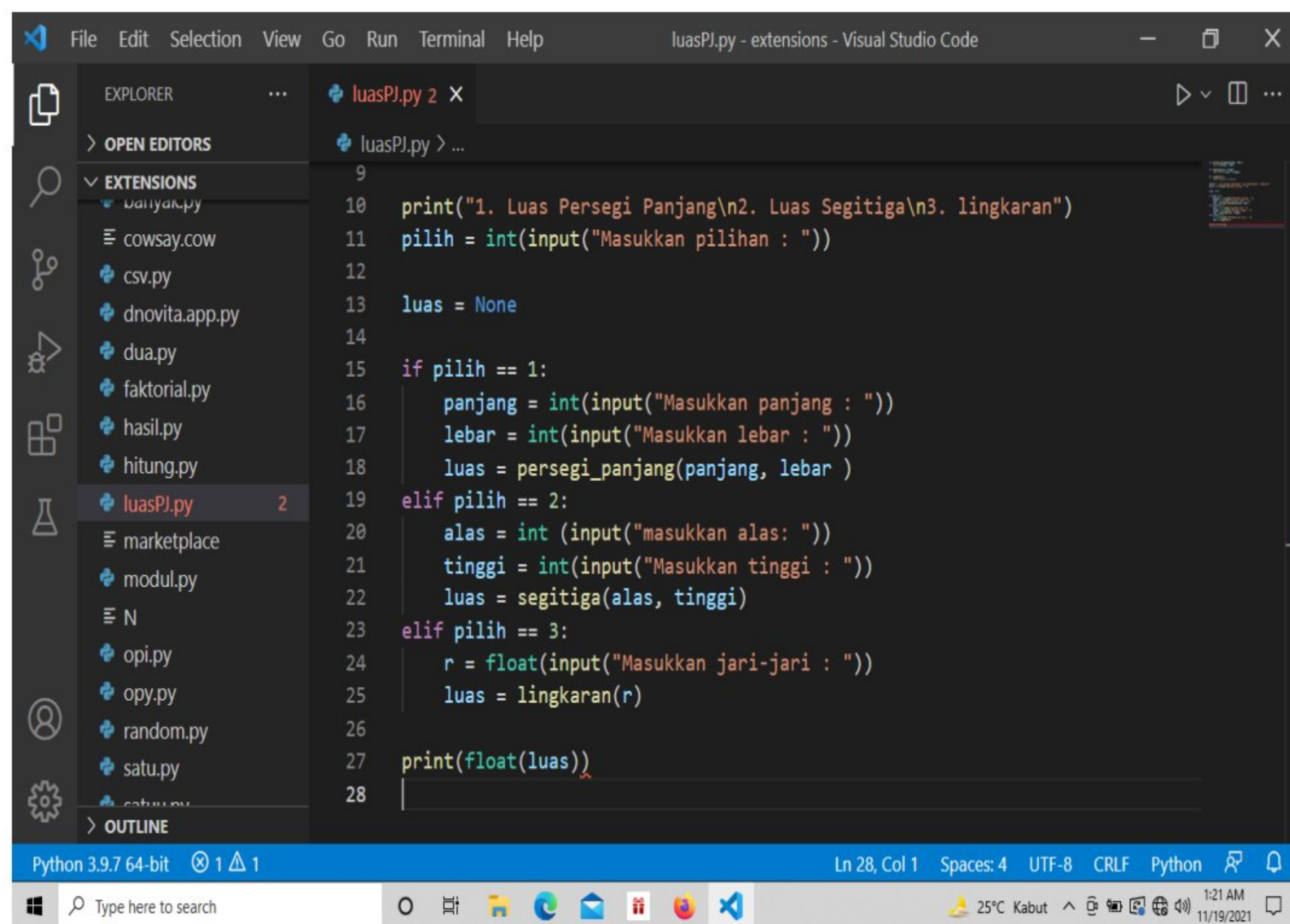


The screenshot shows the Visual Studio Code editor with a file named `luasPJ.py` open. The code defines three functions: `persegi_panjang`, `segitiga`, and `lingkaran`. The `persegi_panjang` function takes `panjang` and `lebar` as arguments and returns their product. The `segitiga` function takes `alas` and `tinggi` as arguments and returns  $0.5 \times \text{alas} \times \text{tinggi}$ . The `lingkaran` function takes `r` as an argument and returns  $3.14 \times r^2$ . The main part of the program prints a menu, prompts the user to choose an option, and then calls the appropriate function based on the choice. The status bar at the bottom indicates Python 3.9.7 64-bit, UTF-8 encoding, and CRLF line endings.

```
File Edit Selection View Go Run Terminal Help
luasPJ.py - extensions - Visual Studio Code

EXPLORER
OPEN EDITORS
EXTENSIONS
luasPJ.py
luasPJ.py 2
OUTLINE

luasPJ.py > persegi_panjang
1 def persegi_panjang(panjang, lebar):
2     return panjang * lebar
3
4 def segitiga(alas, tinggi):
5     return (0.5 * (alas * tinggi))
6
7 def lingkaran(r):
8     return (3.14 * (r ** 2))
9
10 print("1. Luas Persegi Panjang\n2. Luas Segitiga\n3. lingkaran")
11 pilih = int(input("Masukkan pilihan : "))
12
13 luas = None
14
15 if pilih == 1:
16     panjang = int(input("Masukkan panjang : "))
17     lebar = int(input("Masukkan lebar : "))
18     luas = persegi_panjang(panjang, lebar )
19 elif pilih == 2:
20     alas = int (input("masukkan alas: "))
21     tinggi = int(input("Masukkan tinggi : "))
```



