

Nama : Armanita Aning

NIM : 20.01.013.002

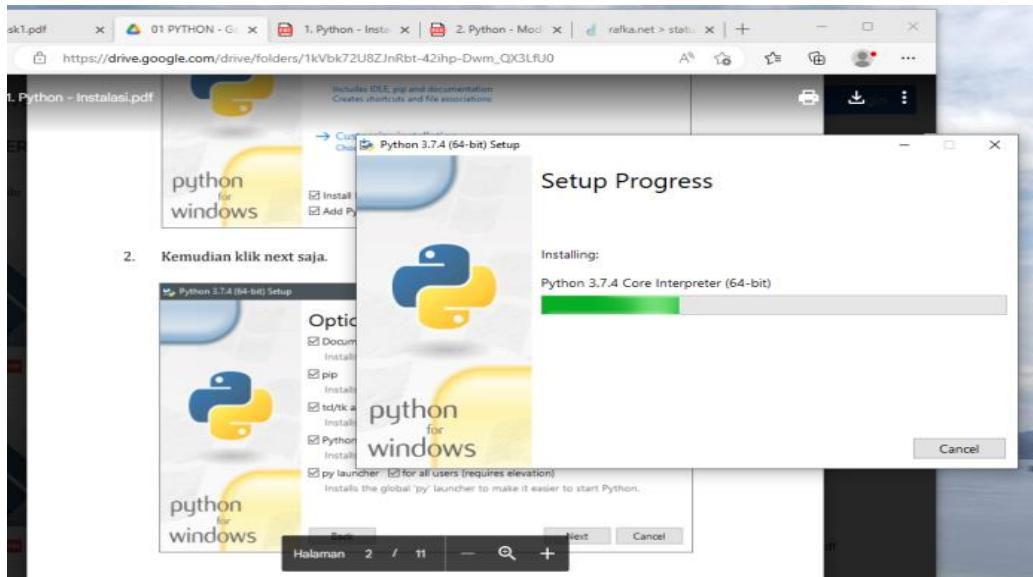
KELAS : C

INSTALASI PYTHON

1. Pilih system python yang sesuai dengan system anda ,disini saya memakai python(32/64 bit)



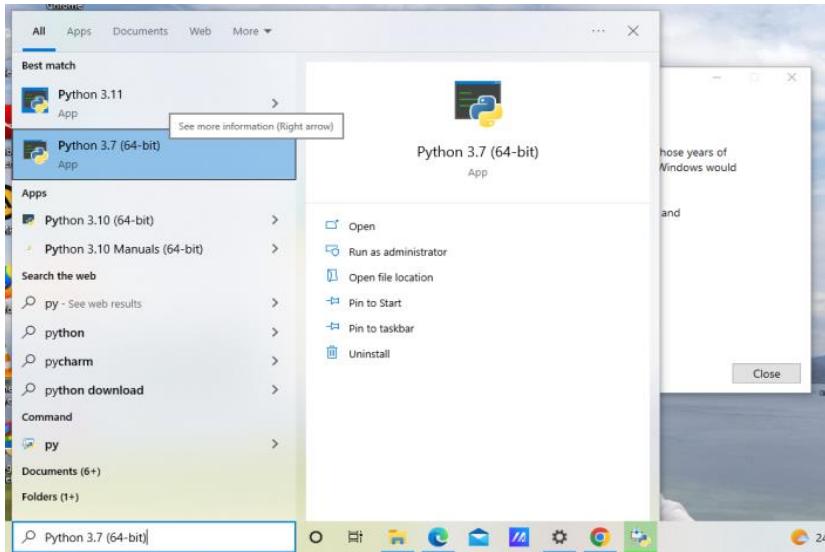
2. Tunggu hingga proses instalasi selesai.



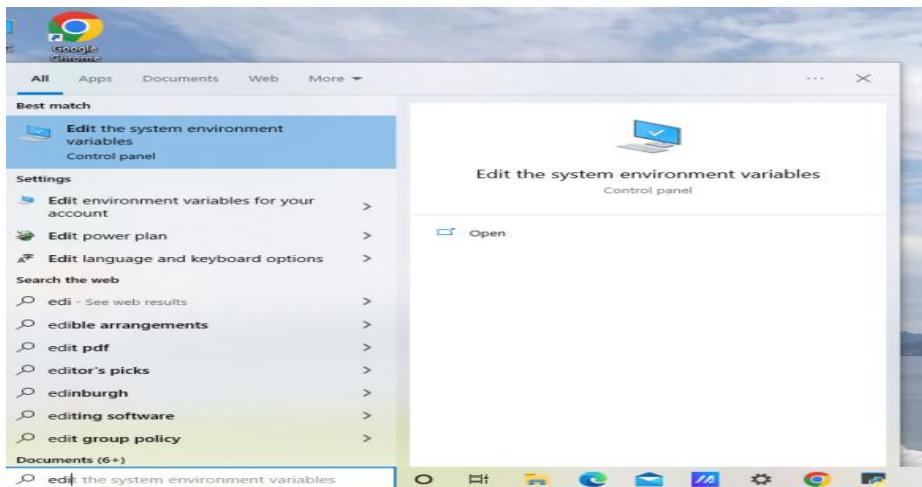
3. Setelah sukses klik ok.



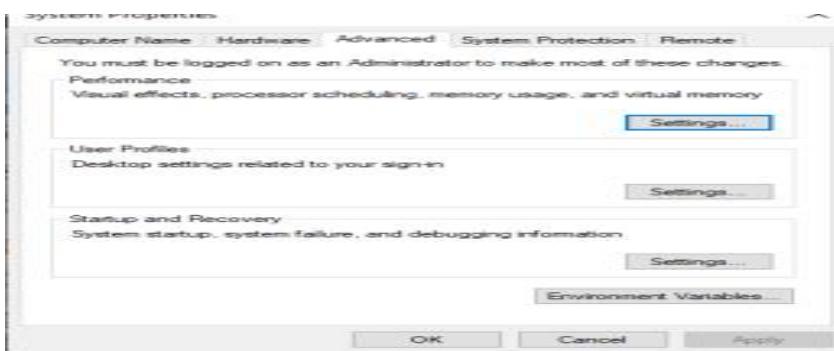
4. Kita bisa mengecek apakah python sudah terinstal atau belum.



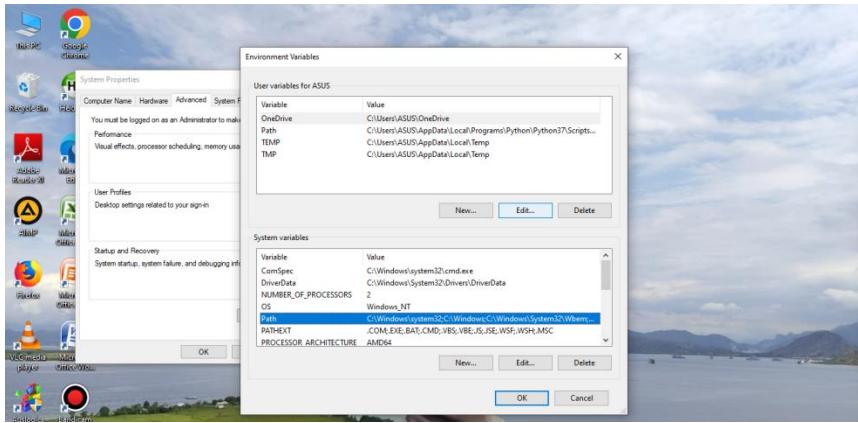
5. Selanjutnya buka sistem **enviroment variabel** untuk mensetting **path**. bisa di cek di menu searching.



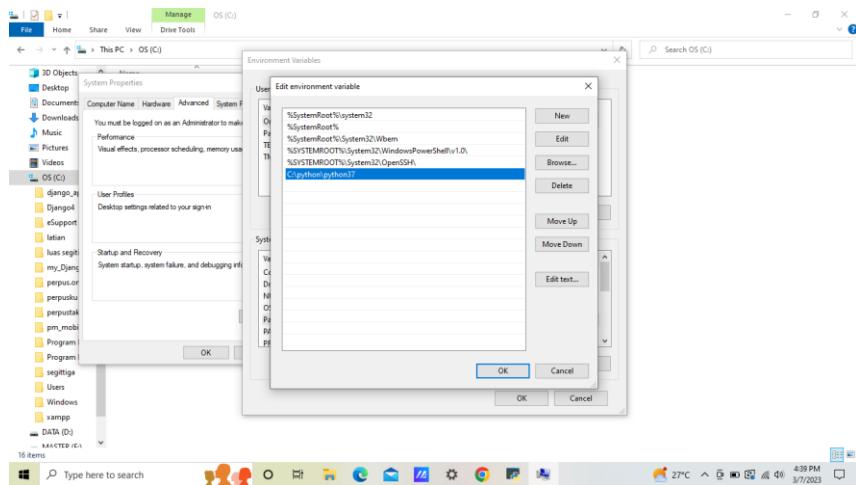
6. Setelah muncul kotak dialog klik **enviroment variabels** seperti gambar di bawah ini.



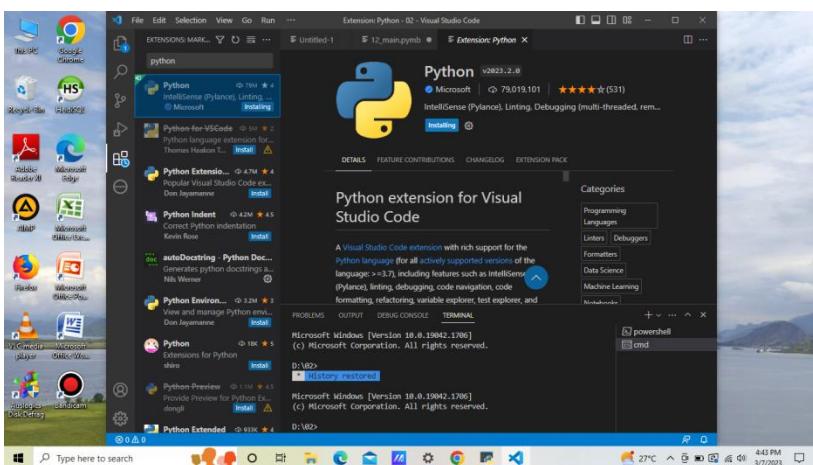
7. Pada bagian **system variables path** klik edit.



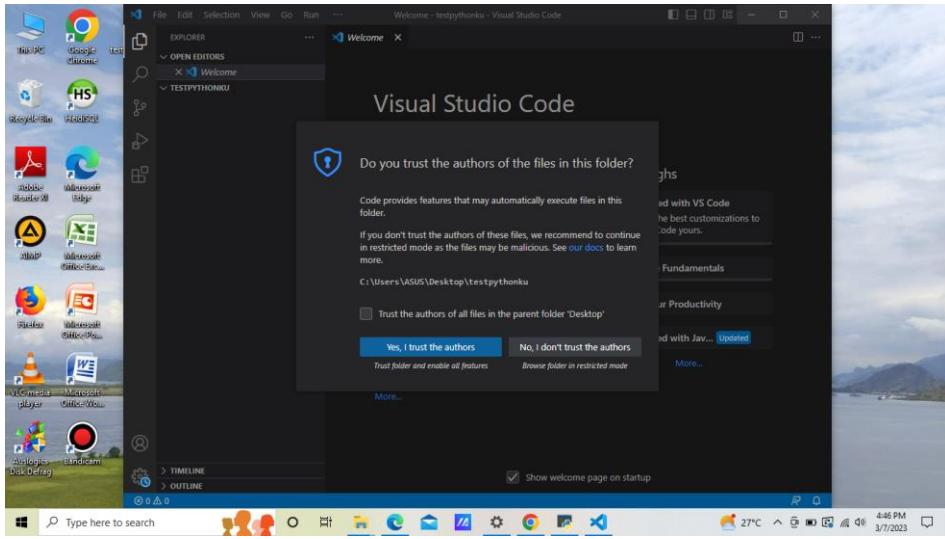
8. Klik tombol new lalu paste alamat directori yang telah di buat atau di copy



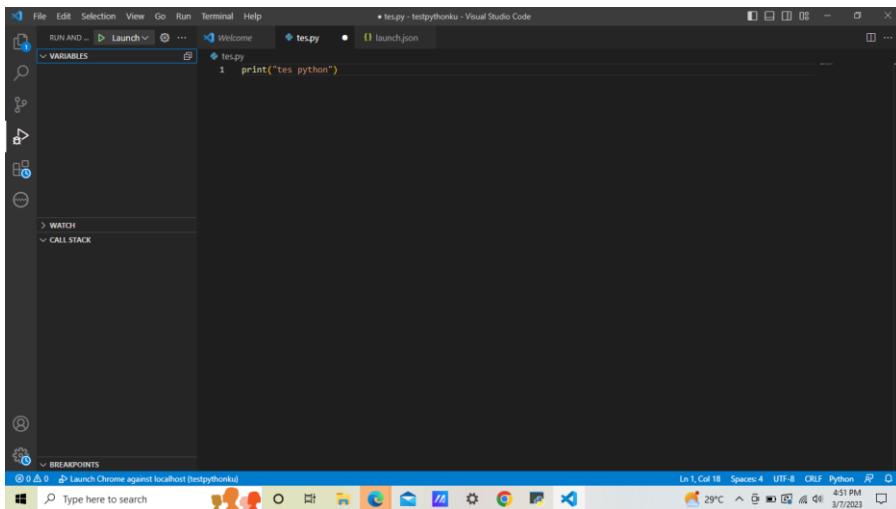
9. Lalu buka vs code pilih menu **extension** lalu searching python kemudian di install.



10. Lalu buat folder pada dekstop yang anda mau.



11. Pada new file lalu buat **folder tes.py**.



12.lalu running project seperti pada gambar di bawah ini.

```
a = 5 + 8
print(a)
```

