

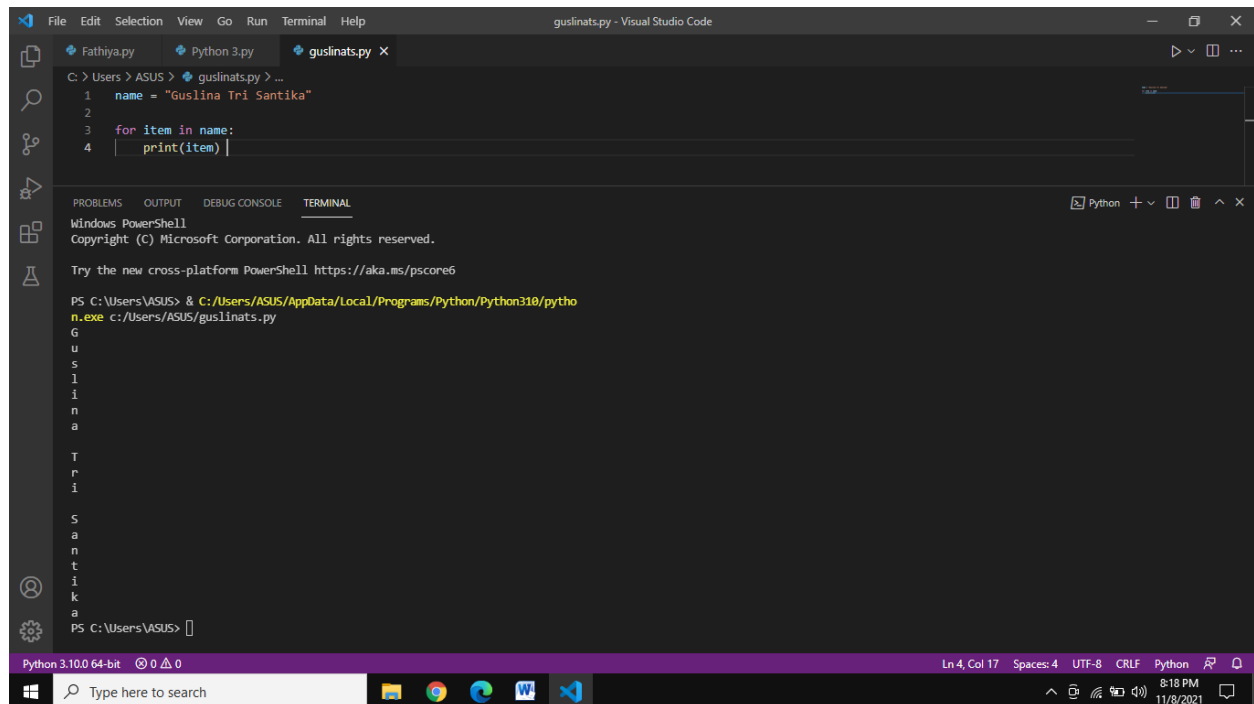
NAMA : GUSLINA TRI SANTIKA

NIM : 20.010.013.049

KELAS : ARTIFICIAL INTELLIGENCE – 3B

TUGAS PYTHON-4

○ Perulangan For



The screenshot shows the Visual Studio Code interface with a Python file named `guslinats.py` open. The code in the editor is as follows:

```
1 name = "Guslina Tri Santika"
2
3 for item in name:
4     print(item)
```

Below the editor, the `TERMINAL` panel is active, showing the execution of the script. The command prompt shows the command `python.exe c:/Users/ASUS/guslinats.py` being executed, resulting in the output:

```
G
u
s
l
i
n
a

T
r
i

S
a
n
t
i
k
a

PS C:\Users\ASUS>
```

The status bar at the bottom indicates the file is using Python 3.10.0 64-bit, with 0 errors and 0 warnings. The window title is `guslinats.py - Visual Studio Code`.

The screenshot shows the Visual Studio Code interface with a file named `guslinats.py` open. The editor displays the following Python code:

```
1 number = [1, 2, 3, 4, 5]
2
3 for item in number:
4     print(item * 4)
```

The TERMINAL panel at the bottom shows the command prompt output after running the script:

```
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
1
2
3
4
5
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
4
8
12
16
20
PS C:\Users\ASUS>
```

The status bar at the bottom indicates the file is at Line 4, Column 23, with 4 spaces, UTF-8 encoding, CRLF line endings, and the Python interpreter is set to Python 3.10.0 64-bit.