This screenshot shows the continuation of the Python program from the previous image. It completes the conditional logic for the area calculations. For choice 2, it calls the `segitiga` function. For choice 3, it calls the `lingkaran` function. Finally, it prints the result as a float. The status bar at the bottom shows the cursor is at line 28, column 1.

```
File Edit Selection View Go Run Terminal Help
luasPJ.py - extensions - Visual Studio Code

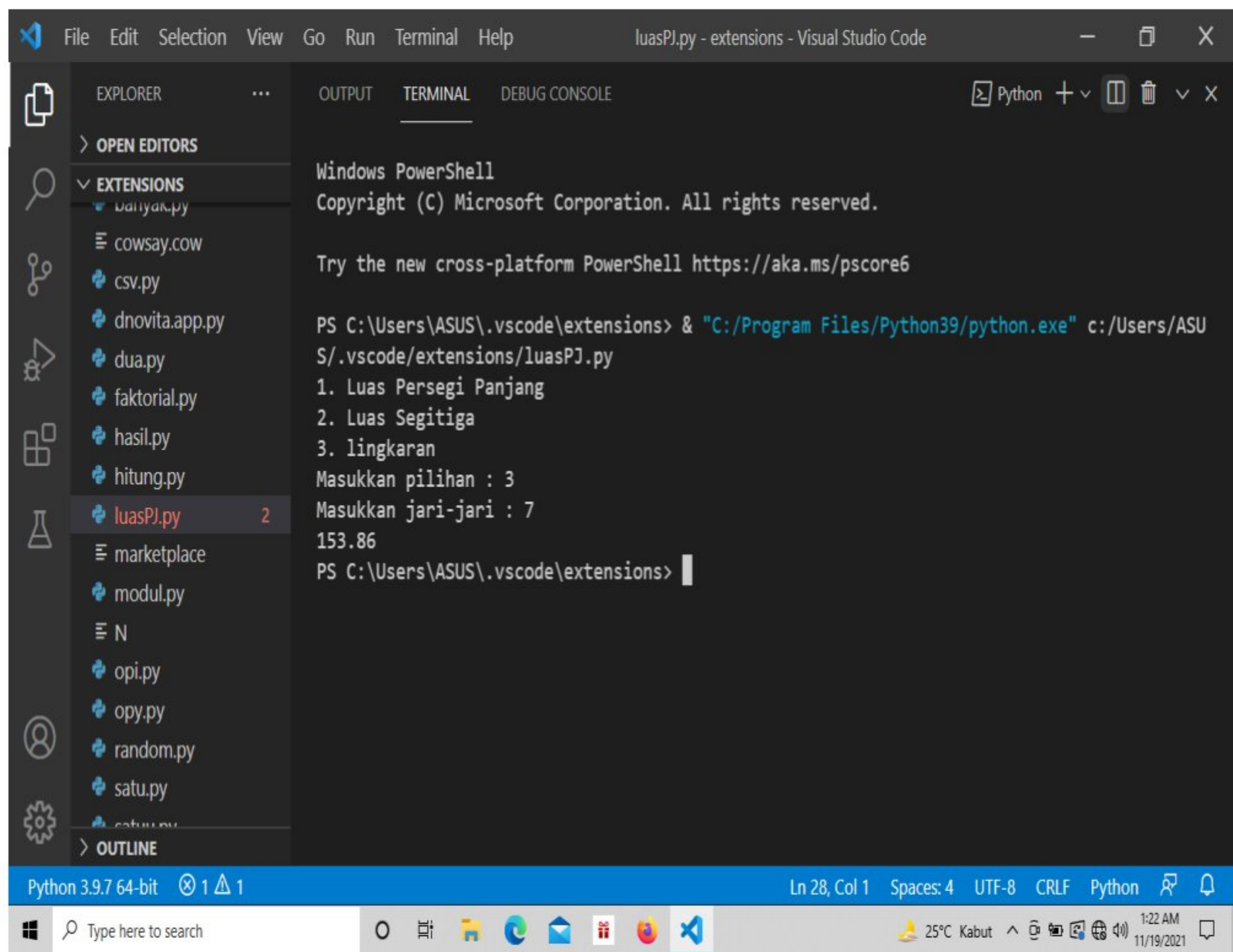
EXPLORER
OPEN EDITORS
EXTENSIONS
luasPJ.py
luasPJ.py 2
OUTLINE

luasPJ.py > ...
9
10 print("1. Luas Persegi Panjang\n2. Luas Segitiga\n3. lingkaran")
11 pilih = int(input("Masukkan pilihan : "))
12
13 luas = None
14
15 if pilih == 1:
16     panjang = int(input("Masukkan panjang : "))
17     lebar = int(input("Masukkan lebar : "))
18     luas = persegi_panjang(panjang, lebar )
19 elif pilih == 2:
20     alas = int (input("masukkan alas: "))
21     tinggi = int(input("Masukkan tinggi : "))
22     luas = segitiga(alas, tinggi)
23 elif pilih == 3:
24     r = float(input("Masukkan jari-jari : "))
25     luas = lingkaran(r)
26
27 print(float(luas))
28
```