PS C:\Users\ASUS\Desktop\testpythonku> 1

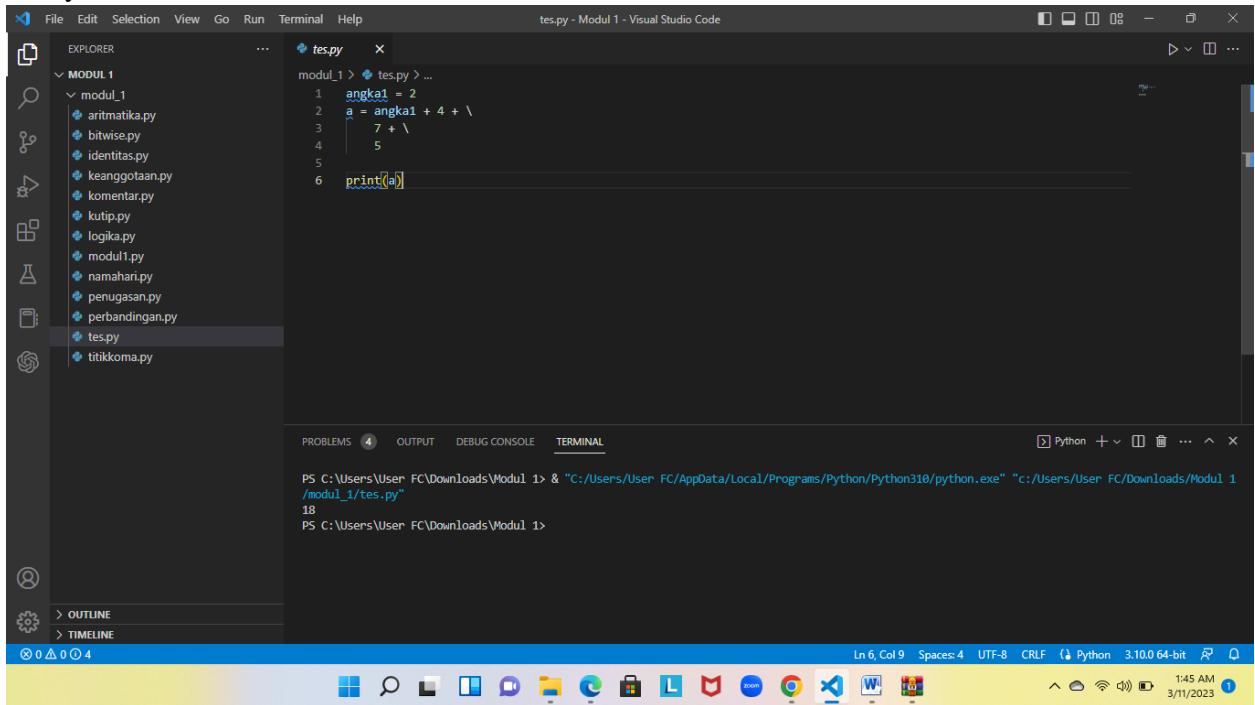
Modul 1 python 2

1. Baris dan identasi

```
modul1.py
1 print("BARIS")
2 print("IDENTITAS")
```

BARIS
IDENTITAS

2. Pernyataan multibaris



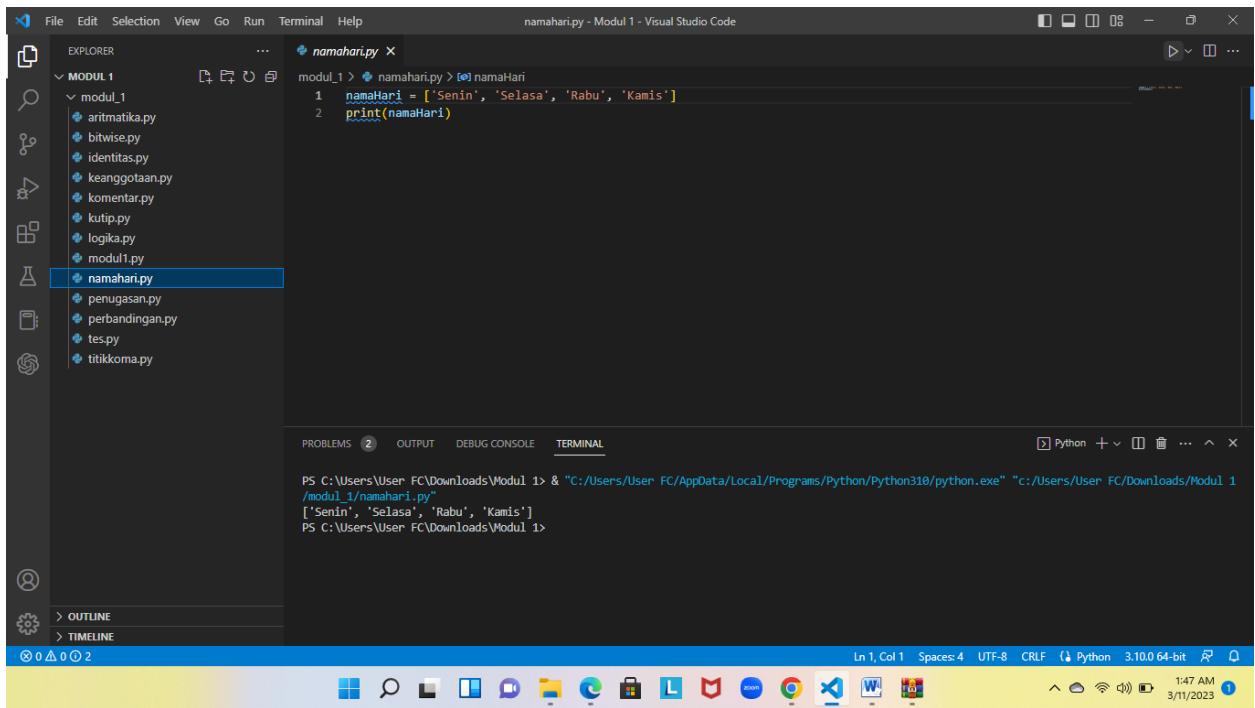
A screenshot of Visual Studio Code showing a Python file named `tes.py`. The code contains a multi-line print statement:

```
angka1 = 2
a = angka1 + 4 +
    7 +
5
print(a)
```

The terminal below shows the output of running the script:

```
PS C:\Users\User FC\Downloads\Modules\Modul 1> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul 1/modul_1/tes.py"
18
PS C:\Users\User FC\Downloads\Modules\Modul 1>
```

3. Nama hari



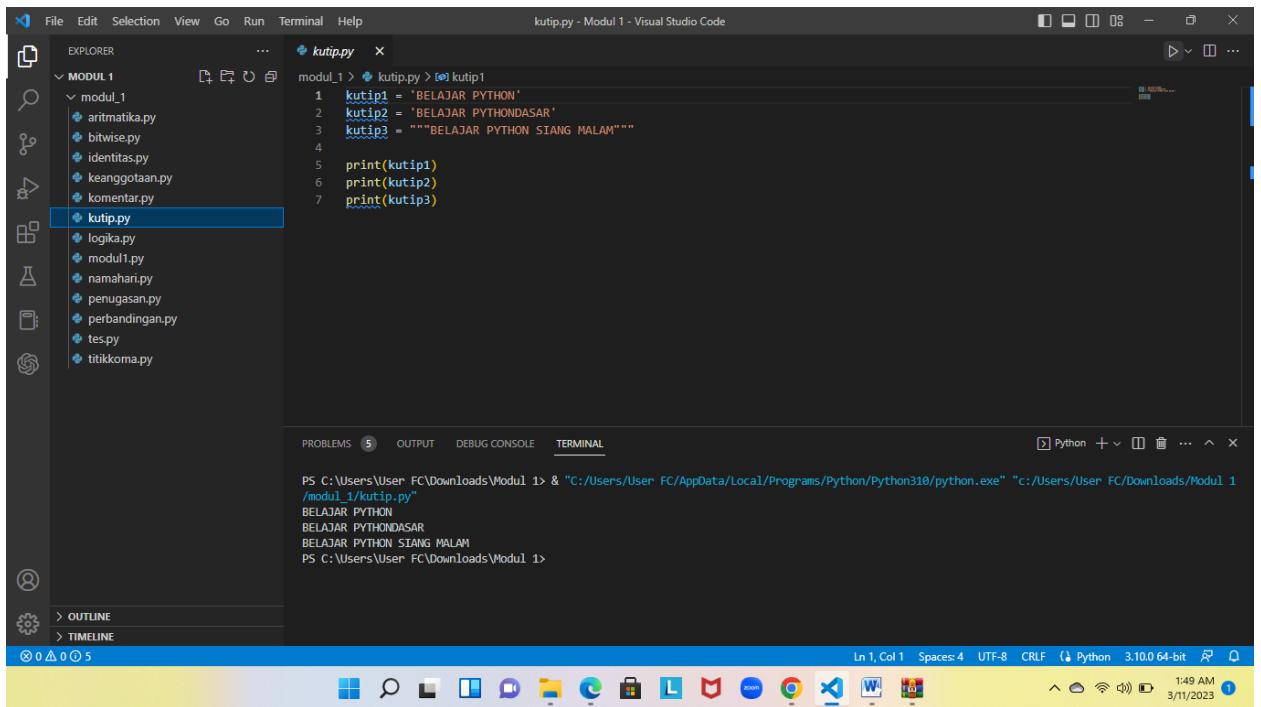
A screenshot of Visual Studio Code showing a Python file named `namahari.py`. The code contains a list comprehension in a print statement:

```
namaHari = ['Senin', 'Selasa', 'Rabu', 'Kamis']
print(namaHari)
```

The terminal below shows the output of running the script:

```
PS C:\Users\User FC\Downloads\Modules\Modul 1> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul 1/modul_1/namahari.py"
['Senin', 'Selasa', 'Rabu', 'Kamis']
PS C:\Users\User FC\Downloads\Modules\Modul 1>
```

4. Tanda kutip



```
File Edit Selection View Go Run Terminal Help kutip.py - Modul 1 - Visual Studio Code

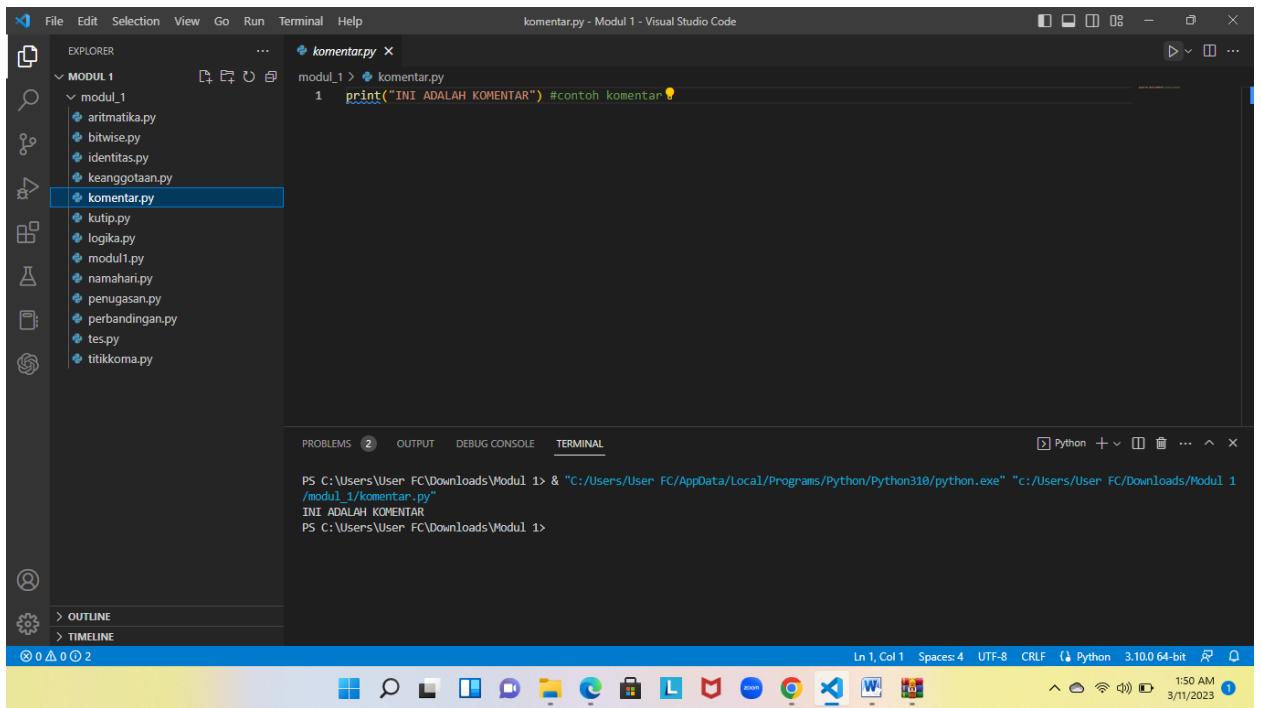
EXPLORER
MODUL 1
modul_1
  aritmatika.py
  bitwise.py
  identitas.py
  keanggotaan.py
  komentar.py
  kutip.py
  logika.py
  modul1.py
  namahari.py
  penugasan.py
  perbandingan.py
  tes.py
  titikoma.py

kutip.py
modul_1 > kutip.py > kutip1
1 kutip1 = 'BELAJAR PYTHON'
2 kutip2 = "BELAJAR PYTHONDASAR"
3 kutip3 = """BELAJAR PYTHON SIANG MALAM"""
4
5 print(kutip1)
6 print(kutip2)
7 print(kutip3)

PROBLEMS 5 OUTPUT DEBUG CONSOLE TERMINAL
PS C:\Users\User FC\Downloads\Modul 1> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul 1/modul_1/kutip.py"
BELAJAR PYTHON
BELAJAR PYTHONDASAR
BELAJAR PYTHON SIANG MALAM
PS C:\Users\User FC\Downloads\Modul 1>

Ln 1, Col 1 Spaces: 4 UTF-8 CRLF Python 3.10.0 64-bit ⚡ 1149 AM 3/11/2023
```

5. Komentar



```
File Edit Selection View Go Run Terminal Help komentar.py - Modul 1 - Visual Studio Code

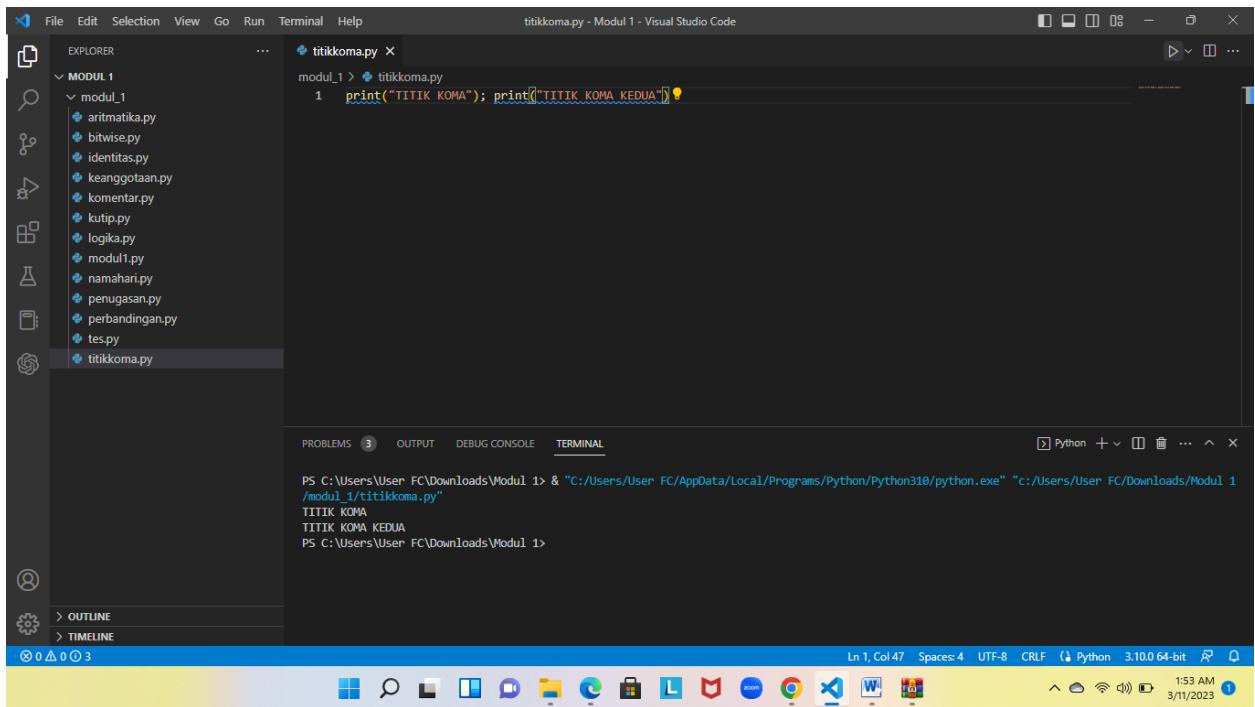
EXPLORER
MODUL 1
modul_1
  aritmatika.py
  bitwise.py
  identitas.py
  keanggotaan.py
  komentar.py
  kutip.py
  logika.py
  modul1.py
  namahari.py
  penugasan.py
  perbandingan.py
  tes.py
  titikoma.py

komentar.py
modul_1 > komentar.py
1 print("INI ADALAH KOMENTAR") #contoh komentar

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL
PS C:\Users\User FC\Downloads\Modul 1> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul 1/modul_1/komentar.py"
INI ADALAH KOMENTAR
PS C:\Users\User FC\Downloads\Modul 1>

Ln 1, Col 1 Spaces: 4 UTF-8 CRLF Python 3.10.0 64-bit ⚡ 1150 AM 3/11/2023
```

6. Dua pernyataan dalam satu baris



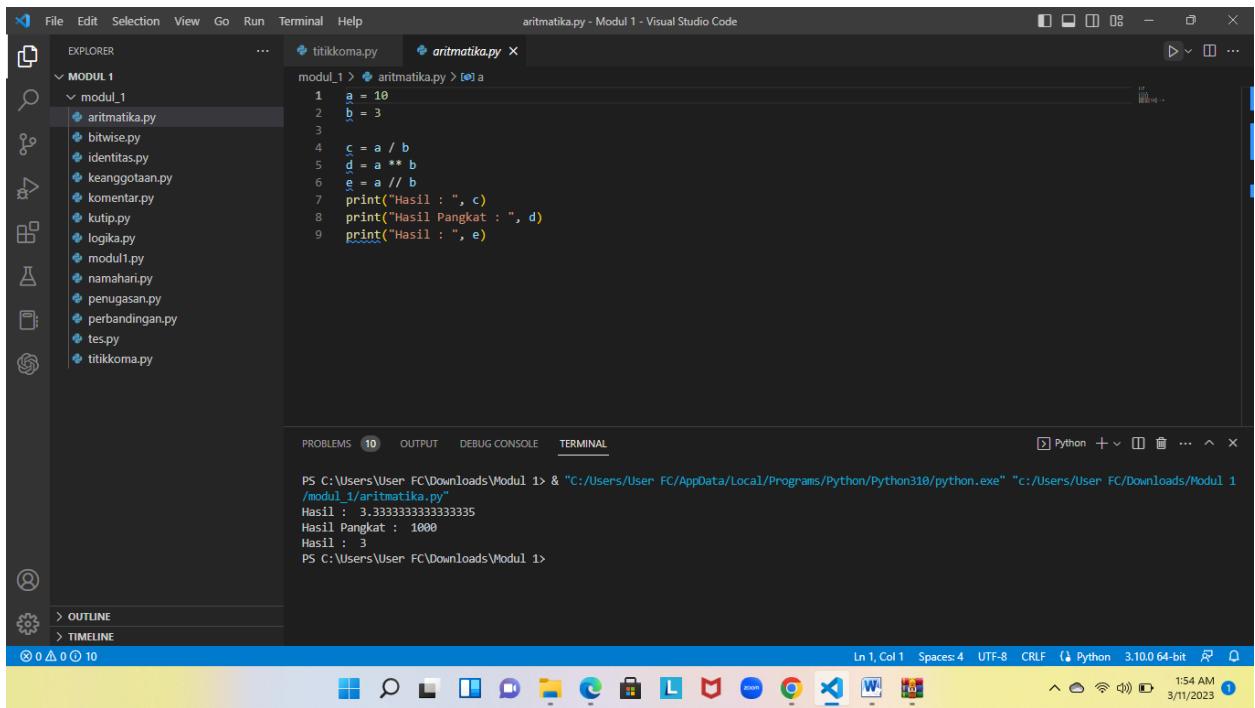
The screenshot shows a Visual Studio Code interface with a dark theme. The Explorer sidebar on the left lists files in a folder named 'MODUL 1', including 'aritmatika.py', 'bitwise.py', 'identitas.py', 'keanggotaan.py', 'komentar.py', 'kutip.py', 'logika.py', 'modul1.py', 'namahari.py', 'penugasan.py', 'perbandingan.py', 'tes.py', and 'titikoma.py'. The main editor window displays the file 'titikoma.py' with the following code:

```
print("TITIK KOMA"); print("TITIK KOMA KEDUA")
```