The screenshot shows the Visual Studio Code interface with a file named `guslinats.py` open. The editor displays the following Python code:

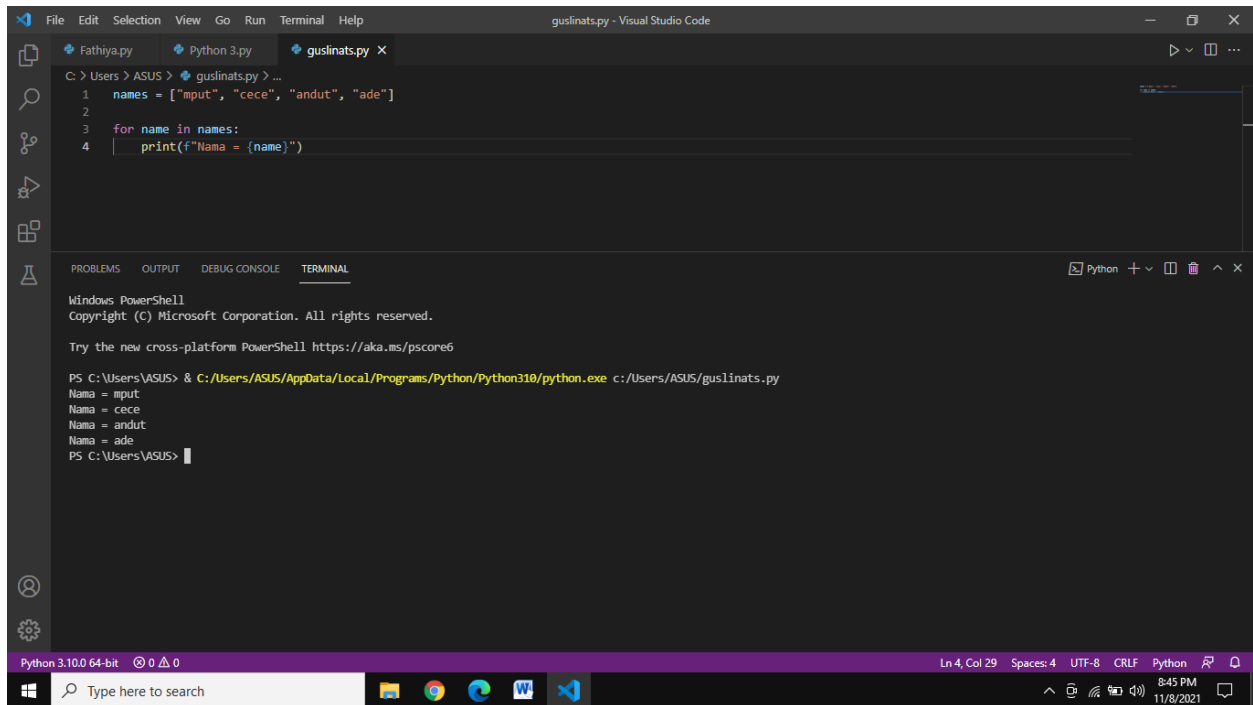
```
1 for item in range(5, 11, 2):
2     print(item)
```

The TERMINAL panel at the bottom shows the command prompt output after running the script:

```
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
0
1
2
3
4
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
5
6
7
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
5
7
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
5
7
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
5
7
9
PS C:\Users\ASUS>
```

The status bar at the bottom indicates the file is at Line 2, Column 17, with 4 spaces, UTF-8 encoding, CRLF line endings, and the Python interpreter is set to Python 3.10.0 64-bit.

