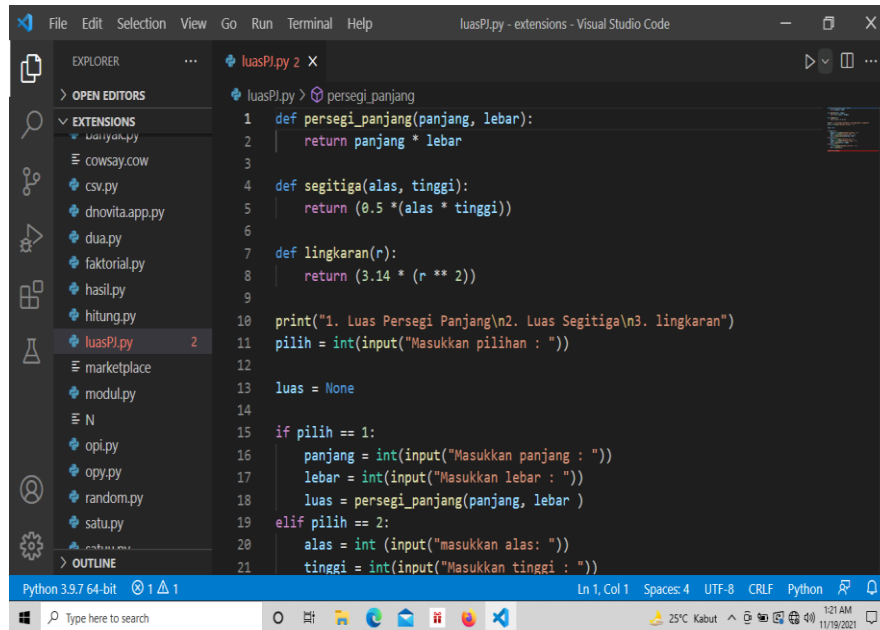


5. TUGAS PRAKTIKUM PYTHON V

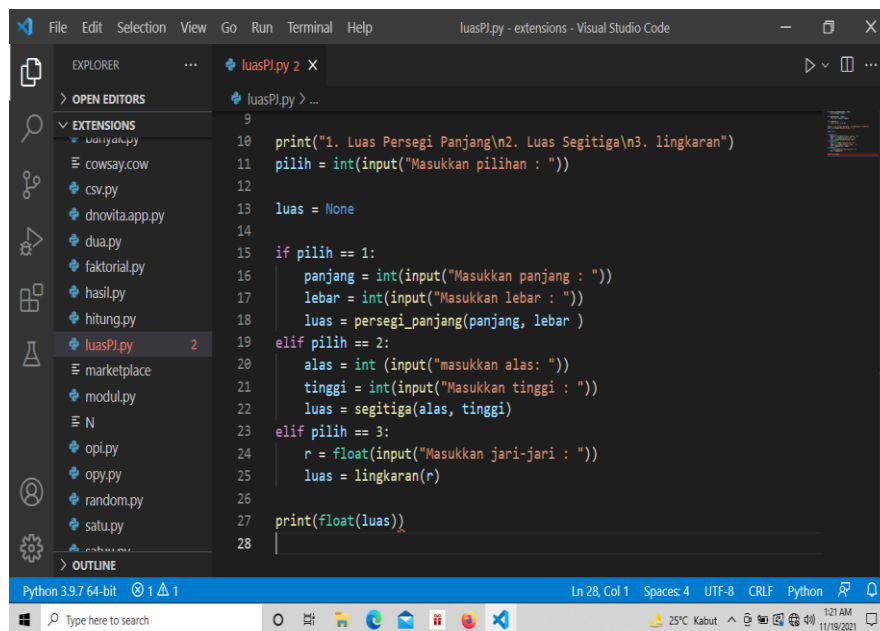
1. Program menghitung luas persegi panjang, segitiga, dan lingkaran dengan menggunakan prosedur.



```
luasPJ.py - extensions - Visual Studio Code

EXPLORER
> OPEN EDITORS
  luasPJ.py
EXTENSIONS
  cowsay.cow
  csv.py
  dnovita.app.py
  dua.py
  faktorial.py
  hasil.py
  hitung.py
  luasPJ.py 2
  marketplace
  modul.py
  N
  opi.py
  opy.py
  random.py
  satu.py
  ...
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 : "))
```



```
luasPJ.py - extensions - Visual Studio Code

EXPLORER
> OPEN EDITORS
  luasPJ.py
EXTENSIONS
  cowsay.cow
  csv.py
  dnovita.app.py
  dua.py
  faktorial.py
  hasil.py
  hitung.py
  luasPJ.py 2
  marketplace
  modul.py
  N
  opi.py
  opy.py
  random.py
  satu.py
  ...
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
```