The terminal below shows the output of running the script:

```
PS C:\Users\User FC\Downloads\Modul 1> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul 1/modul_1/titikoma.py"
TITIK KOMA
TITIK KOMA KEDUA
PS C:\Users\User FC\Downloads\Modul 1>
```

7. Kode operator aritmatika



The screenshot shows a Visual Studio Code interface with a dark theme. The Explorer sidebar on the left lists files in a folder named 'MODUL 1', including 'aritmatika.py', 'bitwise.py', 'identitas.py', 'keanggotaan.py', 'komentar.py', 'kutip.py', 'logika.py', 'modul1.py', 'namahari.py', 'penugasan.py', 'perbandingan.py', 'tes.py', and 'titikoma.py'. The main editor window displays the file 'aritmatika.py' with the following code:

```
a = 10
b = 3
c = a / b
d = a ** b
e = a // b
print("Hasil : ", c)
print("Hasil Pangkat : ", d)
print("Hasil : ", e)
```

The terminal below shows the output of running the script:

```
PS C:\Users\User FC\Downloads\Modul 1> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul 1/modul_1/aritmatika.py"
Hasil :  3.333333333333335
Hasil Pangkat :  1000
Hasil :  3
PS C:\Users\User FC\Downloads\Modul 1>
```

8. Operator perbandingan

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

- File Explorer:** Shows a folder named "MODUL 1" containing several Python files: aritmatika.py, bitwise.py, identitas.py, keanggotaan.py, komentar.py, kutip.py, logika.py, modul1.py, namahari.py, penugasan.py, perbandingan.py, tes.py, and titikoma.py. The file "perbandingan.py" is currently selected.
- Code Editor:** Displays the content of "perbandingan.py". The code uses various comparison operators (`<`, `>`, `==`, `!=`) to compare the values of variables `a` and `b`. The output of the code is shown in the terminal below.
- Terminal:** Shows the command-line output of running the script. It prints four lines: `False`, `True`, `False`, and `True`.
- Bottom Status Bar:** Shows the Python version as "3.10.0 64-bit" and the current date and time as "3/11/2023 1:56 AM".

9. Operator penugasan

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

- File Explorer:** Shows a folder named "MODUL 1" containing several Python files: aritmatika.py, bitwise.py, identitas.py, keanggotaan.py, komentar.py, kutip.py, logika.py, modul1.py, namahari.py, penugasan.py, perbandingan.py, tes.py, and titikoma.py. The file "penugasan.py" is currently selected.
- Code Editor:** Displays the content of "penugasan.py". The code uses assignment operators (`+=`, `-=`) to modify the value of variable `a`. The output of the code is shown in the terminal below.
- Terminal:** Shows the command-line output of running the script. It prints two lines: `13` and `7`.
- Bottom Status Bar:** Shows the Python version as "3.10.0 64-bit" and the current date and time as "3/11/2023 1:57 AM".

10. Operator logika

```
File Edit Selection View Go Run Terminal Help titikoma.py logika.py - Modul 1 - Visual Studio Code

modul_1 > logika.py > a
1 a = True
2 b = False
3 c = True
4
5 d = a and c
6 print(d)
7
8 d = a and b
9 print(d)
10
11 d = a or b
12 print(d)
13
14 d = a or c
15 print(d)

PROBLEMS 12 OUTPUT DEBUG CONSOLE TERMINAL

PS C:\Users\User FC\Downloads\Modul 1> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul 1/modul_1/logika.py"
True
False
True
True
PS C:\Users\User FC\Downloads\Modul 1>

Ln 1, Col 1 Spaces: 4 UTF-8 CRLF Python 3.10.0 64-bit 1:59 AM 3/11/2023
```

11. Operator bitwise

```
File Edit Selection View Go Run Terminal Help titikoma.py bitwise.py - Modul 1 - Visual Studio Code

modul_1 > bitwise.py > a
1 a = 1
2 b = 2
3
4 c = a | b
5 print(c)
6
7 c = a & b
8 print(c)

PROBLEMS 9 OUTPUT DEBUG CONSOLE TERMINAL

PS C:\Users\User FC\Downloads\Modul 1> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul 1/modul_1/bitwise.py"
3
0
PS C:\Users\User FC\Downloads\Modul 1>

Ln 1, Col 1 Spaces: 4 UTF-8 CRLF Python 3.10.0 64-bit 2:00 AM 3/11/2023
```

12. Operator identitas

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

- File Explorer:** Shows a folder named "MODUL 1" containing several Python files: aritmatika.py, bitwise.py, identitas.py (selected), keanggotaan.py, komentar.py, kutip.py, logika.py, modul1.py, namahari.py, penugasan.py, perbandingan.py, tes.py, and titikoma.py.
- Code Editor:** The active file is "identitas.py". The code defines two variables, `a` and `b`, both set to 1. It then prints various comparisons using the `is` operator. The output window shows the results of these comparisons.
- Output Window:** Displays the terminal output of the script execution. It includes a syntax warning about the use of `is not` with a literal, followed by the results of each print statement.
- System Tray:** Shows the date and time as 3/11/2023 2:01 AM.

```
1 a = 1
2 b = 2
3
4 print(1 is a)
5 print(2 is b)
6 print(3 is a)
7 print(1 is not a)
8 print(2 is not b)
9
10 print(" ")
11
12 print(type(a) is int)
13 print(type(b) is float)

c:\Users\User FC\Downloads\Modul_1\modul_1\identitas.py:8: SyntaxWarning: "is not" with a literal. Did you mean "!="?
print(2 is not b)
True
True
False
False
False

True
False
PS C:\Users\User FC\Downloads\Modul_1>
```

13. Operator keanggotaan

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

- File Explorer:** Shows a folder named "MODUL 1" containing several Python files: aritmatika.py, bitwise.py, identitas.py, keanggotaan.py (selected), komentar.py, kutip.py, logika.py, modul1.py, namahari.py, penugasan.py, perbandingan.py, tes.py, and titikoma.py.
- Code Editor:** The active file is "keanggotaan.py". The code defines a string variable `kata` containing "hari ini belajar python". It then prints various substrings using the `in` operator. The output window shows the results of these comparisons.
- Output Window:** Displays the terminal output of the script execution. It includes the definition of the string, followed by the results of each print statement.
- System Tray:** Shows the date and time as 3/11/2023 2:03 AM.

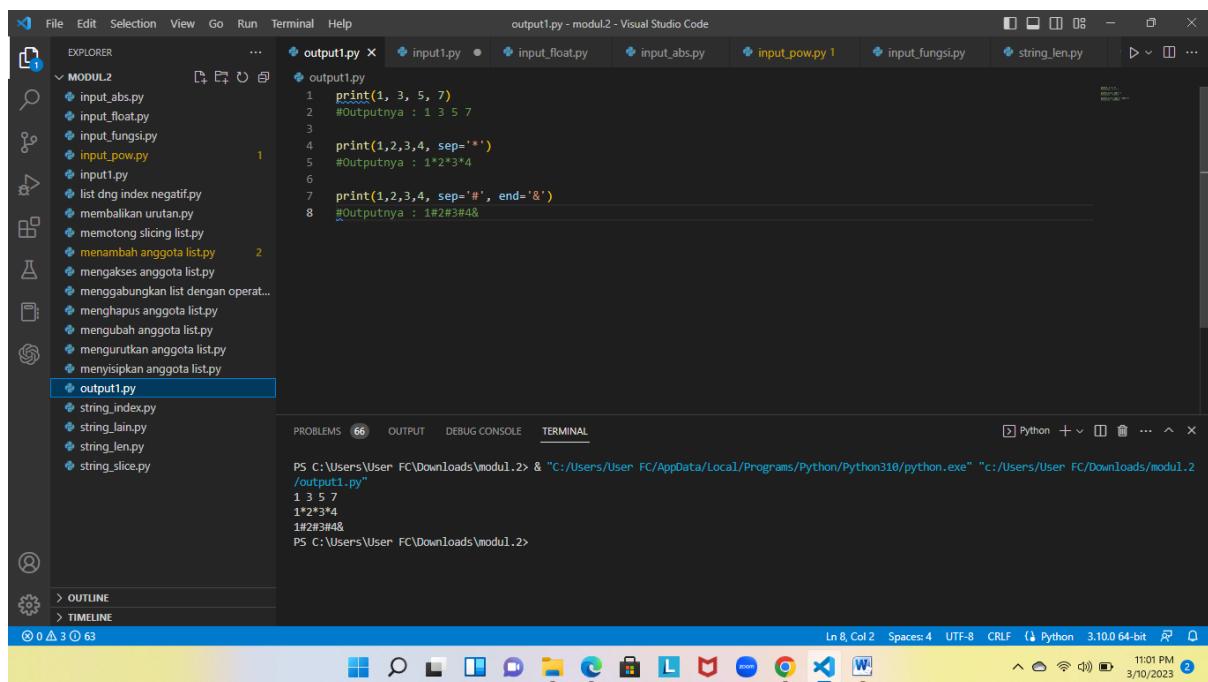
```
1 kata = "hari ini belajar python"
2
3 print("hari" in kata)
4 print("malam" in kata)
5 print("belajar" not in kata)
6 print("piton" is not kata)
7
8 print(" ")
9
10 kata = 5, 8, "sistem"
11
12 print(5 in kata)
13 print(8 in kata)
14 print(8 not in kata)
15 print("sistem" not in kata)

print("piton" is not kata)
True
False
False
True

True
True
False
False
PS C:\Users\User FC\Downloads\Modul_1>
```

.Python _ Modul 2

1. output



The screenshot shows a Visual Studio Code interface with the following details:

- File Explorer:** Shows a folder named "MODULE_2" containing several Python files: "input_abs.py", "input_float.py", "input_fungsi.py", "input_pow.py", "input1.py", "list_dng_index_negatif.py", "membalikkan_urutan.py", "memotong_slicing_list.py", "menambah_anggota_list.py", "mengakses_anggota_list.py", "menggabungkan_list_dengan_operasi.py", "menghapus_anggota_list.py", "mengubah_anggota_list.py", "mengurutkan_anggota_list.py", "menyiapkan_anggota_list.py", and "output1.py".
- Code Editor:** The file "output1.py" is open, displaying the following code:

```
1 print(1, 3, 5, 7)
2 #Outputnya : 1 3 5 7
3
4 print(1,2,3,4, sep='*')
5 #Outputnya : 1*2*3*4
6
7 print(1,2,3,4, sep='#', end='&')
8 #Outputnya : 1#2#3#4&
```
- Terminal:** The terminal shows the command "python output1.py" being run, followed by the output:

```
PS C:\Users\User FC\Downloads\modul_2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "C:/Users/User FC/Downloads/modul_2/output1.py"
1 3 5 7
1*2*3*4
1#2#3#4&
PS C:\Users\User FC\Downloads\modul_2>
```
- Status Bar:** Shows the current line (Ln 8), column (Col 2), spaces (Spaces: 4), encoding (UTF-8), and file type (Python).

2. input

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

- Title Bar:** File Edit Selection View Go Run Terminal Help
- File Explorer:** Shows a folder named "MODUL_2" containing various Python files: input_abs.py, input_float.py, input_fungsi.py, input_pow.py, input1.py, list_dng_index_negatif.py, membalikan_urutan.py, memotong_slicing_list.py, menambah_anggota_list.py, mengakses_anggota_list.py, menggabungkan_list_dengan_operat..., menghapus_anggota_list.py, mengubah_anggota_list.py, mengurutkan_anggota_list.py, menyisipkan_anggota_list.py, output1.py, string_index.py, string_lain.py, string_len.py, string_slice.py.
- Code Editor:** The active file is "input1.py" with the following code:

```
a= input("Masukkan Nilai A :")
b= input("Masukkan Nilai B :")
print(a,b)
a= input("Masukkan Nilai A :")
b= input("Masukkan Nilai B :")
c=a+b
print(c)
a= int (input("Masukkan Nilai A :"))
b= int (input("Masukkan Nilai B :"))
c=int (a)+int (b)
```
- Bottom Status Bar:** Ln 21, Col 18 Spaces:4 UTF-8 CRLF Python 3.10.0 64-bit 11:09 PM 3/10/2023

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

- Title Bar:** File Edit Selection View Go Run Terminal Help
- File Explorer:** Shows a folder named "MODUL_2" containing various Python files: input_abs.py, input_float.py, input_fungsi.py, input_pow.py, input1.py, list_dng_index_negatif.py, membalikan_urutan.py, memotong_slicing_list.py, menambah_anggota_list.py, mengakses_anggota_list.py, menggabungkan_list_dengan_operat..., menghapus_anggota_list.py, mengubah_anggota_list.py, mengurutkan_anggota_list.py, menyisipkan_anggota_list.py, output1.py, string_index.py, string_lain.py, string_len.py, string_slice.py.
- Terminal:** The terminal tab is active, showing the following output:

```
Masukkan Nilai B :12
10 12
Masukkan Nilai A :10
Masukkan Nilai B :12
1012
Masukkan Nilai A :10
Masukkan Nilai B :12
22
Masukkan Nilai A :10
Masukkan Nilai B :12
PS C:\Users\User\FC\Downloads\modul_2> []
```
- Bottom Status Bar:** Ln 21, Col 18 Spaces:4 UTF-8 CRLF Python 3.10.0 64-bit 11:09 PM 3/10/2023

3. input_float

```
a = float(input("Masukkan Nilai A :"))
b = float(input("Masukkan Nilai B :"))

c = a + b
print(c)
```

PS C:\Users\User FC\Downloads\modul.2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul.2\input_float.py"
Masukkan Nilai A :15
Masukkan Nilai B :10
25.0
PS C:\Users\User FC\Downloads\modul.2>

4. input_abs

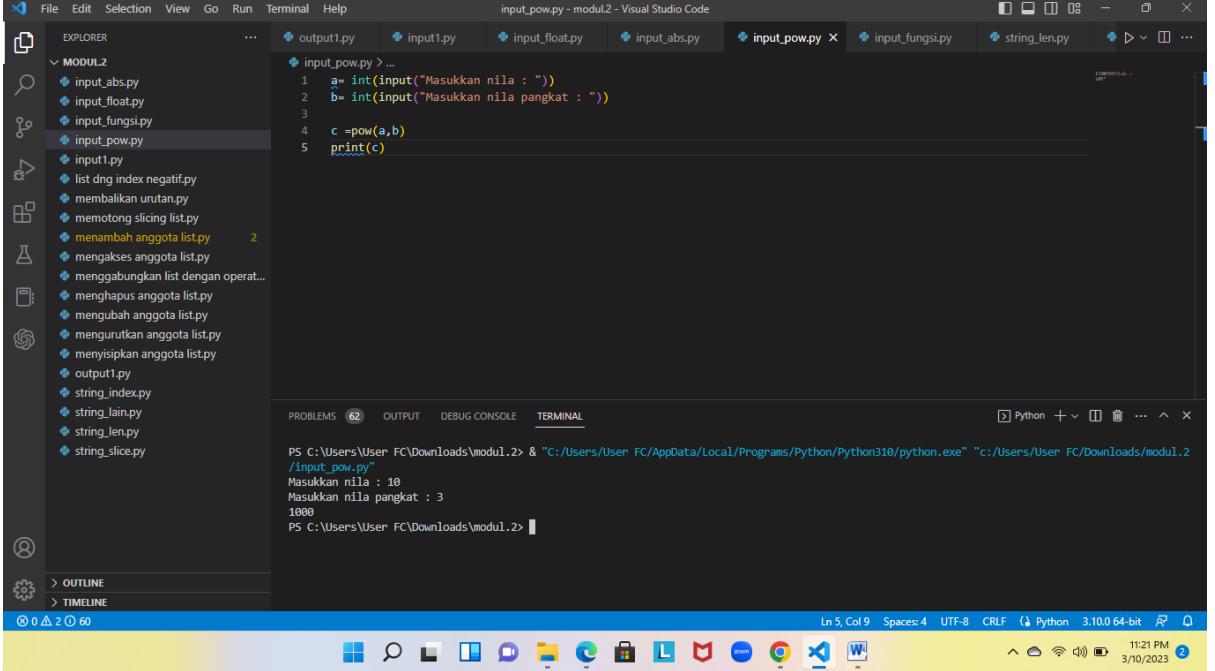
```
a = int(input("Masukkan nilai A : "))

c = abs(a)
print(c)

c = pow(a, 3)
print(c)
```