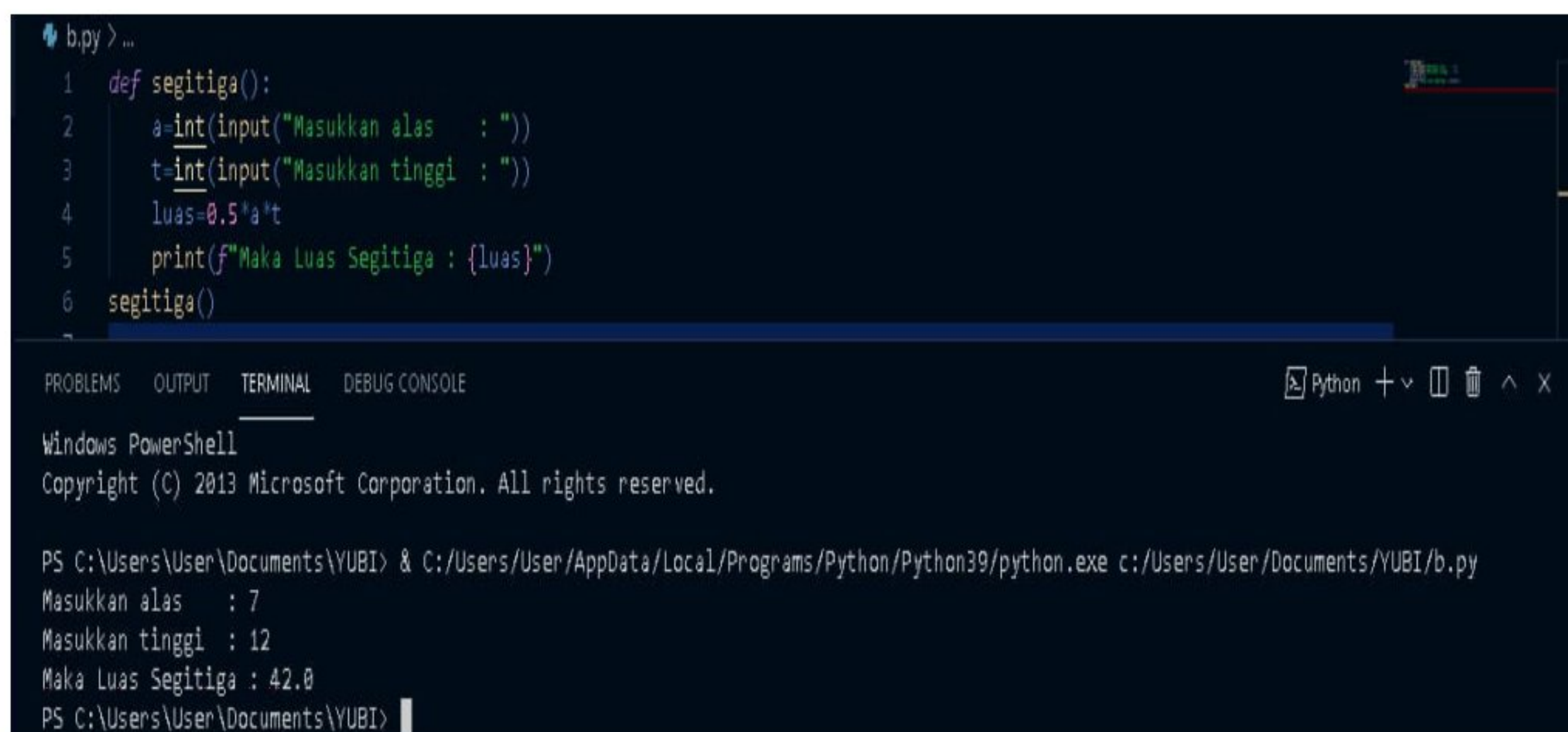