○ List



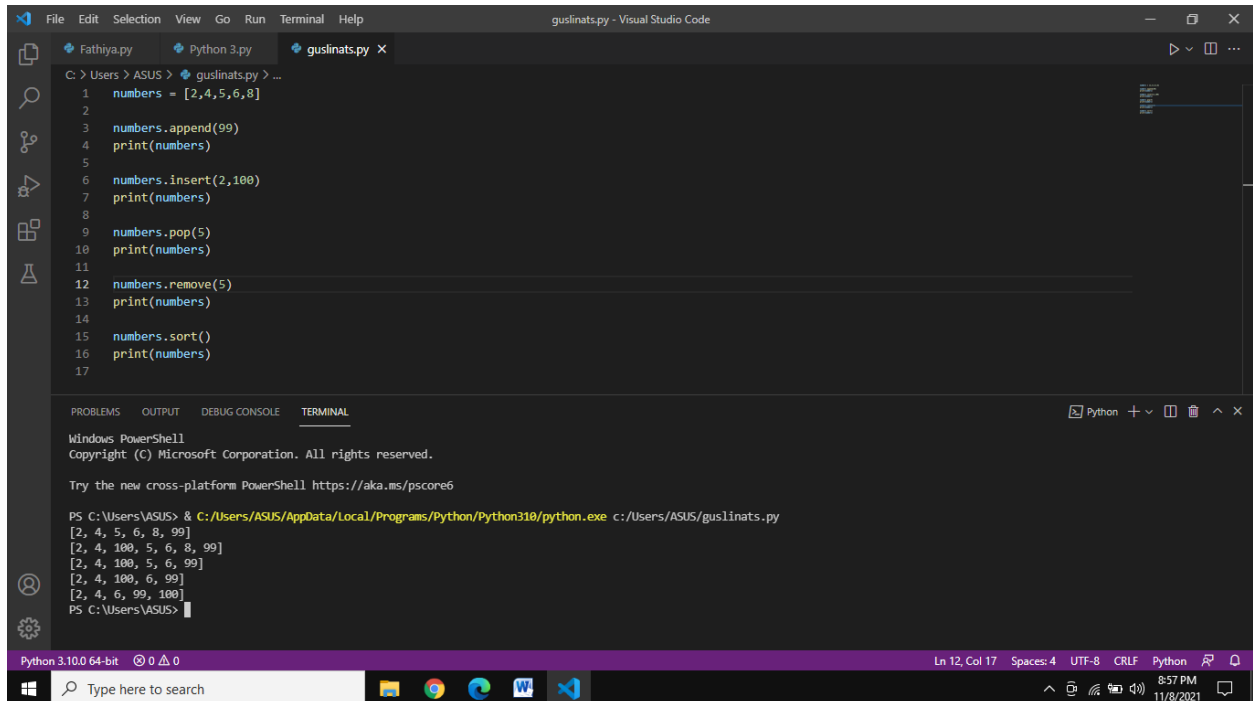
The screenshot shows the Visual Studio Code editor with a file named `guslinats.py` open. The code in the editor is as follows:

```
1 names = ["mput", "cece", "andut", "ade"]
2
3 for name in names:
4     print(f>Nama = {name})
```

The terminal window at the bottom shows the command prompt output after running the script:

```
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
>Nama = mput
>Nama = cece
>Nama = andut
>Nama = ade
PS C:\Users\ASUS>
```

○ List Method



The screenshot shows the Visual Studio Code editor with a file named `guslinats.py` open. The code in the editor is as follows:

```
1 numbers = [2,4,5,6,8]
2
3 numbers.append(99)
4 print(numbers)
5
6 numbers.insert(2,100)
7 print(numbers)
8
9 numbers.pop(5)
10 print(numbers)
11
12 numbers.remove(5)
13 print(numbers)
14
15 numbers.sort()
16 print(numbers)
17
```

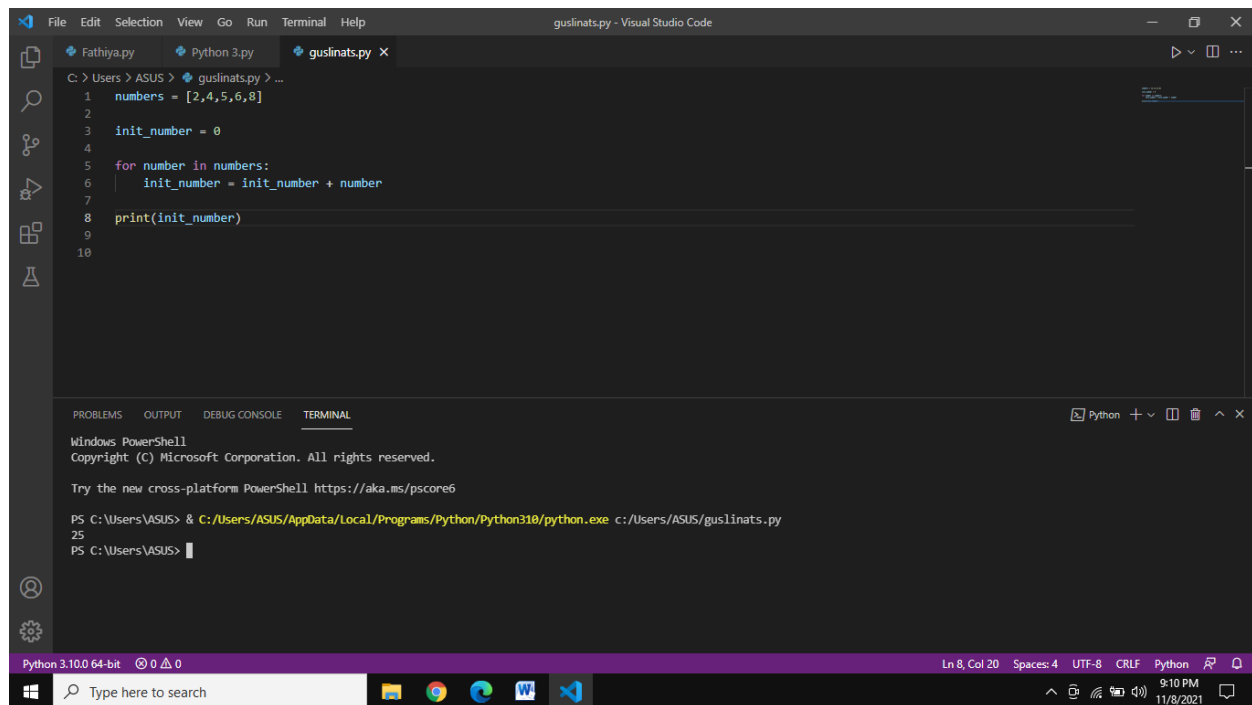
The terminal window at the bottom shows the command prompt output after running the script:

```
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
[2, 4, 5, 6, 8, 99]
[2, 4, 100, 5, 6, 8, 99]
[2, 4, 100, 5, 6, 99]
[2, 4, 100, 6, 99]
[2, 4, 6, 99, 100]
PS C:\Users\ASUS>
```