PS C:\Users\User FC\Downloads\modul.2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul.2\input_abs.py"
5
Masukkan nilai A : 12
12
8
PS C:\Users\User FC\Downloads\modul.2>

5. input_pow



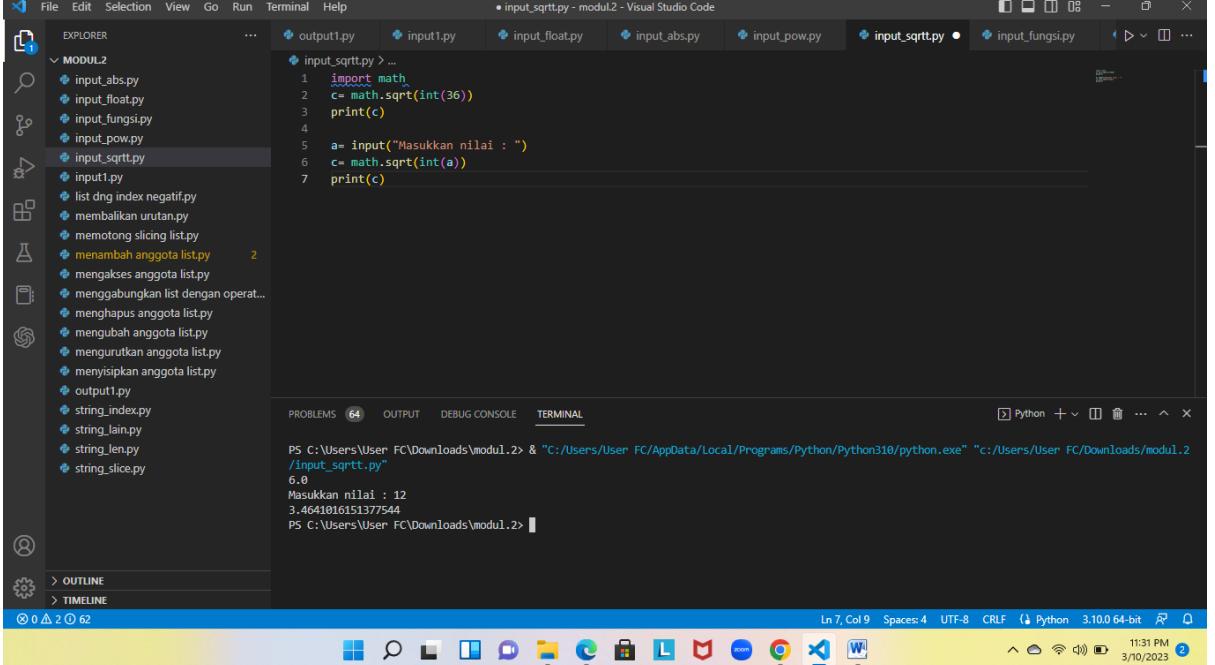
The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows a folder named "MODUL2" containing several Python files: input_abs.py, input_float.py, input_fungsi.py, input_pow.py, input1.py, list_dng_index_negatif.py, membalikan_urutan.py, memotong_slicing_list.py, menambah_anggota_list.py, mengakses_anggota_list.py, menggabungkan_list_dengan_operat..., menghapus_anggota_list.py, mengubah_anggota_list.py, mengurutkan_anggota_list.py, menyisipkan_anggota_list.py, output1.py, string_index.py, string_lain.py, string_len.py, and string_slice.py.
- Code Editor:** Displays the content of `input_pow.py`:

```
a = int(input("Masukkan nilai : "))
b = int(input("Masukkan nilai pangkat : "))
c = pow(a,b)
print(c)
```
- Terminal:** Shows the command-line output:

```
PS C:\Users\User FC\Downloads\modul.2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul.2\input_pow.py"
Masukkan nilai : 10
Masukkan nilai pangkat : 3
1000
PS C:\Users\User FC\Downloads\modul.2>
```
- Bottom Status Bar:** Includes file navigation icons, status bar text (Ln 5, Col 9, Spaces: 4, UTF-8, CRLF), Python 3.10.0 64-bit, and a date/time stamp (11:21 PM 3/10/2023).

6. input_sqrtt



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

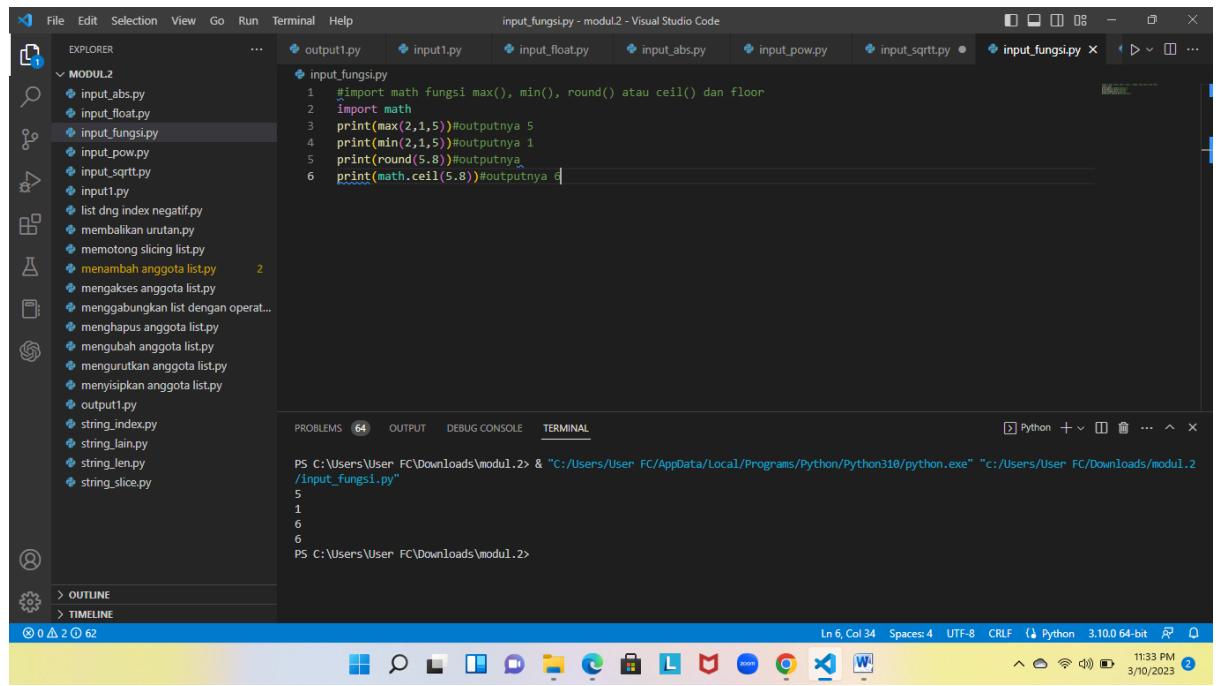
- File Explorer:** Shows a folder named "MODUL2" containing several Python files: input_abs.py, input_float.py, input_fungsi.py, input_pow.py, input_sqrtt.py, input1.py, list_dng_index_negatif.py, membalikan_urutan.py, memotong_slicing_list.py, menambah_anggota_list.py, mengakses_anggota_list.py, menggabungkan_list_dengan_operat..., menghapus_anggota_list.py, mengubah_anggota_list.py, mengurutkan_anggota_list.py, menyisipkan_anggota_list.py, output1.py, string_index.py, string_lain.py, string_len.py, and string_slice.py.
- Code Editor:** Displays the content of `input_sqrtt.py`:

```
import math
c = math.sqrt(int(36))
print(c)

a = input("Masukkan nilai : ")
c = math.sqrt(int(a))
print(c)
```
- Terminal:** Shows the command-line output:

```
PS C:\Users\User FC\Downloads\modul.2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul.2\input_sqrtt.py"
6.0
Masukkan nilai : 12
3.4641016151377544
PS C:\Users\User FC\Downloads\modul.2>
```
- Bottom Status Bar:** Includes file navigation icons, status bar text (Ln 7, Col 9, Spaces: 4, UTF-8, CRLF), Python 3.10.0 64-bit, and a date/time stamp (11:31 PM 3/10/2023).

7. input_fungsi lain



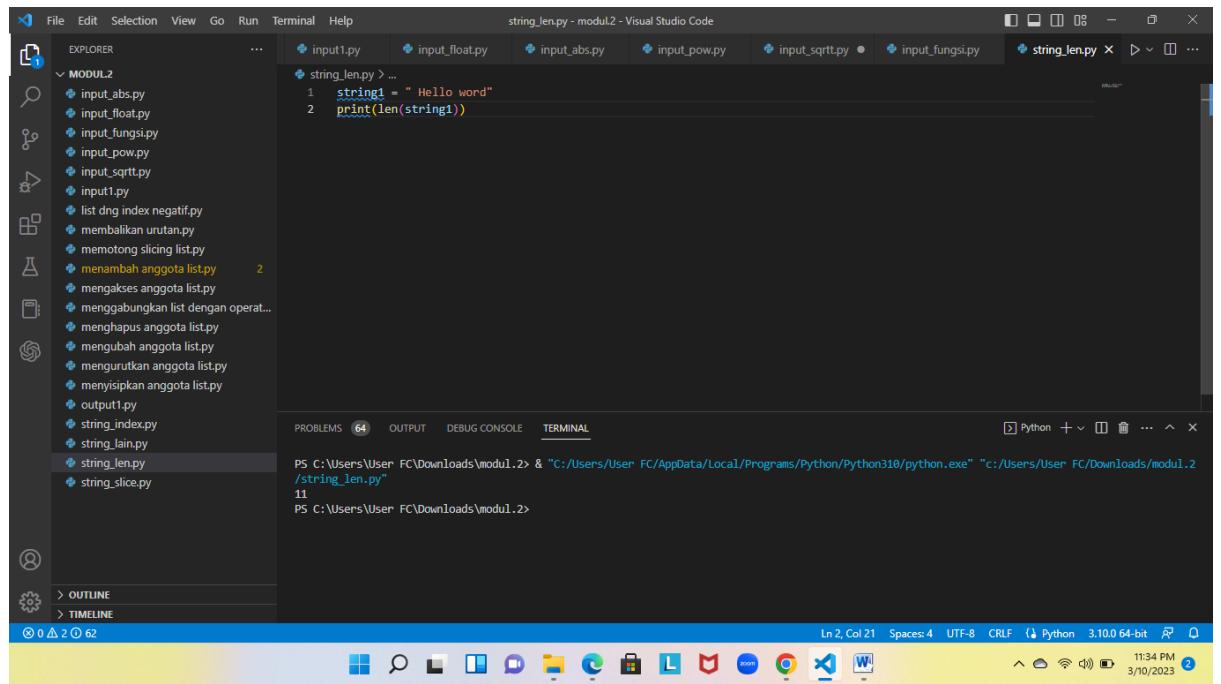
The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows a folder named "MODUL2" containing files: input_abs.py, input_float.py, input_fungsi.py, input_pow.py, input_sqrt.py, input1.py, list_dng_index_negatif.py, membalikan_urutan.py, memotong_slicing_list.py, menambah_anggota_list.py, mengakses_anggota_list.py, menggabungkan_list_dengan_operator.py, menghapus_anggota_list.py, mengubah_anggota_list.py, mengurutkan_anggota_list.py, menyisipkan_anggota_list.py, output1.py, string_index.py, string_lain.py, string_len.py, and string_slice.py.
- Code Editor:** The active file is "input_fungsi.py" with the following content:

```
1 #import math fungsi max(), min(), round() atau ceil() dan floor
2 import math
3 print(max(2,1,5))#outputnya 5
4 print(min(2,1,5))#outputnya 1
5 print(round(5.8))#outputnya 6
6 print(math.ceil(5.8))#outputnya 6
```
- Terminal:** The terminal shows the command PS C:\Users\User FC\Downloads\modul2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul2\input_fungsi.py" followed by the output:

```
5
1
6
6
```
- Bottom Status Bar:** Shows Ln 6, Col 34, Spaces:4, UTF-8, CRLF, Python 3.10.0 64-bit, and the date/time 3/10/2023 11:33 PM.

8. string_len



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

- File Explorer:** Shows a folder named "MODUL2" containing files: input_abs.py, input_float.py, input_fungsi.py, input_pow.py, input_sqrt.py, input1.py, list_dng_index_negatif.py, membalikan_urutan.py, memotong_slicing_list.py, menambah_anggota_list.py, mengakses_anggota_list.py, menggabungkan_list_dengan_operator.py, menghapus_anggota_list.py, mengubah_anggota_list.py, mengurutkan_anggota_list.py, menyisipkan_anggota_list.py, output1.py, string_index.py, string_lain.py, string_len.py, and string_slice.py.
- Code Editor:** The active file is "string_len.py" with the following content:

```
1 string1 = "Hello world"
2 print(len(string1))
```
- Terminal:** The terminal shows the command PS C:\Users\User FC\Downloads\modul2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul2\string_len.py" followed by the output:

```
11
```
- Bottom Status Bar:** Shows Ln 2, Col 21, Spaces:4, UTF-8, CRLF, Python 3.10.0 64-bit, and the date/time 3/10/2023 11:34 PM.

9. string_index

A screenshot of Visual Studio Code showing a Python script named `string_index.py`. The code uses the `index()` method to find the index of the character 'o' in the string "Hello World". The code editor shows the following:

```
kata = "Hello World"
print(kata.index("o"))
```

The terminal window shows the output of running the script:

```
PS C:\Users\User FC\Downloads\modul.2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul.2/string_index.py"
4
```

The status bar at the bottom indicates Python 3.10.0 64-bit and the date/time 3/10/2023.

10.string_lain

A screenshot of Visual Studio Code showing a Python script named `string_lain.py`. The script demonstrates various string manipulation methods: `count()`, `upper()`, `lower()`, and `split()`. It prints the count of 'o', the uppercased version of the string, the lowercased version, and a list of words from the split string. The code editor shows the following:

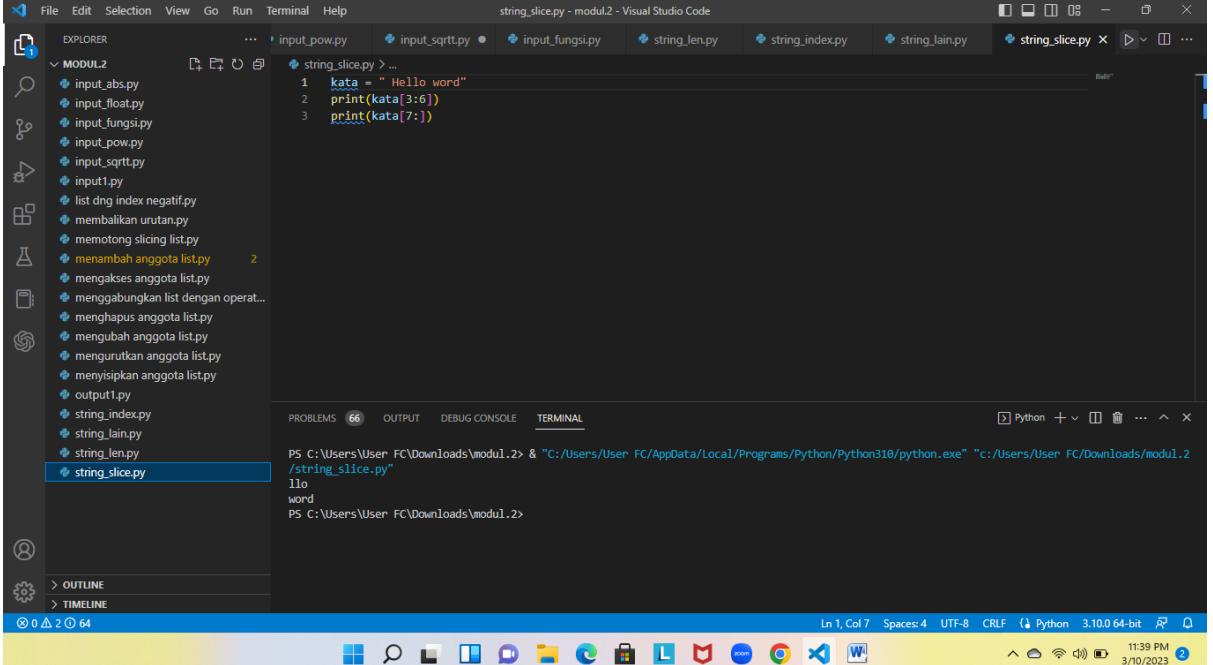
```
kata = "Hello word"
print(kata.count("o"))
print(kata.upper())
print(kata.lower())
kata_baru = kata.split(" ")
print(kata_baru)
```

The terminal window shows the output of running the script:

```
PS C:\Users\User FC\Downloads\modul.2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul.2/string_lain.py"
0
HELLO WORD
hello word
['', 'Hello', 'word']
PS C:\Users\User FC\Downloads\modul.2>
```

The status bar at the bottom indicates Python 3.10.0 64-bit and the date/time 3/10/2023.