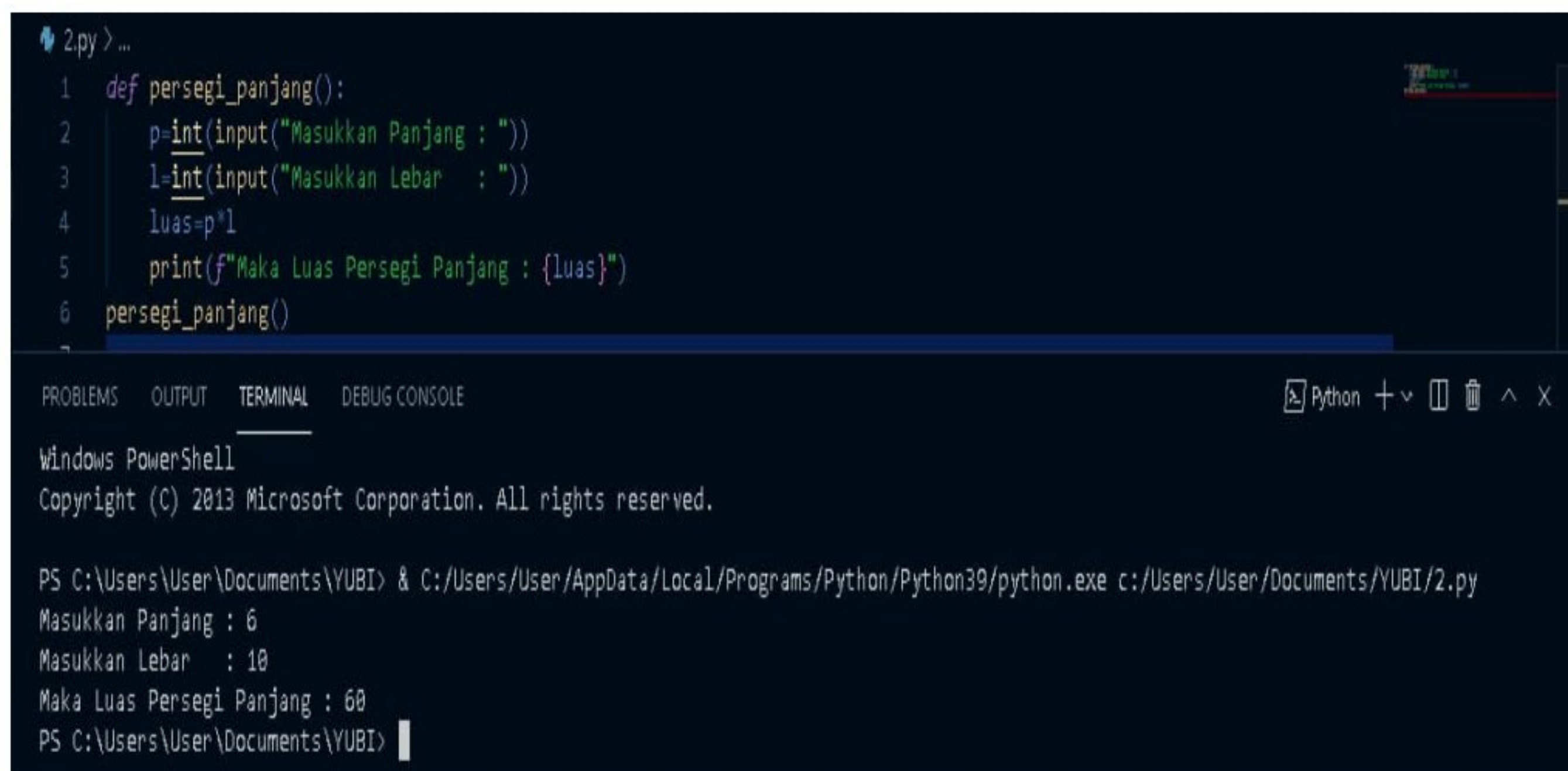