- Append berfungsi menambah nilai pada index.
- Insert berfungsi memasukan nilai pada index sesuai dengan index yang si tentukan.
- Pop berfungsi menghapus nilai sesuai urutan index.

- Remove berfungsi menghapus nilai dengan cara langsung menuliskan nilai nya.
- Sort berfungsi mengurutkan nilai pada index dari yang terkecil ke yang terbesar.

- Menjumlahkan List



The screenshot shows the Visual Studio Code editor with a file named `guslinats.py` open. The code in the editor is as follows:

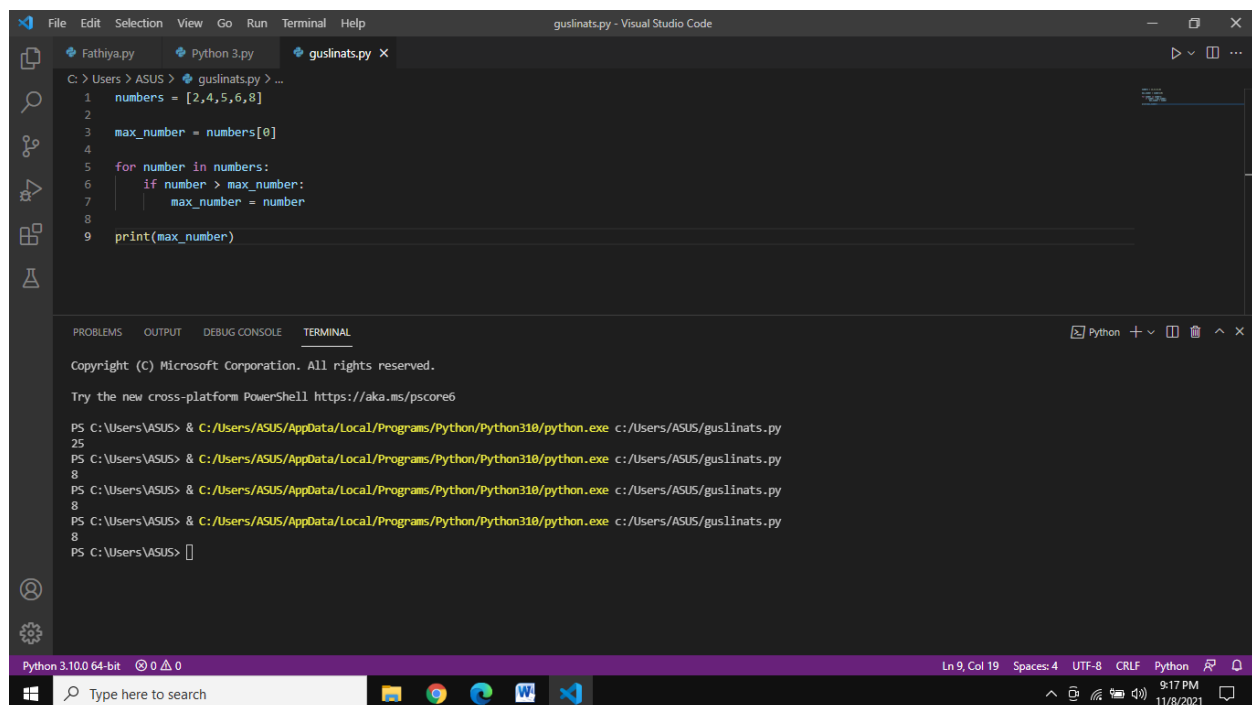
```
1 numbers = [2,4,5,6,8]
2
3 init_number = 0
4
5 for number in numbers:
6     init_number = init_number + number
7
8 print(init_number)
9
10
```