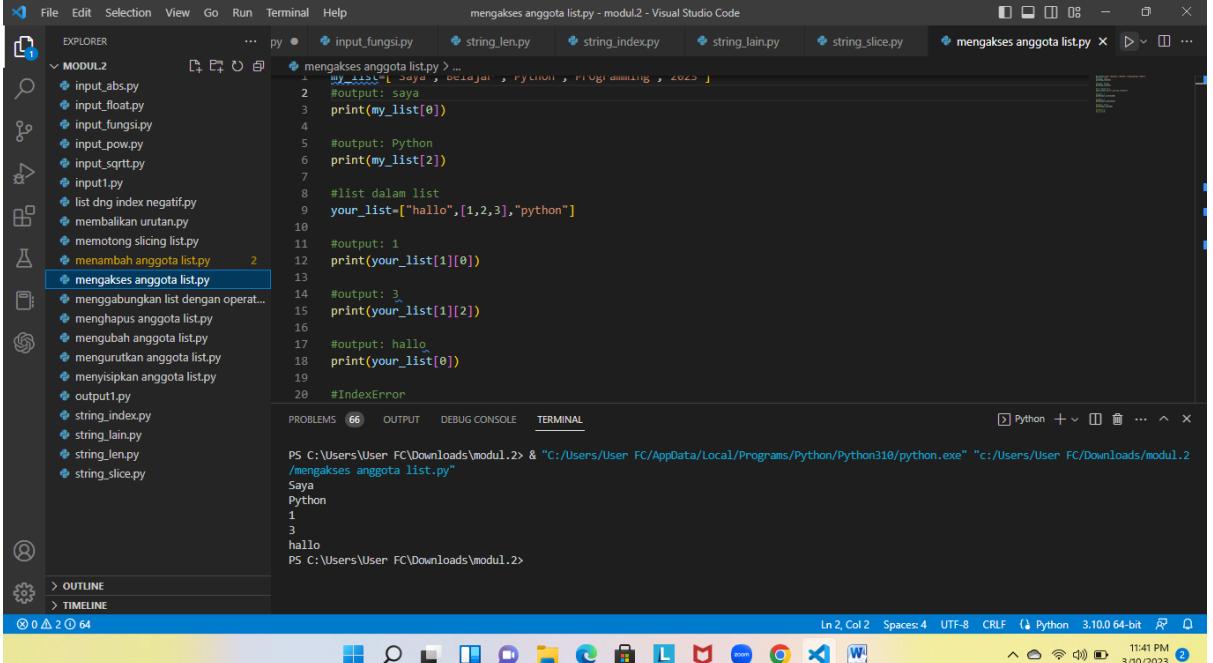
11.string_slice



```
string_slice.py - modul.2 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
EXPLORER ... input_pow.py input_sqrt.py input_fungi.py string_len.py string_index.py string_lain.py string_slice.py
MODUL.2
input_abs.py
input_float.py
input_fungi.py
input_pow.py
input_sqrt.py
input1.py
list_dng_index_negatif.py
membalikan_urutan.py
memotong_slicing_list.py
menambah_anggota_list.py
mengakses_anggota_list.py
menggabungkan_list_dengan_operat...  
menghapus_anggota_list.py
mengubah_anggota_list.py
mengurutkan_anggota_list.py
menyisipkan_anggota_list.py
output1.py
string_index.py
string_lain.py
string_len.py
string_slice.py

PROBLEMS 66 OUTPUT DEBUG CONSOLE TERMINAL
PS C:\Users\User FC\Downloads\modul.2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul.2/string_slice.py"
1lo
word
PS C:\Users\User FC\Downloads\modul.2>
```

12.mengakses anggota list



```
mengakses_anggota_list.py - modul.2 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
EXPLORER ... py input_fungi.py string_len.py string_index.py string_lain.py string_slice.py mengakses_anggota_list.py
MODUL.2
input_abs.py
input_float.py
input_fungi.py
input_pow.py
input_sqrt.py
input1.py
list_dng_index_negatif.py
membalikan_urutan.py
memotong_slicing_list.py
menambah_anggota_list.py
mengakses_anggota_list.py
menggabungkan_list_dengan_operat...  
menghapus_anggota_list.py
mengubah_anggota_list.py
mengurutkan_anggota_list.py
menyisipkan_anggota_list.py
output1.py
string_index.py
string_lain.py
string_len.py
string_slice.py

PROBLEMS 66 OUTPUT DEBUG CONSOLE TERMINAL
PS C:\Users\User FC\Downloads\modul.2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul.2/mengakses_anggota_list.py"
Saya
Python
1
3
hallo
PS C:\Users\User FC\Downloads\modul.2>
```

13. list dengan index negative

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

- File Explorer:** Shows a folder named "MODUL2" containing several Python files: input_abs.py, input_float.py, input_fungsi.py, input_pow.py, input_sqrt.py, input1.py, list_dng_index_negatif.py, membalikan urutan.py, memotong slicing list.py, menambah anggota list.py, mengakses anggota list.py, menggabungkan list dengan oper..., menghapus anggota list.py, mengubah anggota list.py, mengurutkan anggota list.py, menyisipkan anggota list.py, output1.py, string_index.py, string_lain.py, string_len.py, string_slice.py.
- Terminal:** Displays the command PS C:\Users\User FC\Downloads\modul.2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul.2/list_dng_index_negatif.py". The output shows the execution of the code which prints the last element of the list.
- Status Bar:** Shows the Python extension is active, the file is 3.10.0 64-bit, and the date and time are 3/10/2023 11:42 PM.

```
my_list=['p','y','t','h','o','n']
print(my_list[-1])
print(my_list[-3])
```

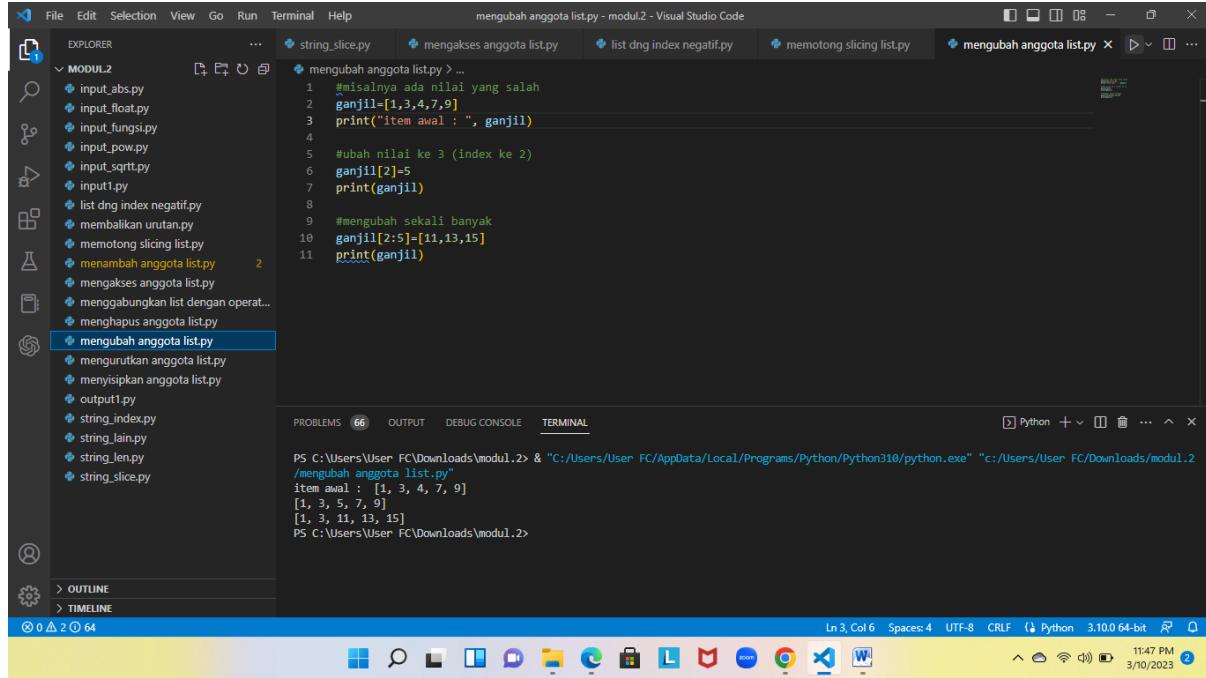
14. memotong list

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

- File Explorer:** Shows a folder named "MODUL2" containing several Python files: input_abs.py, input_float.py, input_fungsi.py, input_pow.py, input_sqrt.py, input1.py, list_dng_index_negatif.py, membalikan urutan.py, memotong slicing list.py, menambah anggota list.py, mengakses anggota list.py, menggabungkan list dengan oper..., menghapus anggota list.py, mengubah anggota list.py, mengurutkan anggota list.py, menyisipkan anggota list.py, output1.py, string_index.py, string_lain.py, string_len.py, string_slice.py.
- Terminal:** Displays the command PS C:\Users\User FC\Downloads\modul.2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul.2/memotong slicing list.py". The output shows the execution of the code which prints the sublists from index 3 to 6, 4 to the end, and 0 to 5.
- Status Bar:** Shows the Python extension is active, the file is 3.10.0 64-bit, and the date and time are 3/10/2023 11:44 PM.

```
my_list=['p','y','t','h','o','n','s','a','y','a']
print(my_list[3:6])
print(my_list[4:])
print(my_list[:5])
```

15.mengubah anggota list



The screenshot shows a Visual Studio Code interface with the following details:

- File Explorer:** Shows a folder named "MODUL_2" containing several Python files: input_abs.py, input_float.py, input_fungsi.py, input_pow.py, input_sqrt.py, input1.py, list_dng_index_negatif.py, membalikkan_urutan.py, memotong_slicing_list.py, menambah_anggota_list.py, mengakses_anggota_list.py, mengabungkan_list_dengan_operator.py, and menghapus_anggota_list.py. The file "menambah_anggota_list.py" is currently selected.
- Code Editor:** Displays the following Python code:

```
1 #misalnya ada nilai yang salah
2 ganjil=[1,3,4,7,9]
3 print("item awal : ", ganjil)
4
5 #ubah nilai ke 3 (index ke 2)
6 ganjil[2]=5
7 print(ganjil)
8
9 #mengubah sekali banyak
10 ganjil[2:5]=[11,13,15]
11 print(ganjil)
```
- Terminal:** Shows the command line output of running the script:

```
PS C:\Users\User FC\Downloads\modul_2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul_2/mengubah_anggota_list.py"
item awal : [1, 3, 4, 7, 9]
[1, 3, 5, 7, 9]
[1, 3, 11, 13, 15]
```
- Status Bar:** Shows the current file path as "C:\Users\User FC\Downloads\modul_2", line 3, column 6, and other system information like battery level, signal strength, and date/time.

16.menambah anggota list

A screenshot of Visual Studio Code interface. The left sidebar shows a file tree under 'MODUL_2' with files like 'input_abs.py', 'input_float.py', etc., and several Python script files. The main editor window displays Python code for adding elements to a list:

```
menambah anggota list.py
1 ganjil = [1,3,5,7]
2
3 ganjil.append(9)
4 print(ganjil)
5 [1,3,5,7,9]
6
7 ganjil.extend([11,13,15])
8 print(ganjil)
9 [1,3,5,7,9,11,13,15]
```

The terminal at the bottom shows the output of running the script:

```
PS C:\Users\User FC\Downloads\modul_2> & "c:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul_2/menambah anggota list.py"
[1, 3, 5, 7, 9]
[1, 3, 5, 7, 9, 11, 13, 15]
PS C:\Users\User FC\Downloads\modul_2>
```

17. menggabung list dengan operator

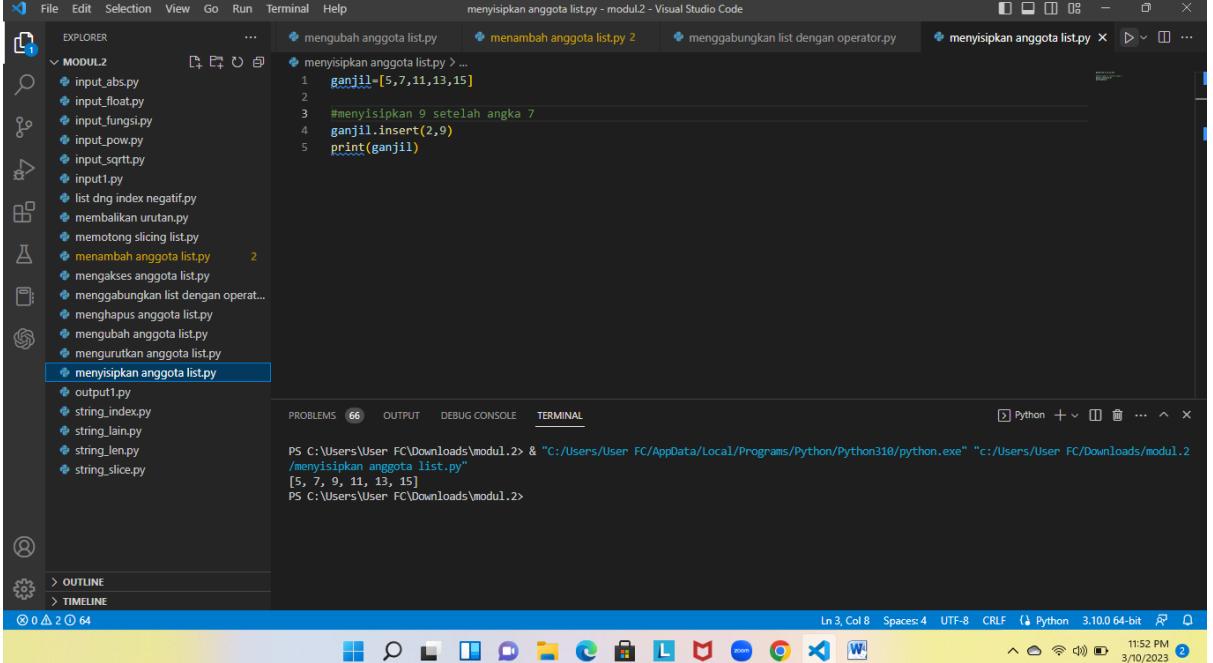
A screenshot of Visual Studio Code interface. The left sidebar shows a file tree under 'MODUL_2' with files like 'input_abs.py', 'input_float.py', etc., and several Python script files. The main editor window displays Python code for concatenating lists using the '+' operator:

```
menggabungkan list dengan operator.py
1 genap=[2,4,6]
2 print(genap+[8,10,12])
3 #output [2,4,6,8,10,12]
4
5 print(['p','y']*2)
6 #output ['p','y','p','y']
```

The terminal at the bottom shows the output of running the script:

```
PS C:\Users\User FC\Downloads\modul_2> & "c:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul_2/menggabungkan list dengan operator.py"
[2, 4, 6, 8, 10, 12]
['p', 'y', 'p', 'y']
PS C:\Users\User FC\Downloads\modul_2>
```

18.menyisipkan anggota list



The screenshot shows a Visual Studio Code interface with the following details:

- File Explorer:** Shows a folder named "MODUL_2" containing several Python files: input_abs.py, input_float.py, input_fungsi.py, input_pow.py, input_sqrt.py, input1.py, list_dng_index_negatif.py, membalikkan_urutan.py, memotong_slicing_list.py, menambah_anggota_list.py (highlighted in blue), mengakses_anggota_list.py, menggabungkan_list_dengan_operat..., menghapus_anggota_list.py, mengubah_anggota_list.py, mengurutkan_anggota_list.py, and menyisipkan_anggota_list.py.
- Code Editor:** Displays the contents of the "menyisipkan_anggota_list.py" file:

```
1 ganjil=[5,7,11,13,15]
2
3 #menyisipkan 9 setelah angka 7
4 ganjil.insert(2,9)
5 print(ganjil)
```
- Terminal:** Shows the command line output of running the script:

```
PS C:\Users\User FC\Downloads\modul_2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul_2\menyisipkan_anggota_list.py"
[5, 7, 9, 11, 13, 15]
```
- Bottom Status Bar:** Includes information like Ln 3, Col 8, Spaces: 4, UTF-8, CRLF, Python 3.10.0 64-bit, and the date/time 3/10/2023 11:52 PM.

