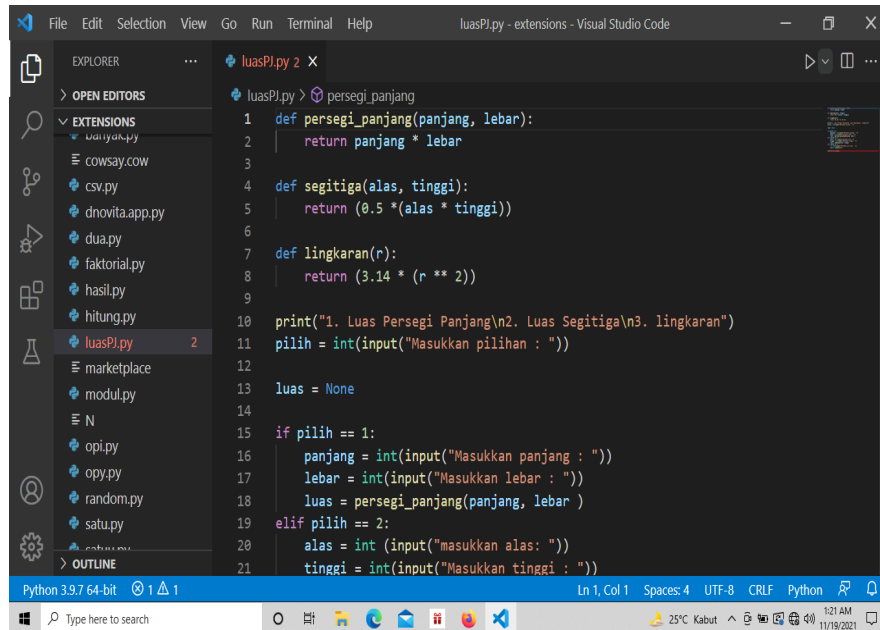


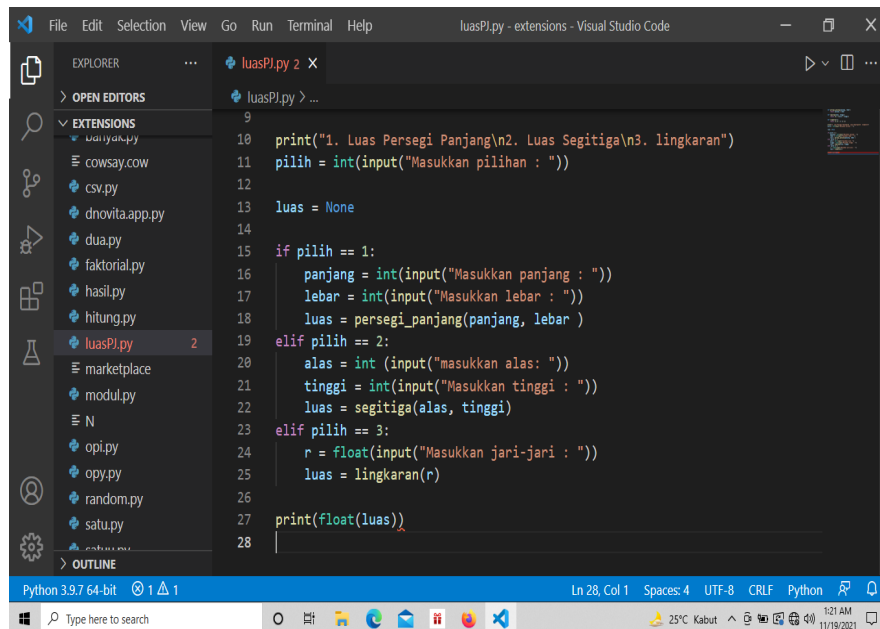
PRAK PYTHON V

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



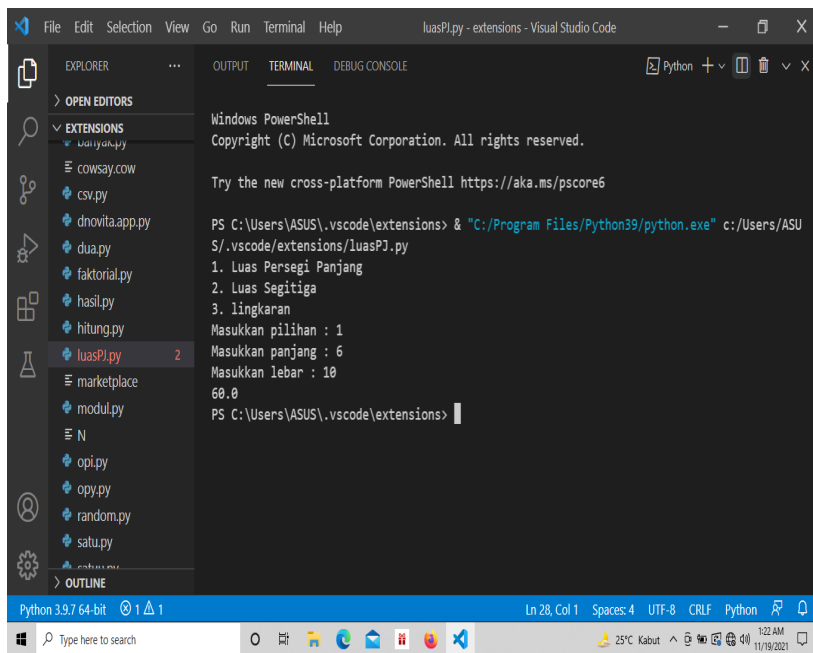
The screenshot shows the Visual Studio Code editor with a file named `luasPJ.py` open. The code defines three functions: `persegi_panjang`, `segitiga`, and `lingkaran`. It also includes a menu-driven interface for the user to select which calculation to perform.

```
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 : "))
```



The screenshot shows the same Visual Studio Code editor with the `luasPJ.py` file. The code is now complete, including the logic to calculate the area based on the user's selection and to print the result.