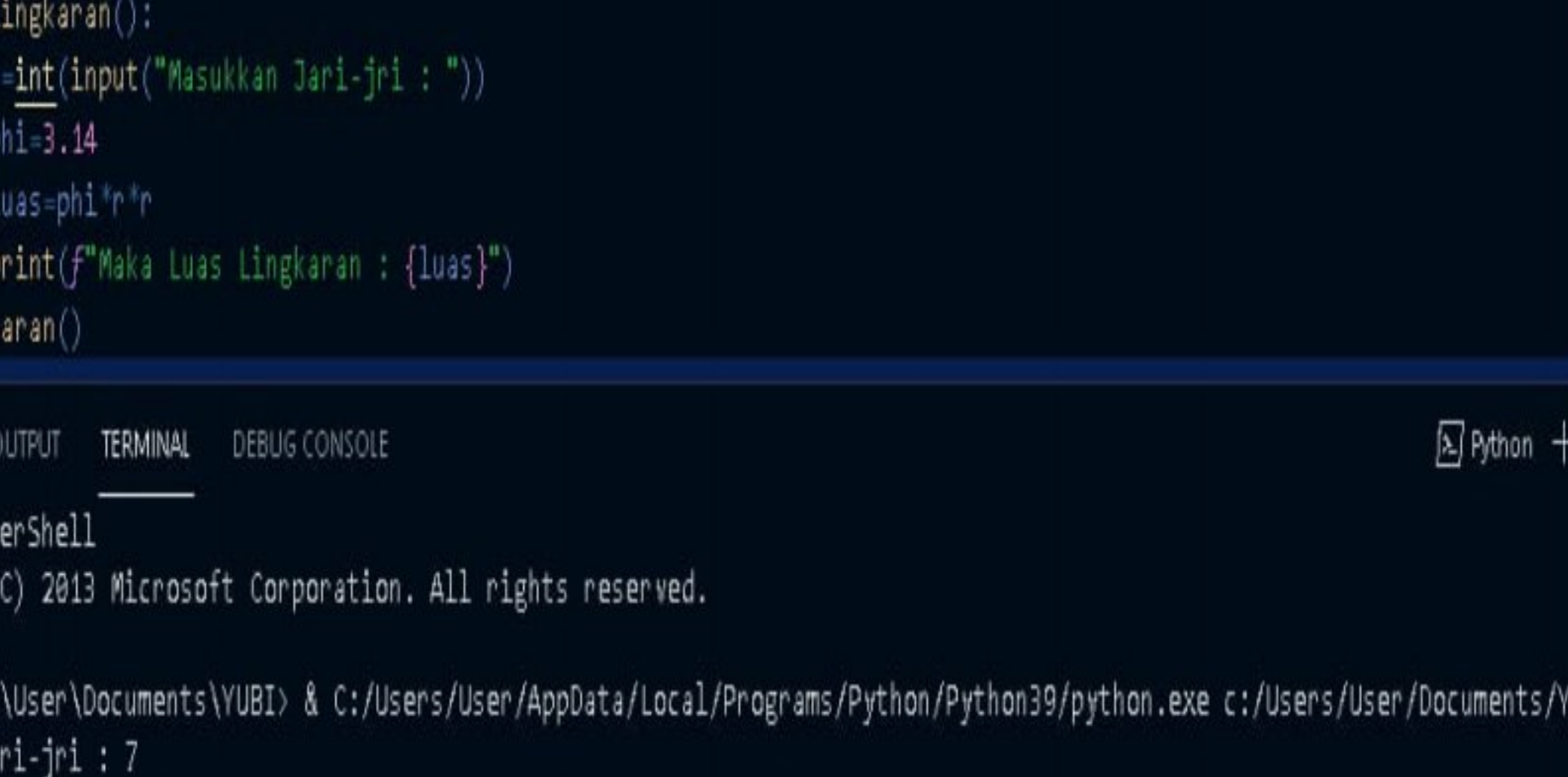




## 2. Prosedur disimpan dalam file yang berbeda.







```
1 def lingkaran():
2     r=int(input("Masukkan Jari-jari : "))
3     phi=3.14
4     luas=phi*r*r
5     print(f"Maka Luas Lingkaran : {luas}")
6 lingkaran()

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
Python + - [ ] ^ x

Windows PowerShell
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PS C:\Users\User\Documents\YUBI> & C:/Users/User/AppData/Local/Programs/Python/Python39/python.exe c:/Users/User/Documents/YUBI/c.py
Masukkan Jari-jari : 7
Maka Luas Lingkaran : 153.86
PS C:\Users\User\Documents\YUBI>
```

3. Program menghitung luas segitiga menggunakan fungsi.

The screenshot shows the Visual Studio Code editor with the following components:

- Explorer View:** Displays a list of files in the 'satuu.py' directory, including '26.py', '27.py', '28.py', '1.py', and 'luas\_segitiga.py'.
- Editor View:** Shows the content of 'luas\_segitiga.py'. The code defines a function 'luas\_segitiga' that takes 'alas' and 'tinggi' as parameters and returns the calculated area. The function is called with 'luas\_segitiga(4, 8)', which outputs 'Luas segitiga 16.0'.
- Run and Debug View:** Shows the output of the script execution, which is 'Luas segitiga 16.0'.
- Output View:** Shows the output of the script execution, which is 'Luas segitiga 16.0'.