19.menghapus anggota list

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

- File Explorer:** Shows a folder named "MODULE_2" containing various Python files: input_abs.py, input_float.py, input_fungsi.py, input_pow.py, input_sqrt.py, input1.py, list_dng_index_negatif.py, membalik_urutan.py, memotong_slicing_list.py, menambah_anggota_list.py (selected), mengakses_anggota_list.py, menggabungkan_list_dengan_operat..., menghapus_anggota_list.py (selected), mengubah_anggota_list.py, mengurutkan_anggota_list.py (selected), menyiapkan_anggota_list.py, output1.py, string_index.py, string_lain.py, string_len.py, and string_slice.py.
- Editor:** Displays the content of the selected file "menambah_anggota_list.py". The code uses the `remove` method to delete specific elements from a list. The output in the terminal shows the list being modified from ["p", "y", "t", "h", "o", "n", "s", "a", "y", "a"] to ["p", "y", "t", "h", "o", "s", "a", "y", "a"], then to ["p", "y", "t", "h", "o", "s", "a", "y", "a"], and finally to [] after clearing it.
- Terminal:** Shows the command PS C:\Users\User FC\Downloads\modul.2 & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul.2/menghapus_anggota_list.py" followed by the list modification process.
- Bottom Status Bar:** Includes information like Line 20, Column 15, Spaces:4, UTF-8, CRLF, Python 3.10.0 64-bit, and the date/time 3/10/2023 11:53 PM.

20.mengurutkan anggota list

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

- File Explorer:** Shows a folder named "MODULE_2" containing various Python files: input_abs.py, input_float.py, input_fungsi.py, input_pow.py, input_sqrt.py, input1.py, list_dng_index_negatif.py, membalik_urutan.py, memotong_slicing_list.py, menambah_anggota_list.py (selected), mengakses_anggota_list.py, menggabungkan_list_dengan_operat..., menghapus_anggota_list.py, mengubah_anggota_list.py, mengurutkan_anggota_list.py (selected), menyiapkan_anggota_list.py, output1.py, string_index.py, string_lain.py, string_len.py, and string_slice.py.
- Editor:** Displays the content of the selected file "mengurutkan_anggota_list.py". The code uses the `sort` method to sort a list of characters. The output in the terminal shows the list being sorted from ["a", "b", "c", "d", "e", "f"] to ["a", "b", "c", "d", "e", "f"].
- Terminal:** Shows the command PS C:\Users\User FC\Downloads\modul.2 & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul.2/mengurutkan_anggota_list.py" followed by the list modification process.
- Bottom Status Bar:** Includes information like Line 8, Column 61, Spaces:4, UTF-8, CRLF, Python 3.10.0 64-bit, and the date/time 3/10/2023 11:54 PM.

21.membalik urutan list

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

- File Explorer:** Shows a folder named "MODUL.2" containing various Python files like "operator.py", "membalik urutan.py", and "string_index.py".
- Code Editor:** Displays the following Python code:

```

1 alphabet =['a', 'c', 'd', 'e', 'b']
2 alphabet.reverse()
3 print(alphabet)
4
5 output ['b', 'e', 'd', 'c', 'b', 'a']

```
- Terminal:** Shows the command PS C:\Users\User FC\Downloads\modul.2> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/modul.2/membalik urutan.py" followed by the output ['b', 'e', 'd', 'c', 'b']
- Bottom Status Bar:** Shows Python 3.10.0 64-bit, 11:57 PM, and 3/10/2023.

python _ modul 3

1. membuat tuple

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

- File Explorer:** Shows a folder named "MODUL.3" containing various Python files like "dictionary_akses_anggota.py", "dictionary_hapus_anggota.py", and "tuple_ukuran.py".
- Code Editor:** Displays the following Python code:

```

1 # Membuat dictionary kosong
2 dict1 = {}
3 print(dict1)
4
5 # dictionary dengan kunci integer
6 dict1 = {1: 'sepatu', 2: 'tas'}
7 print(dict1)
8
9 # dictionary dengan kunci campuran
10 dict1 = {'warna': 'merah', 1: [2, 3, 4]}
11 print(dict1)
12
13 # membuat dictionary menggunakan fungsi dict()
14 dict1 = dict([('1','sepatu'), ('2','bola')])
15 print(dict1)
16
17 dict1 = dict(m=8, n=9, o=10)
18 print(dict1)

```
- Terminal:** Shows the command PS C:\Users\User FC\Downloads\Modul.3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul.3/dictionary1.py" followed by the output {}
- Bottom Status Bar:** Shows Python 3.10.0 64-bit, 12:02 AM, and 3/11/2023.

2. mengakses tuple

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

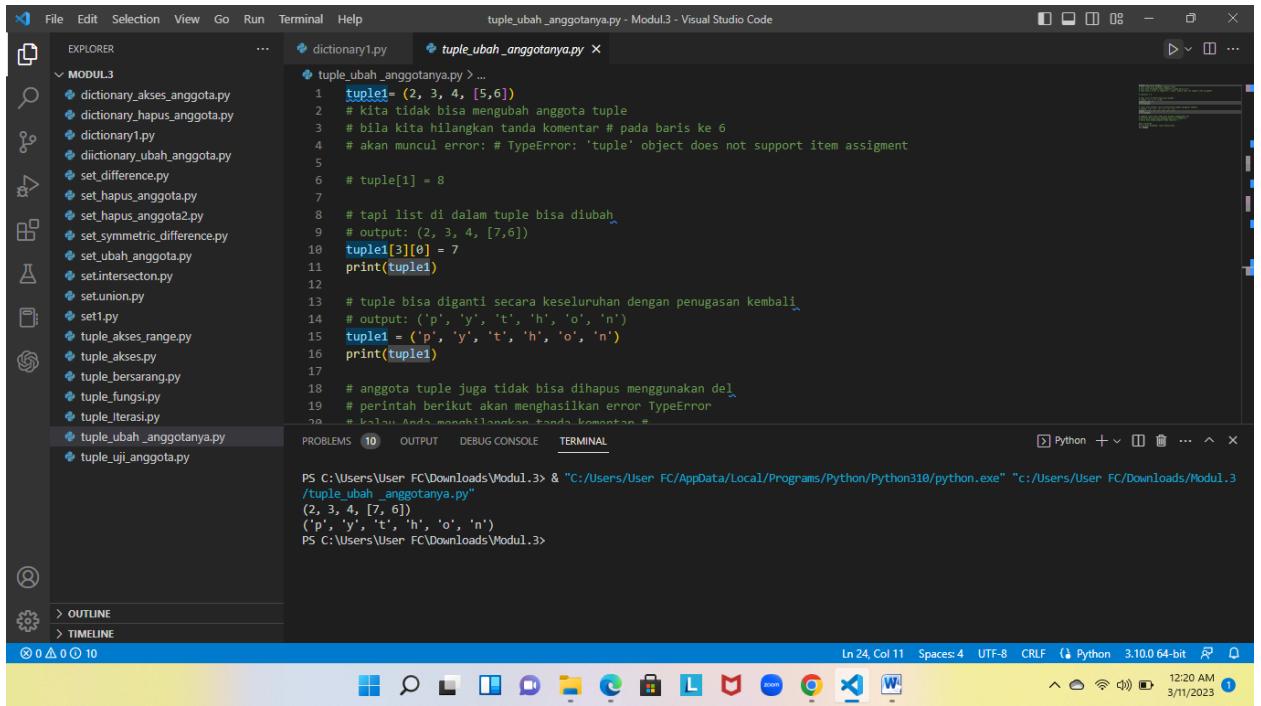
- File Explorer:** Shows a folder named "MODUL_3" containing various Python files related to tuples and sets.
- Code Editor:** Displays the file "tuple_akses.py". The code defines a tuple `tuple1 = ('p', 'y', 't', 'h', 'o', 'n')` and prints its elements at indices 0, 1, -1, -2, and -6.
- Terminal:** Shows the command `python tuple_akses.py` being run, with the output "p", "y", "n", "o", and "o" displayed.
- Status Bar:** Shows the Python version as 3.10.0 64-bit and the current date and time as 3/11/2023 12:05 AM.

Mengakses tuple dengan range

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

- File Explorer:** Shows a folder named "MODUL_3" containing various Python files related to tuples and sets.
- Code Editor:** Displays the file "tuple_akses_range.py". The code defines a tuple `tuple1 = ('p', 'r', 'o', 'g', 'n', 'a', 't', 'h', 'm', 'i', 'n', 'g')` and prints its elements from index 0 to 2, from index 2 to 6, and from index 3 to the end.
- Terminal:** Shows the command `python tuple_akses_range.py` being run, with the output "('p', 'r', 'o')", "('o', 'g', 'r', 'n')", and "('g', 'r', 'o', 'a', 't', 'h', 'm', 'i', 'n', 'g')" displayed.
- Status Bar:** Shows the Python version as 3.10.0 64-bit and the current date and time as 3/11/2023 12:07 AM.

3. mengubah anggota tuple



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

- File Explorer:** Shows a folder named "MODUL3" containing several Python files: dictionary1.py, tuple_ubah_anggotanya.py, tuple_ubah_anggotanya.py, tuple_ubah_anggotanya.py, set_difference.py, set_hapus_anggota.py, set_hapus_anggota2.py, set_symmetric_difference.py, set_ubah_anggota.py, set_intersecton.py, set_union.py, set1.py, tuple_akses_range.py, tuple_akses.py, tuple_bersarang.py, tuple_fungsi.py, tuple_iterasi.py, tuple_ubah_anggotanya.py, and tuple_uji_anggota.py.
- Code Editor:** The active file is "tuple_ubah_anggotanya.py". The code attempts to modify a tuple's element:

```
tuple1 = (2, 3, 4, [5,6])
# kita tidak bisa mengubah anggota tuple
# bila kita hilangkan tanda komentar # pada baris ke 6
# akan muncul error: # TypeError: 'tuple' object does not support item assignment
tuple1[1] = 8
# tapi list di dalam tuple bisa diubah
# output: (2, 3, 4, [7,6])
tuple1[3][0] = 7
print(tuple1)
# tuple bisa diganti secara keseluruhan dengan penugasan kembali
# output: ('p', 'y', 't', 'h', 'o', 'n')
tuple1 = ('p', 'y', 't', 'h', 'o', 'n')
print(tuple1)
# anggota tuple juga tidak bisa dihapus menggunakan del
# perintah berikut akan menghasilkan error TypeError
# del tuple1[0]
# Lalu Anda mungkin akan mendapatkan tanda komentar #
```

- Terminal:** Shows the command run in the terminal:

```
PS C:\Users\FC\Downloads\Modul.3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul.3/tuple_ubah_anggotanya.py"
(2, 3, 4, [7, 6])
('p', 'y', 't', 'h', 'o', 'n')
PS C:\Users\User FC\Downloads\Modul.3>
```

- Status Bar:** Shows the current file path, line number (Ln 24), column number (Col 11), spaces count (Spaces: 4), encoding (UTF-8), line endings (CRLF), Python version (3.10.0 64-bit), and the date and time (12:20 AM 3/11/2023).

4. menguji anggota tuple

A screenshot of Visual Studio Code showing the execution of a Python script named `tuple_uji_anggota.py`. The terminal output shows the following results:

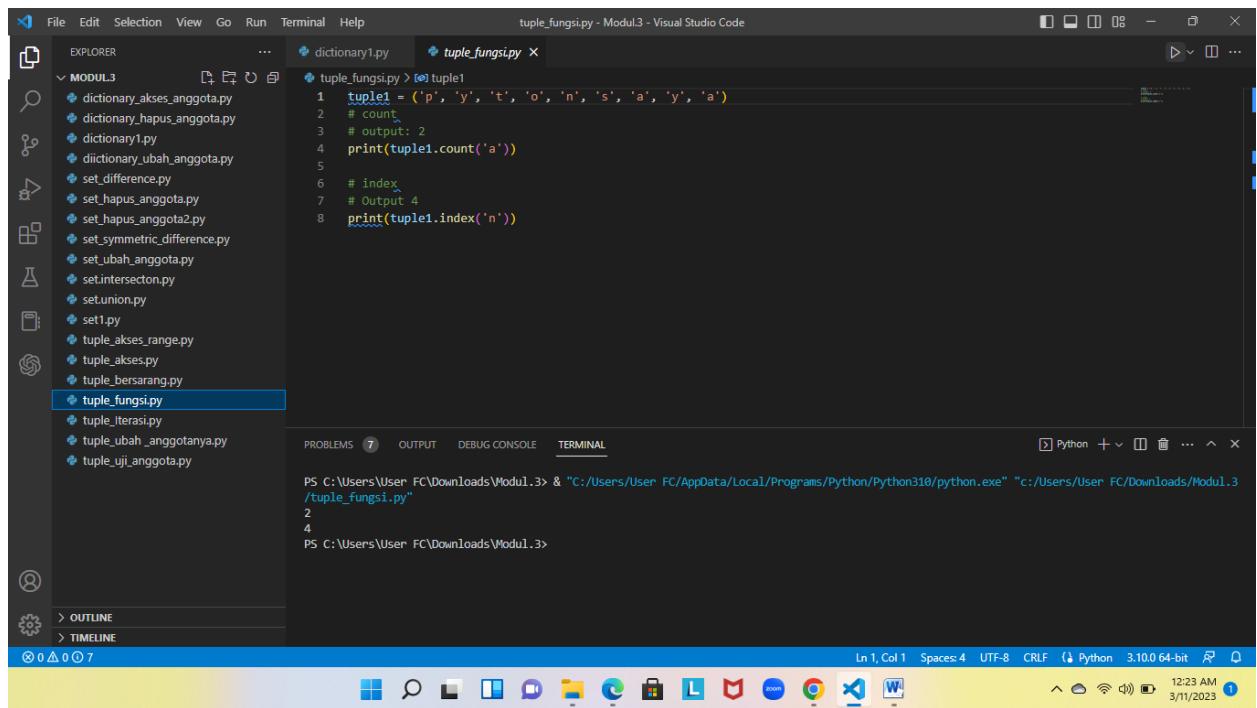
```
PS C:\Users\User FC\Downloads\Modul.3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul.3/tuple_uji_anggota.py"
True
True
False
True
True
```

5. iterasi pada tuple

A screenshot of Visual Studio Code showing the execution of a Python script named `tuple_iterasi.py`. The terminal output shows the following results:

```
PS C:\Users\User FC\Downloads\Modul.3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul.3/tuple_iterasi.py"
Hai Sistem
Hai Informasi
```

6. fungsi bawaan tuple



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

- File Explorer:** Shows a folder named "MODUL.3" containing various Python files related to sets and tuples.
- Editor:** Displays the file "tuple_fungsi.py" with the following code:

```

tuple1 = ('p', 'y', 't', 'o', 'n', 's', 'a', 'y', 'a')
# count
# output: 2
print(tuple1.count('a'))

# index
# Output 4
print(tuple1.index('n'))

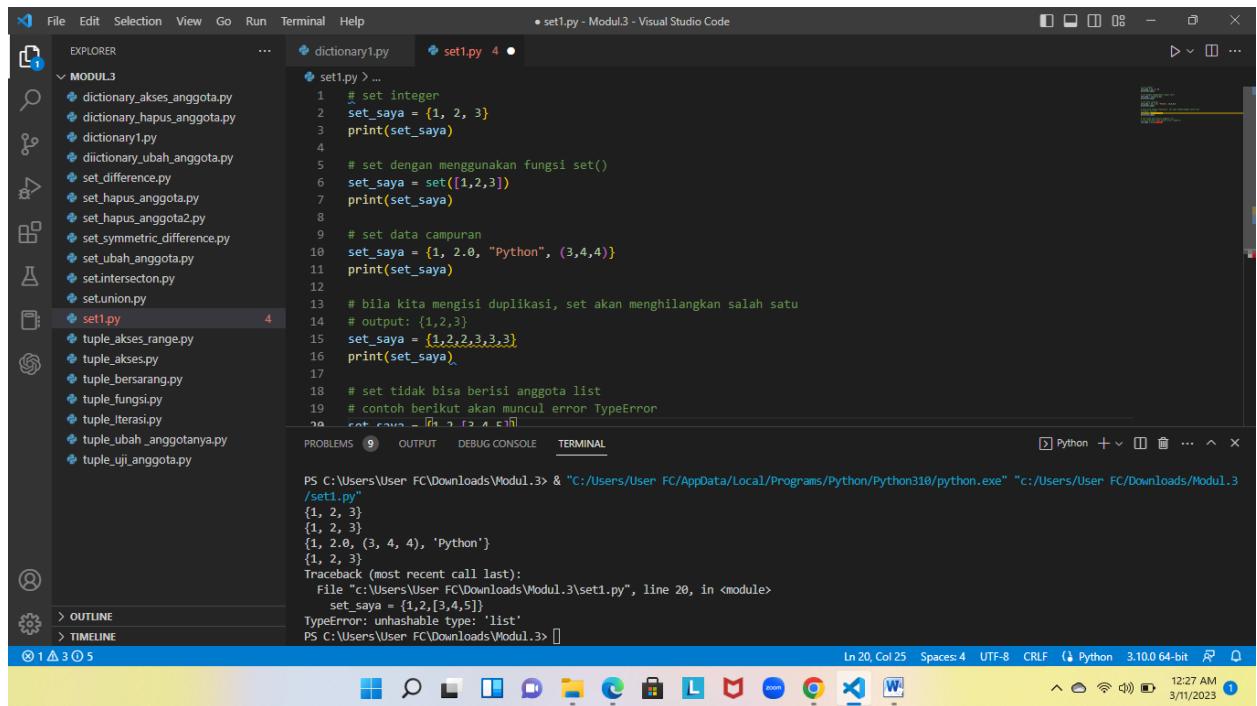
```
- Terminal:** Shows the command-line output of running the script:

```

PS C:\Users\User FC\Downloads\Modul.3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul.3/tuple_fungsi.py"
2
4
PS C:\Users\User FC\Downloads\Modul.3>

```
- Status Bar:** Shows the current file is "tuple_fungsi.py", line 1, col 1, and the Python version is 3.10.0 64-bit.