Visual Studio Code interface showing the execution of a Python script named `luasPJ.py` in a Windows PowerShell terminal. The Explorer sidebar on the left lists several files, with `luasPJ.py` selected and showing a count of 2. The terminal output displays the script's execution, which prompts the user for three inputs: a shape choice (1 for rectangle, 2 for triangle, 3 for circle), a length, and a width. The user enters 1, 6, and 10 respectively, and the script calculates and outputs an area of 60.0.

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

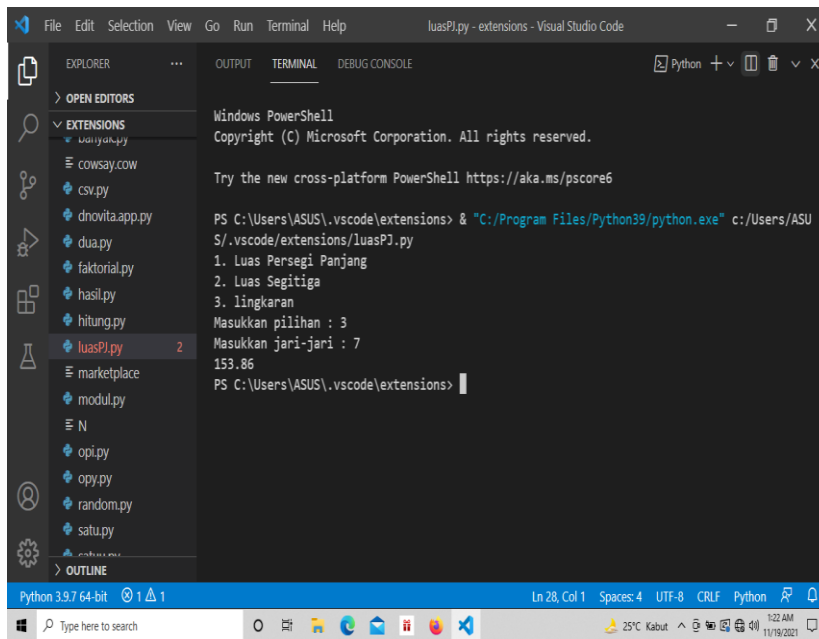
PS C:\Users\ASUS\.vscode\extensions> & "C:/Program Files/Python39/python.exe" c:/Users/ASUS/.vscode/extensions/luasPJ.py
1. Luas Persegi Panjang
2. Luas Segitiga
3. lingkaran
Masukkan pilihan : 1
Masukkan panjang : 6
Masukkan lebar : 10
60.0
PS C:\Users\ASUS\.vscode\extensions>
```

Visual Studio Code interface showing the execution of the same Python script `luasPJ.py` in a Windows PowerShell terminal. The Explorer sidebar shows `luasPJ.py` with a count of 2. The terminal output shows the script being run with different inputs: the user chooses option 2 (triangle), enters a length of 7, and a height (tinggi) of 12. The script calculates and outputs an area of 42.0.

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

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

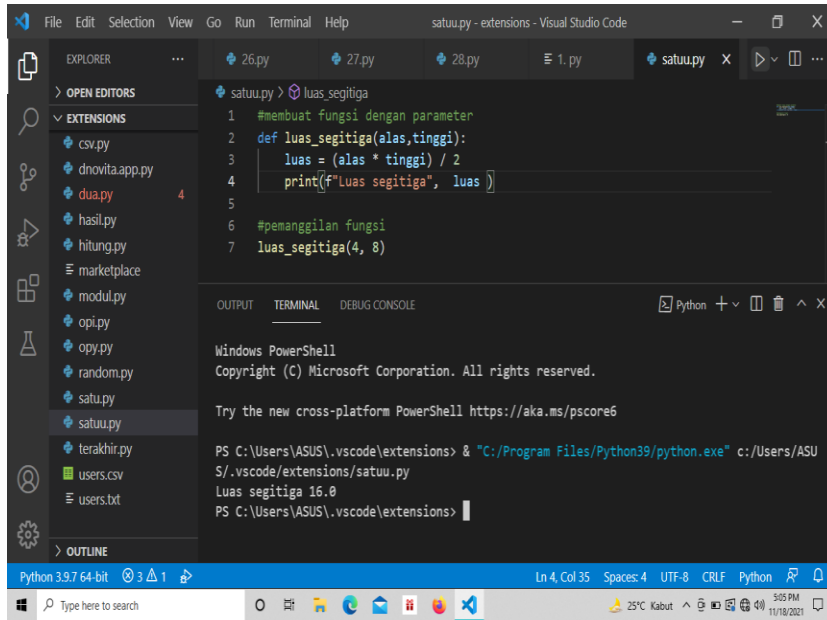
PS C:\Users\ASUS\.vscode\extensions> & "C:/Program Files/Python39/python.exe" c:/Users/ASUS/.vscode/extensions/luasPJ.py
1. Luas Persegi Panjang
2. Luas Segitiga
3. lingkaran
Masukkan pilihan : 2
masukkan alas: 7
Masukkan tinggi : 12
42.0
PS C:\Users\ASUS\.vscode\extensions>
```