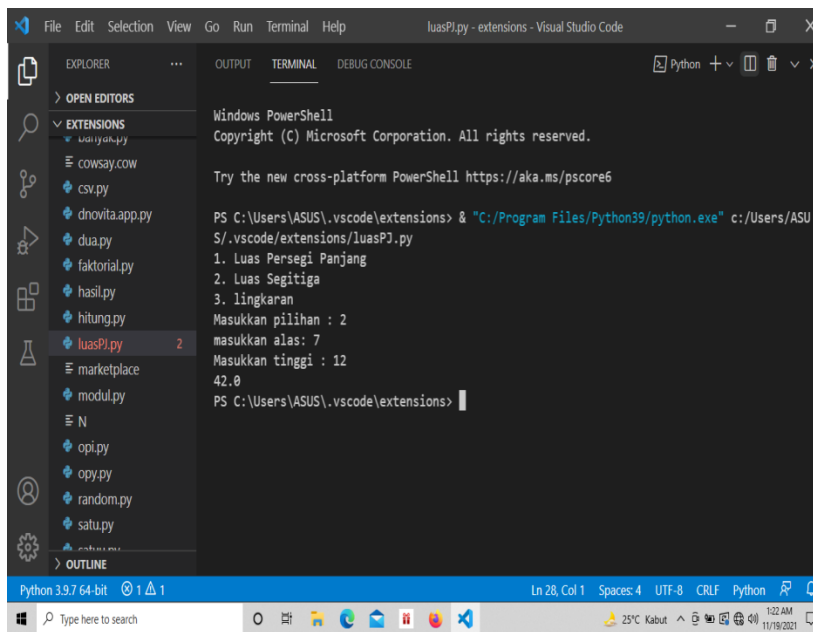
```
9
10 print("1. Luas Persegi Panjang\n2. Luas Segitiga\n3. lingkaran")
11 pilih = int(input("Masukkan pilihan : "))
12
13 luas = None
14
15 if pilih == 1:
16     panjang = int(input("Masukkan panjang : "))
17     lebar = int(input("Masukkan lebar : "))
18     luas = persegi_panjang(panjang, lebar)
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
```



```
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>
```



```
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 : 2
masukkan alas : 7
Masukkan tinggi : 12
42.0
PS C:\Users\ASUS\.vscode\extensions>
```