7. membuat set



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

- File Explorer:** Shows a folder named "MODUL.3" containing various Python files related to sets and tuples.
- Editor:** Displays the file "set1.py" with the following code:

```

# set integer
set_saya = {1, 2, 3}
print(set_saya)

# set dengan menggunakan fungsi set()
set_saya = set([1,2,3])
print(set_saya)

# set data campuran
set_saya = {1, 2.0, "Python", (3,4,4)}
print(set_saya)

# bila kita mengisi duplikasi, set akan menghilangkan salah satu
set_saya = {1,2,3}
set_saya = {1,2,3,3,3}
print(set_saya)

# set tidak bisa berisi anggota list
# contoh berikut akan muncul error TypeError
set_saya = [1,2,3]

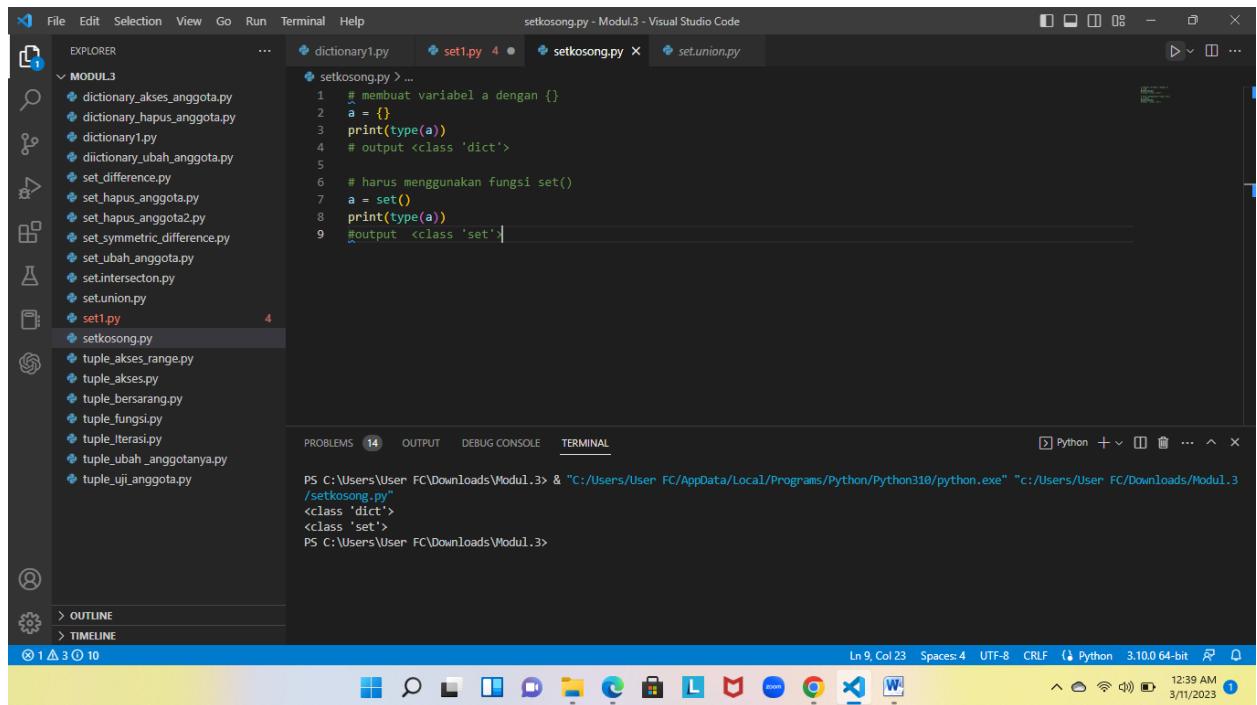
```
- Terminal:** Shows the command-line output of running the script:

```

PS C:\Users\User FC\Downloads\Modul.3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul.3/set1.py"
{1, 2, 3}
{1, 2, 3}
{1, 2.0, (3, 4, 4), 'Python'}
{1, 2, 3}
Traceback (most recent call last):
  File "c:/Users/User FC/Downloads\Modul.3\set1.py", line 20, in <module>
    set_saya = [1,2,3]
TypeError: unhashable type: 'list'
PS C:\Users\User FC\Downloads\Modul.3>

```
- Status Bar:** Shows the current file is "set1.py", line 20, col 25, and the Python version is 3.10.0 64-bit.

8. set kosong



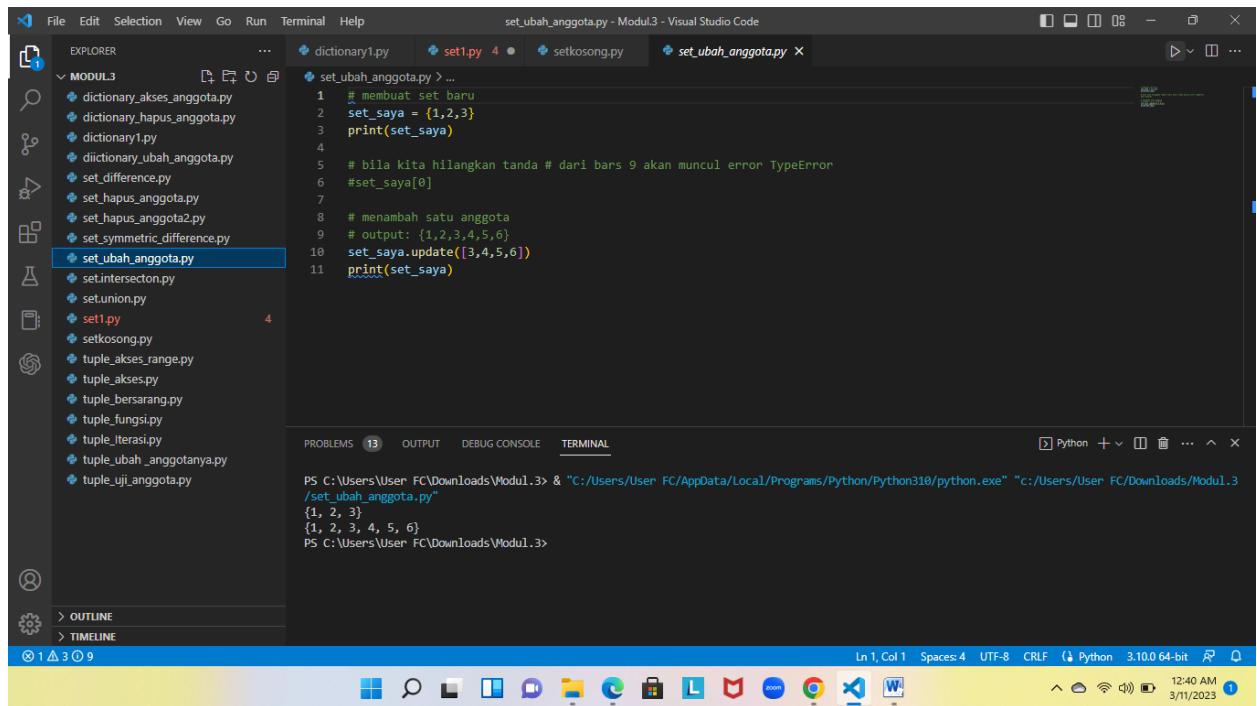
The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows a folder named "MODUL3" containing various Python files: dictionary1.py, set1.py, setkosong.py, and set.union.py.
- Code Editor:** The active file is "setkosong.py" which contains the following code:

```
# membuat variabel a dengan {}
a = {}
print(type(a))
# output <class 'dict'>
# harus menggunakan fungsi set()
a = set()
print(type(a))
#output <class 'set'>
```
- Terminal:** Displays the command line output:

```
PS C:\Users\User FC\Downloads\Modul.3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul.3/setkosong.py"
<class 'dict'>
<class 'set'>
PS C:\Users\User FC\Downloads\Modul.3>
```
- Bottom Status Bar:** Shows the current file is "setkosong.py", line 9, column 23, spaces 4, encoding UTF-8, Python 3.10.0 64-bit, and the date/time 3/11/2023 12:39 AM.

9. mengubah anggota set



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

- File Explorer:** Shows a folder named "MODUL3" containing various Python files: dictionary1.py, set1.py, setkosong.py, and set_ubah_anggota.py.
- Code Editor:** The active file is "set_ubah_anggota.py" which contains the following code:

```
# membuat set baru
set_saya = {1,2,3}
print(set_saya)
# bila kita hilangkan tanda # dari bars 9 akan muncul error TypeError
# set_saya[0]
# menambah satu anggota
# output: {1,2,3,4,5,6}
set_saya.update([3,4,5,6])
print(set_saya)
```
- Terminal:** Displays the command line output:

```
PS C:\Users\User FC\Downloads\Modul.3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul.3/set_ubah_anggota.py"
{1, 2, 3}
{1, 2, 3, 4, 5, 6}
PS C:\Users\User FC\Downloads\Modul.3>
```
- Bottom Status Bar:** Shows the current file is "set_ubah_anggota.py", line 1, column 1, spaces 4, encoding UTF-8, Python 3.10.0 64-bit, and the date/time 3/11/2023 12:40 AM.

10. menghapus anggota set

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

- File Explorer:** Shows a folder named "MODUL3" containing several Python files: dictionary1.py, set1.py, setkosong.py, set_hapus_anggota.py, set_hapus_anggota2.py, set_symmetric_difference.py, set_ubah_anggota.py, set.intersecton.py, set.union.py, tuple_akses.py, tuple_akses_range.py, tuple_akses.py, tuple_bersarang.py, tuple_fungsi.py, tuple_iterasi.py, tuple_ubah_anggotanya.py, and tuple_uji_anggota.py.
- Code Editor:** The active file is "set_hapus_anggota.py". The code demonstrates how to remove elements from a set using the `discard()` and `remove()` methods.
- Terminal:** The terminal output shows the execution of the script and its results:

```
PS C:\Users\User FC\Downloads\Modul.3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul.3/set_hapus_anggota.py"
{1, 2, 3, 5}
{1, 2, 3, 5}
{1, 2, 3}
PS C:\Users\User FC\Downloads\Modul.3>
```

Menghapus anggota set secara random dengan pop

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

- File Explorer:** Shows a folder named "MODUL3" containing several Python files: dictionary1.py, set1.py, setkosong.py, set_hapus_anggota.py, set_hapus_anggota2.py, set_symmetric_difference.py, set_ubah_anggota.py, set.intersecton.py, set.union.py, tuple_akses.py, tuple_akses_range.py, tuple_akses.py, tuple_bersarang.py, tuple_fungsi.py, tuple_iterasi.py, tuple_ubah_anggotanya.py, and tuple_uji_anggota.py.
- Code Editor:** The active file is "set_hapus_anggota2.py". The code demonstrates how to remove elements from a set using the `pop()` method.
- Terminal:** The terminal output shows the execution of the script and its results:

```
PS C:\Users\User FC\Downloads\Modul.3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul.3/set_hapus_anggota2.py"
{'t', 'P', 'y', 'e', 'o', 'h', 'H', 'n', 'l'}
t
{'P', 'y', 'e', 'o', 'h', 'H', 'n', 'l'}
P
{'y', 'e', 'o', 'h', 'H', 'n', 'l'}
set()
PS C:\Users\User FC\Downloads\Modul.3>
```

11. operasi gabungan union dengan set

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

- File Explorer:** Shows a folder named "MODUL_3" containing various Python files related to sets and tuples.
- Editor:** The file "set.union.py" is open, displaying code to demonstrate the union operation on two sets A and B.
- Terminal:** The terminal shows the output of running the script, which prints the combined elements of sets A and B.
- Bottom Bar:** Includes standard Windows icons for file operations and system status.

```
set.union.py > ...
1 # membuat set A dan B
2 A = {1, 2, 3, 4, 5}
3 B = {4, 5, 6, 7, 8}
4
5 # Gabungkan menggunakan operator |
6 # output: {1, 2, 3, 4, 5, 6, 7, 8}
7 print(A | B)
8
9 # Menggunakan fungsi union()
10 # output: {1, 2, 3, 4, 5, 6, 7, 8}
11 A.union(B)
12
13 # output: {1, 2, 3, 4, 5, 6, 7, 8}
14 B.union(A)
```

```
PS C:\Users\User FC\Downloads\Modul.3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul.3/set.union.py"
{1, 2, 3, 4, 5, 6, 7, 8}
PS C:\Users\User FC\Downloads\Modul.3>
```

12. operasi irisan dengan set

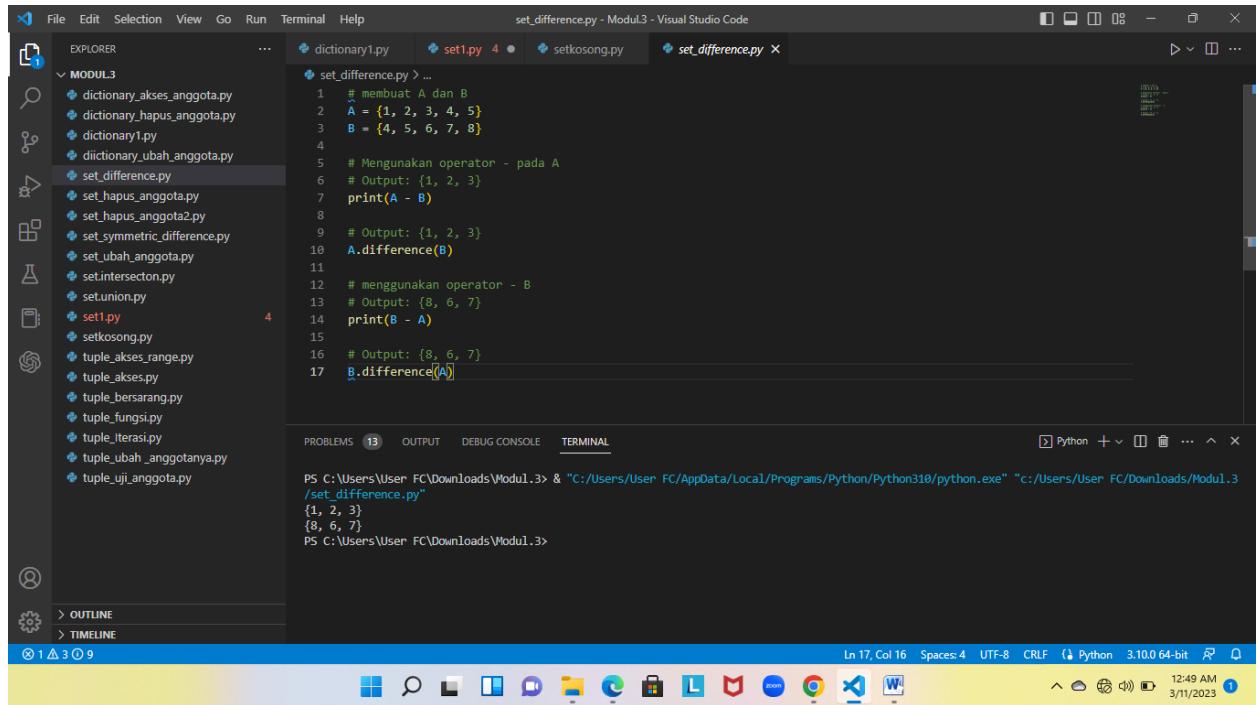
The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows a folder named "MODUL_3" containing various Python files related to sets and tuples.
- Editor:** The file "set.intersector.py" is open, displaying code to demonstrate the intersection operation on two sets A and B.
- Terminal:** The terminal shows the output of running the script, which prints the common elements of sets A and B.
- Bottom Bar:** Includes standard Windows icons for file operations and system status.

```
set.intersector.py > ...
1 # membuat set A dan B
2 A = {1, 2, 3, 4, 5}
3 B = {4, 5, 6, 7, 8}
4
5 # irisan menggunakan operator &
6 # output: {4,5}
7 print(A & B)
8 # Menggunakan fungsi intersection()
9 # output: {4,5}
10 A.intersection(B)
11
12 # Output: {4,5}
13 B.intersection(A)
```

```
PS C:\Users\User FC\Downloads\Modul.3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul.3/set.intersector.py"
{4, 5}
PS C:\Users\User FC\Downloads\Modul.3>
```