2. Prosedur disimpandalam file yang berbeda.



3. Program menghitung luas segitiga menggunakan fungsi.

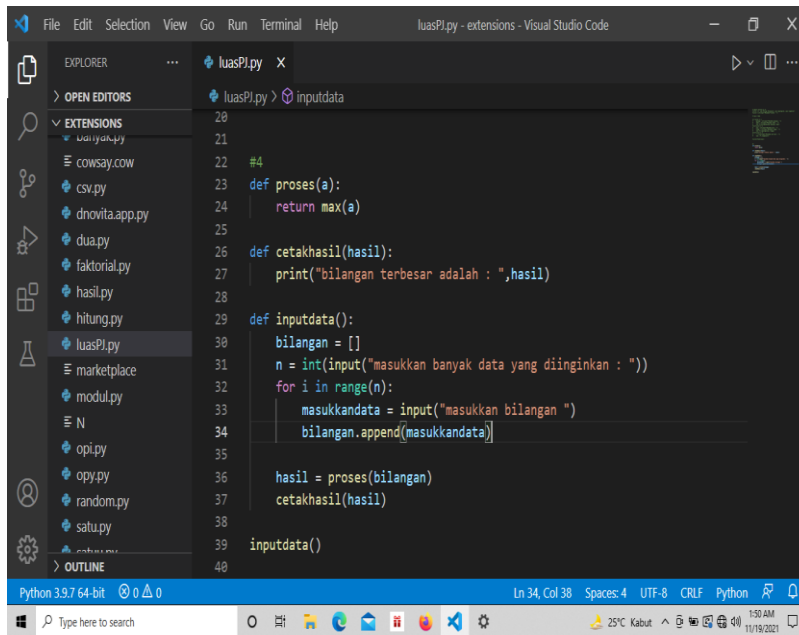


The screenshot shows the Visual Studio Code interface with a Python file named `luas_segitiga.py` open. The code defines a function `luas_segitiga` that takes `alas` (base) and `tinggi` (height) as parameters and returns the area. The function is then called with `luas_segitiga(4, 8)`. The terminal shows the command `python c:/Users/ASU/.vscode/extensions/satu.py` being executed, resulting in the output `Luas segitiga 16.0`.

```
1 #membuat fungsi dengan parameter
2 def luas_segitiga(alas,tinggi):
3     luas = (alas * tinggi) / 2
4     print(f"Luas segitiga", luas)
5
6 #pemanggilan fungsi
7 luas_segitiga(4, 8)
```