The screenshot shows the Visual Studio Code interface. In the Explorer on the left, the file 'luasPJ.py' is selected under the 'EXTENSIONS' folder. The main editor area displays the code for 'luasPJ.py', which includes a list of menu items and a function to calculate the area of a rectangle. The Terminal at the bottom shows the execution of the script, with the following output:

```
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/ASUS/.vscode/extensions/luasPJ.py
1. Luas Persegi Panjang
2. Luas Segitiga
3. lingkaran
Masukkan pilihan : 3
Masukkan jari-jari : 7
153.86
PS C:\Users\ASUS\.vscode\extensions>
```

2. Prosedur disimpan dalam file yang berbeda.

The screenshot shows a Python script named '2.py' in the editor. The script defines a function 'persegi_panjang()' that takes two inputs, 'p' (panjang) and 'l' (lebar), and calculates the area of a rectangle. The terminal output shows the script being executed, with the following input and output:

```
PS C:\Users\User\Documents\YUBI> & C:/Users/User/AppData/Local/Programs/Python/Python39/python.exe c:/Users/User/Documents/YUBI/2.py
Masukkan Panjang : 6
Masukkan Lebar : 10
Maka Luas Persegi Panjang : 60
PS C:\Users\User\Documents\YUBI>
```

The screenshot shows a Python script named 'b.py' in the editor. The script defines a function 'segitiga()' that takes two inputs, 'a' (alas) and 't' (tinggi), and calculates the area of a triangle. The terminal output shows the script being executed, with the following input and output:

```
PS C:\Users\User\Documents\YUBI> & C:/Users/User/AppData/Local/Programs/Python/Python39/python.exe c:/Users/User/Documents/YUBI/b.py
Masukkan alas : 7
Masukkan tinggi : 12
Maka Luas Segitiga : 42.0
PS C:\Users\User\Documents\YUBI>
```



```
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
```

```
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 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>
```

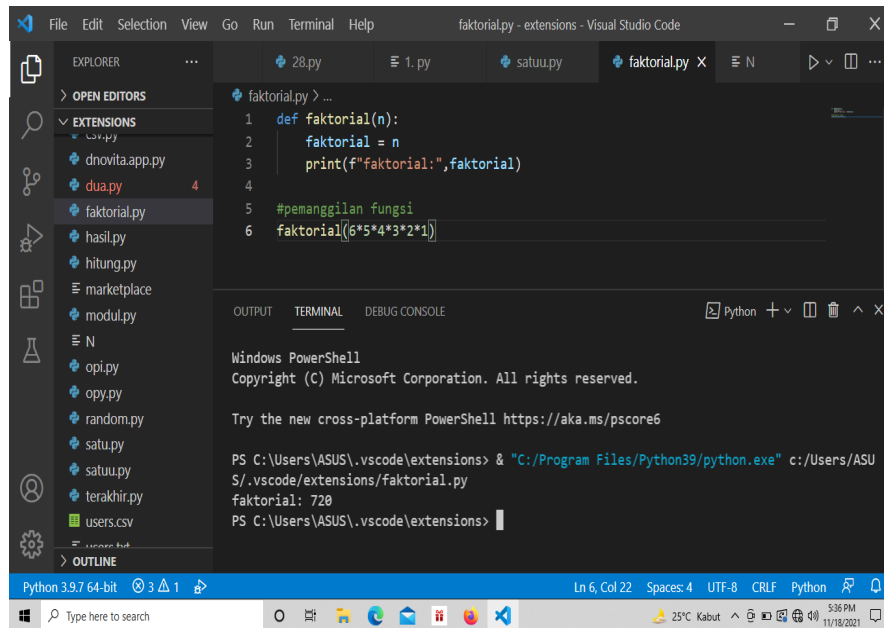
5. Program menampilkan bilangan kelipatan X



```
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()
```

```
PS C:\Users\ASUS\.vscode\extensions> & "C:/Program Files/Python39/python.exe" c:/Users/ASUS/.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 Python file named `faktorial.py` open. The code defines a function `faktorial(n)` that calculates the factorial of `n` and prints the result. The function is then called with the argument `6*5*4*3*2*1`. The terminal window shows the execution of the program, displaying the output `faktorial: 720`.

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

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/faktorial.py
faktorial: 720
PS C:\Users\ASUS\.vscode\extensions>

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

```
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>
```