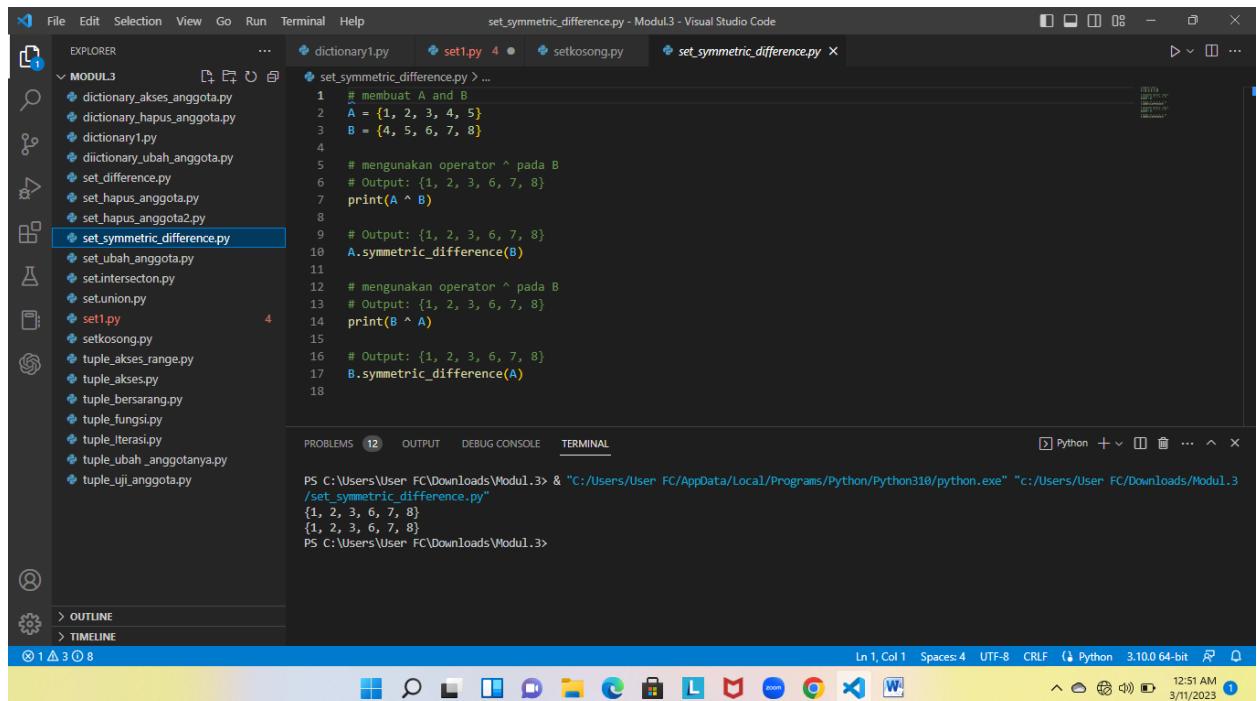
13. operasi selisih dengan set



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

- File Explorer:** Shows a folder named "MODUL3" containing various Python files: dictionary1.py, set1.py, setkosong.py, set_difference.py, set_hapus_anggota.py, set_hapus_anggota2.py, set_symmetric_difference.py, set_ubah_anggota.py, set.intersecton.py, set.union.py, tuple_akses_range.py, tuple_akses.py, tuple_bersarang.py, tuple_fungsi.py, tuple_iterasi.py, tuple_ubah_anggotanya.py, and tuple_uji_anggota.py.
- Code Editor:** The active file is "set_difference.py". The code demonstrates the use of the '-' operator to find the difference between two sets A and B.
- Terminal:** The terminal shows the command being run: "C:/Users/User FC/Downloads/Modul.3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul.3/set_difference.py" and the output: {1, 2, 3} {8, 6, 7}
- Status Bar:** Shows the current line (Ln 17), column (Col 16), spaces (Spaces: 4), encoding (UTF-8), and Python version (3.10.0 64-bit).

14. operasi komplemen dengan set



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

- File Explorer:** Shows a folder named "MODUL3" containing various Python files: dictionary1.py, set1.py, setkosong.py, set_symmetric_difference.py, set_ubah_anggota.py, set.hapus_anggota.py, set.hapus_anggota2.py, set_symmetric_difference.py, set_ubah_anggota2.py, set_ubah_anggota.py, set.intersecton.py, set.union.py, tuple_akses_range.py, tuple_akses.py, tuple_bersarang.py, tuple_fungsi.py, tuple_iterasi.py, tuple_ubah_anggotanya.py, and tuple_uji_anggota.py.
- Code Editor:** The active file is "set_symmetric_difference.py". The code demonstrates the use of the '^' operator to find the symmetric difference between two sets A and B.
- Terminal:** The terminal shows the command being run: "C:/Users/User FC/Downloads/Modul.3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul.3/set_symmetric_difference.py" and the output: {1, 2, 3, 6, 7, 8} {1, 2, 3, 6, 7, 8}
- Status Bar:** Shows the current line (Ln 1, Col 1), column (Col 1), spaces (Spaces: 4), encoding (UTF-8), and Python version (3.10.0 64-bit).

15. membuat dictionary

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

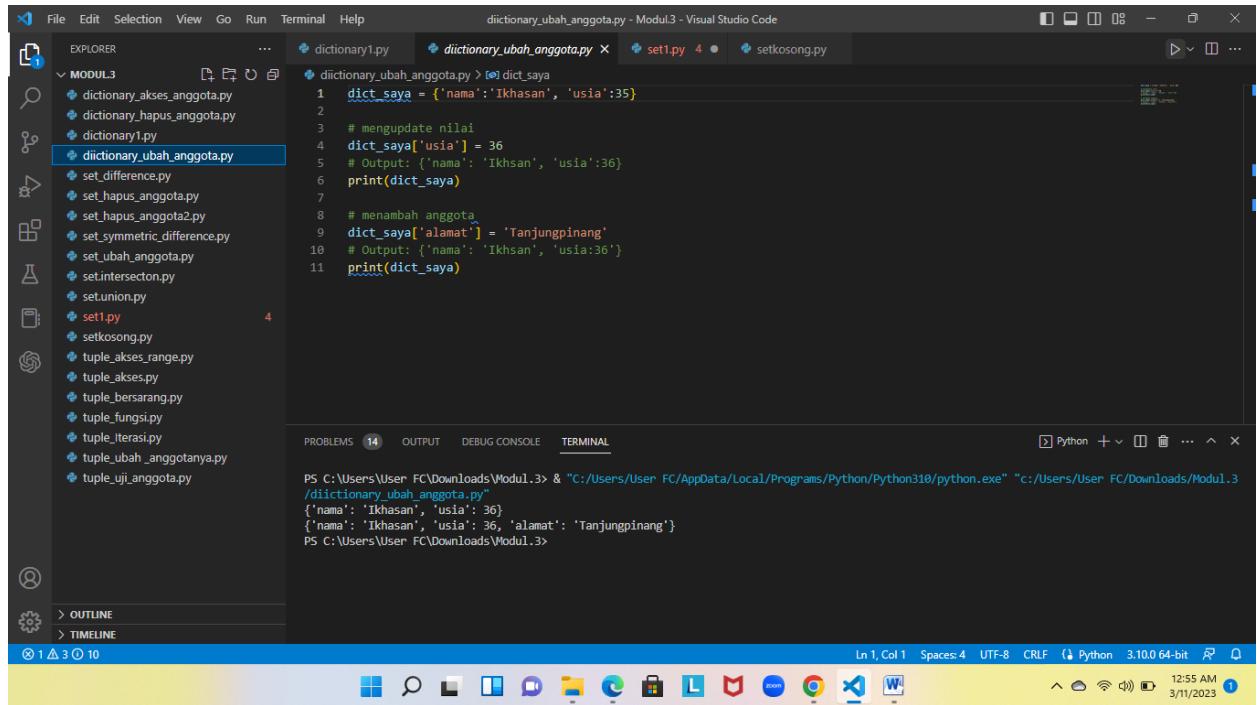
- File Explorer:** Shows a folder named "MODUL_3" containing several Python files: dictionary1.py, set1.py, setkosong.py, and set_symmetric_difference.py.
- Code Editor:** Displays the content of dictionary1.py. The code creates various dictionaries, including an empty one, one with integer keys, one with mixed keys, and one using the dict() constructor.
- Terminal:** Shows the command PS C:\Users\User FC\Downloads\Modul_3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul_3/dictionary1.py". The output shows the resulting dictionary structures.
- Status Bar:** Shows the current file is dictionary1.py, the line count is Ln 18, Col 13, and the Python version is 3.10.0 64-bit.

16. mengakses anggota dictionary

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

- File Explorer:** Shows a folder named "MODUL_3" containing several Python files: dictionary1.py, dictionary_akses_anggota.py, set1.py, and setkosong.py.
- Code Editor:** Displays the content of dictionary_akses_anggota.py. It defines a dictionary 'dict_saya' and attempts to access its keys ('nama', 'usia', and 'alamat').
- Terminal:** Shows the command PS C:\Users\User FC\Downloads\Modul_3> & "C:/Users/User FC/AppData/Local/Programs/Python/Python310/python.exe" "c:/Users/User FC/Downloads/Modul_3/dictionary_akses_anggota.py". The output shows the values for 'nama' and 'usia', and a None value for 'alamat'.
- Status Bar:** Shows the current file is dictionary_akses_anggota.py, the line count is Ln 1, Col 1, and the Python version is 3.10.0 64-bit.

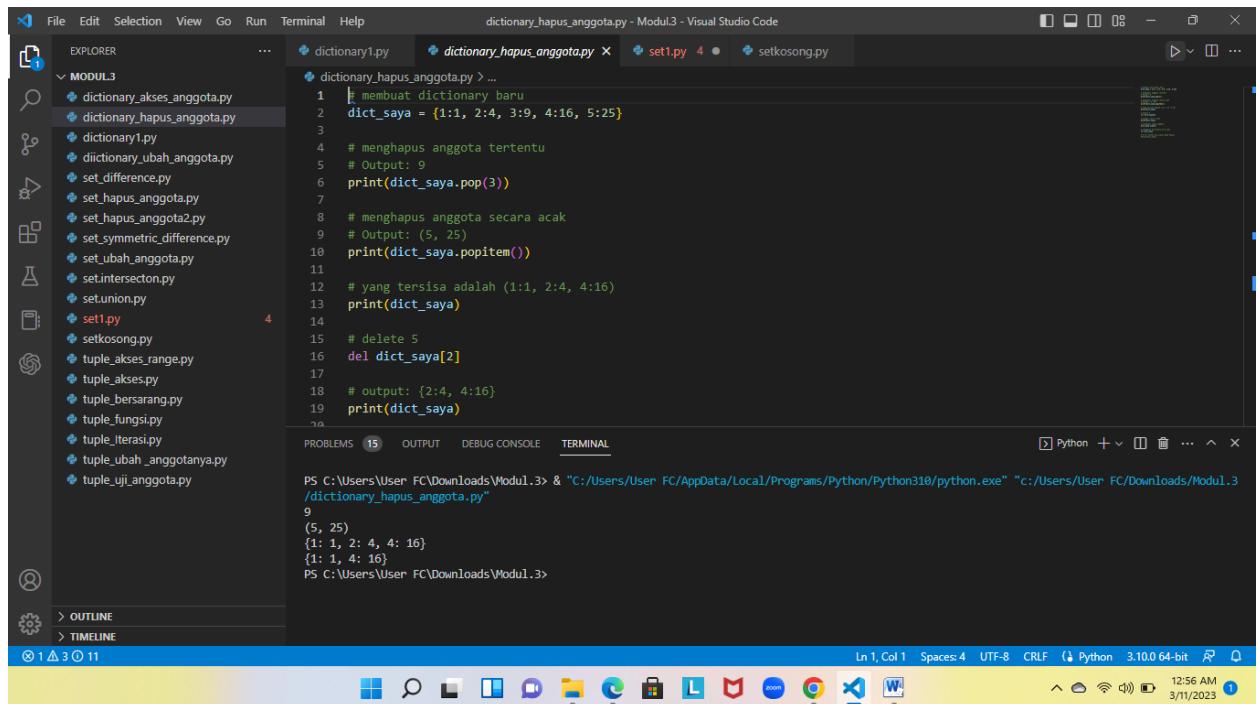
17. mengubah anggota dictionary



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

- File Explorer:** Shows a folder named "MODUL3" containing several Python files: dictionary_akses_anggota.py, dictionary_hapus_anggota.py, dictionary1.py, dictionary_ubah_anggota.py, set_difference.py, set_hapus_anggota.py, set_hapus_anggota2.py, set_symmetric_difference.py, set_ubah_anggota.py, set_intersecton.py, set_union.py, set1.py, setkosong.py, tuple_akses.py, tuple_akses_range.py, tuple_akseses.py, tuple_bersarang.py, tuple_fungsi.py, tuple_iterasi.py, tuple_ubah_anggotanya.py, and tuple_uji_anggota.py.
- Code Editor:** Displays the content of `dictionary_ubah_anggota.py`. The code defines a dictionary `dict_saya` with a key 'nama' and value 'Ikhisan'. It then updates the value of 'usia' from 35 to 36 and adds a new key 'alamat' with the value 'Tanjungpinang'.
- Terminal:** Shows the command-line output of running the script. The output shows the initial state of the dictionary, the update, and the final state where the dictionary contains 'nama': 'Ikhisan', 'usia': 36, and 'alamat': 'Tanjungpinang'.
- Status Bar:** Includes information like line count (Ln 1), character count (Col 1), spaces (Spaces: 4), encoding (UTF-8), and file type (CRLF).

18. menghapus anggota dictionary



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

- File Explorer:** Shows a folder named "MODUL3" containing several Python files: dictionary_akses_anggota.py, dictionary_hapus_anggota.py, dictionary1.py, dictionary_ubah_anggota.py, set_difference.py, set_hapus_anggota.py, set_hapus_anggota2.py, set_symmetric_difference.py, set_ubah_anggota.py, set_intersecton.py, set_union.py, set1.py, setkosong.py, tuple_akses.py, tuple_akses_range.py, tuple_akseses.py, tuple_bersarang.py, tuple_fungsi.py, tuple_iterasi.py, tuple_ubah_anggotanya.py, and tuple_uji_anggota.py.
- Code Editor:** Displays the content of `dictionary_hapus_anggota.py`. The code creates a dictionary `dict_saya` with keys 1:1, 2:4, 3:9, 4:16, and 5:25. It then uses various methods to remove items: `pop(3)` removes the item at index 3, `popitem()` removes a random item, `popitem()` removes the last item, and `del dict_saya[2]` removes the item at index 2.
- Terminal:** Shows the command-line output of running the script. The output shows the initial state of the dictionary, the removal of the third item, the removal of a random item, the removal of the last item, and the final state of the dictionary.
- Status Bar:** Includes information like line count (Ln 1), character count (Col 1), spaces (Spaces: 4), encoding (UTF-8), and file type (CRLF).