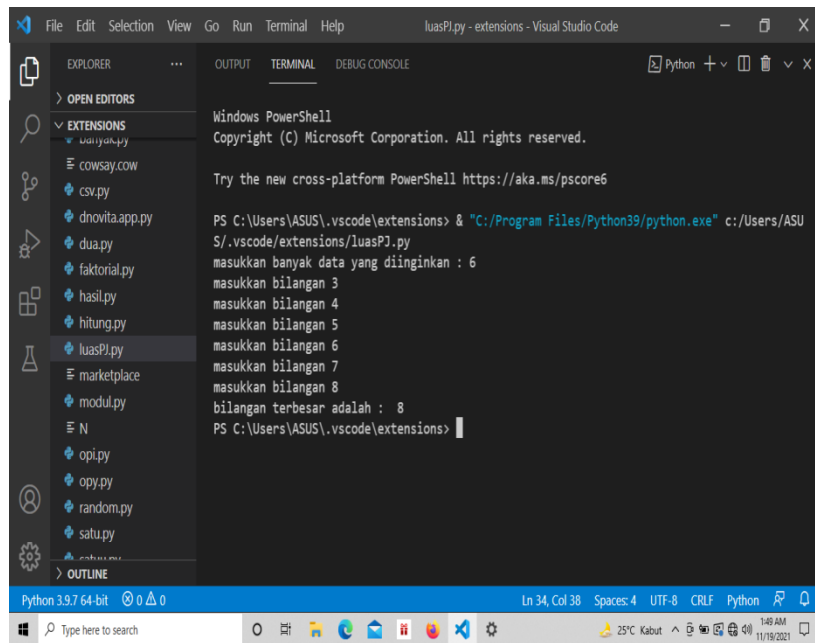
```
PS C:\Users\ASU\.vscode\extensions> python c:/Users/ASU/.vscode/extensions/satu.py
Luas segitiga 16.0
PS C:\Users\ASU\.vscode\extensions>
```

4. Program mencari nilai tertinggi dari sekelompok data menggunakan list



The screenshot shows the Visual Studio Code interface with a Python file named `luasPl.py` open. The code defines a function `proses` that takes a list `a` and returns the maximum value. It also defines a function `cetakhasil` that prints the result. The `inputdata` function prompts the user for the number of data points, collects the data into a list, and then calls `proses` and `cetakhasil` to find and display the maximum value.

```
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
```