4. Program mencari nilai tertinggi dari sekelompok data menggunakan list



The screenshot shows the Visual Studio Code editor with the file 'luasPJ.py' open. The left sidebar displays the Explorer and Extensions views. The main editor area shows the following Python code:

```
20
21
22 #4
23 def proses(a):
24     return max(a)
25
26 def cetakhasil(hasil):
27     print("bilangan terbesar adalah :",hasil)
28
29 def inputdata():
30     bilangan = []
31     n = int(input("masukkan banyak data yang diinginkan : "))
32     for i in range(n):
33         masukkandata = input("masukkan bilangan ")
34         bilangan.append(masukkandata)
35
36     hasil = proses(bilangan)
37     cetakhasil(hasil)
38
39 inputdata()
40
```

The status bar at the bottom indicates 'Python 3.9.7 64-bit', 'Ln 34, Col 38', 'Spaces: 4', 'UTF-8', 'CRLF', and 'Python'.

The screenshot shows the Visual Studio Code terminal window with the following output:

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

PS C:\Users\ASUS\.vscode\extensions> & "C:/Program Files/Python39/python.exe" c:/Users/ASUS/.vscode/extensions/luasPJ.py
masukkan banyak data yang diinginkan : 6
masukkan bilangan 3
masukkan bilangan 4
masukkan bilangan 5
masukkan bilangan 6
masukkan bilangan 7
masukkan bilangan 8
bilangan terbesar adalah : 8
PS C:\Users\ASUS\.vscode\extensions>
```

The status bar at the bottom indicates 'Python 3.9.7 64-bit', 'Ln 34, Col 38', 'Spaces: 4', 'UTF-8', 'CRLF', and 'Python'.

## 5. Program menampilkan bilangan kelipatan X



```
41 #5
42 def cetakhasil(cetak):
43     print("bilangan kelipatan :",cetak)
44
45 def proses(nilai,kelipatan):
46     for i in nilai:
47         if i % kelipatan == 0:
48             cetakhasil(i)
49
50 def inputdata():
51     bilangan = []
52     for i in range(5):
53         masukkandata = int(input("masukkan bilangan :"))
54         bilangan.append(masukkandata)
55
56     kelipatan = int(input("masukkan kelipatan : "))
57
58     hasil = proses(bilangan,kelipatan)
59     cetakhasil(hasil)
60
61 inputdata()
```

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

PS C:\Users\ASUS\.vscode\extensions> & "C:/Program Files/Python39/python.exe" c:/Users/ASU
S/.vscode/extensions/luasPJ.py
masukkan bilangan :2
masukkan bilangan :4
masukkan bilangan :6
masukkan bilangan :8
masukkan bilangan :10
masukkan kelipatan : 2
bilangan kelipatan : 2
bilangan kelipatan : 4
bilangan kelipatan : 6
bilangan kelipatan : 8
bilangan kelipatan : 10
bilangan kelipatan : None
PS C:\Users\ASUS\.vscode\extensions>
```

6. Buatlah program menghitung faktorial sebuah bilangan



The screenshot shows the Visual Studio Code interface with a file explorer on the left containing several Python files. The main editor displays a file named `faktorial.py` with the following code:

```
1 def faktorial(n):
2     faktorial = n
3     print(f"faktorial:",faktorial)
4
5 #pemanggilan fungsi
6 faktorial(6*5*4*3*2*1)
```

Below the code editor is a terminal window titled "Windows PowerShell" showing the execution of the script:

```
PS C:\Users\ASUS\.vscode\extensions> & "C:/Program Files/Python39/python.exe" c:/Users/ASUS/.vscode/extensions/faktorial.py
faktorial: 720
PS C:\Users\ASUS\.vscode\extensions>
```

The status bar at the bottom indicates the Python 3.9.7 64-bit environment and the current cursor position at line 6, column 22.

7. Program menjumlahkan data antara dua buah list dengan menggunakan fungsi.
8. Program menghitung akar-akar persamaan.
9. Program menampilkan jumlah deret aritmatik.

The screenshot shows the Visual Studio Code interface with a file explorer on the left. The main editor displays a file named `luasPJ.py` with the following code:

```
1 #deret aritmatika
2
3 A = 2
4 B = 4
5 N = 0
6
7 while True :
8     if N < 10:
9         print(A)
10        N = N + 1
11        A = A + B
12    else :
13        break
14
15 print("Sn = {}".format(hasil))
```

The status bar at the bottom indicates the Python 3.9.7 64-bit environment and the current cursor position at line 14, column 1.