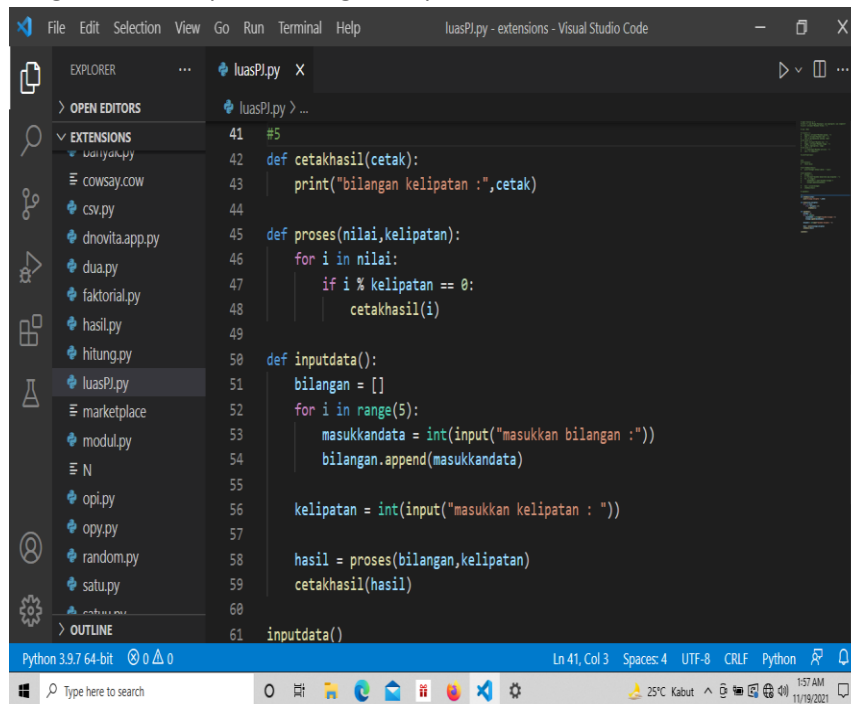
The screenshot shows the Visual Studio Code interface with the Explorer sidebar on the left displaying a list of files including `luasPJ.py`. The main editor area shows a PowerShell terminal window with the following output:

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

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>
```

5. Program menampilkanbilangankelipatan X



The screenshot shows the Visual Studio Code editor with the file `luasPJ.py` open. The code is as follows:

```
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()
```

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

- Explorer Sidebar:** Lists files including `luasPJ.py`, `marketplace`, `modul.py`, `opi.py`, `opy.py`, `random.py`, and `satup.py`.
- Terminal Window:** Displays the execution of a PowerShell script. The prompt is `PS C:\Users\ASUS\.vscode\extensions> & "C:/Program Files/Python39/python.exe" c:/Users/ASUS/.vscode/extensions/luasPJ.py`. The script prompts for a number (`masukkan bilangan :`) and calculates its multiples (e.g., `bilangan kelipatan : 2`).
- Status Bar:** Shows `Python 3.9.7 64-bit` and the cursor position `Ln 61, Col 12`.

6. Buatlah program menghitung faktorial sebuah bilangan

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

- File Explorer (Left):** Shows a list of files including `28.py`, `1.py`, `satu.py`, `faktorial.py`, and `N`. The `EXTENSIONS` section is expanded, showing a list of installed extensions like `dnovita.app.py`, `dua.py`, `faktorial.py`, `hasil.py`, `hitung.py`, `marketplace`, `modul.py`, `opi.py`, `opy.py`, `random.py`, `satu.py`, `satu.py`, `terakhir.py`, and `users.csv`.
- Editor (Center):** Displays the content of `faktorial.py`:


```
1 def faktorial(n):
2     faktorial = n
3     print(f"faktorial:",faktorial)
4
5 #pemanggilan fungsi
6 faktorial(6*5*4*3*2*1)
```
- Terminal (Bottom):** Shows the output of running the script in a Windows PowerShell environment:


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

PS C:\Users\ASUS\.vscode\extensions> & "C:/Program Files/Python39/python.exe" c:/Users/ASU
S/.vscode/extensions/faktorial.py
faktorial: 720
PS C:\Users\ASUS\.vscode\extensions>
```
- Status Bar (Bottom):** Indicates the current file is `faktorial.py` at line 6, column 22, with 3 spaces. It also shows the Python version as 3.9.7 64-bit and the current time as 5:36 PM on 11/18/2021.

7. Program menjumlahkan data antaradua buah list dengan menggunakan fungsi.
8. Program menghitung akar-akar persamaan.
9. Program menampilkan jumlah deret aritmatika.

```
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))
```

```
Windows PowerShell

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
2
6
10
14
18
22
26
30
34
38

Traceback (most recent call last):
  File "c:\Users\ASUS\.vscode\extensions\luasPJ.py", line 15, in <module>
    print("Sn = {}". format(hasil))
NameError: name 'hasil' is not defined
PS C:\Users\ASUS\.vscode\extensions>
```