The terminal at the bottom shows the command to run the script and the output:

```
PS C:\Users\ASUS> & c:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
25
PS C:\Users\ASUS>
```

The status bar at the bottom indicates the file is a Python 3.10.0 64-bit file, with the cursor at line 8, column 20. The system tray shows the date and time as 9:10 PM on 11/8/2021.

- Mencari Angka Max



The screenshot shows the Visual Studio Code editor with the same file `guslinats.py`. The code in the editor is as follows:

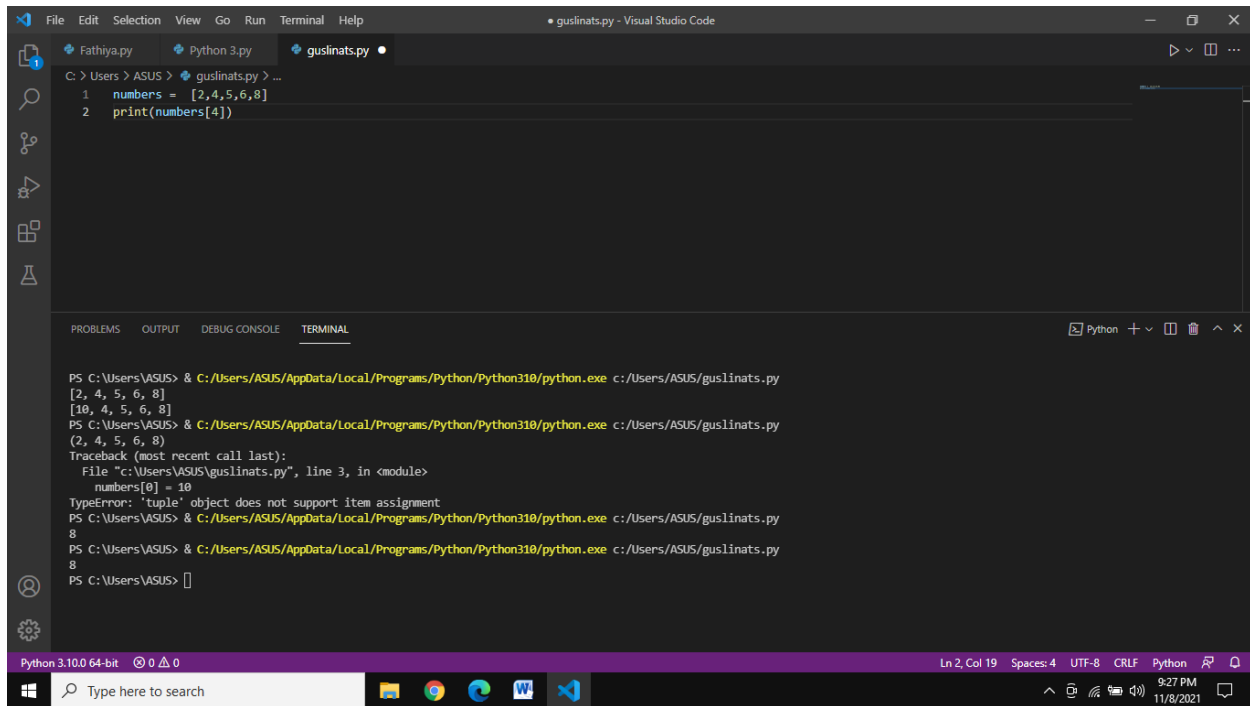
```
1 numbers = [2,4,5,6,8]
2
3 max_number = numbers[0]
4
5 for number in numbers:
6     if number > max_number:
7         max_number = number
8
9 print(max_number)
```

The terminal at the bottom shows the command to run the script and the output:

```
PS C:\Users\ASUS> & c:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
8
PS C:\Users\ASUS> & c:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
8
PS C:\Users\ASUS> & c:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
8
PS C:\Users\ASUS> & c:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
8
PS C:\Users\ASUS>
```

The status bar at the bottom indicates the file is a Python 3.10.0 64-bit file, with the cursor at line 9, column 19. The system tray shows the date and time as 9:17 PM on 11/8/2021.

○ Tuple



The screenshot shows the Visual Studio Code editor with a file named `guslinats.py` open. The code in the editor is:

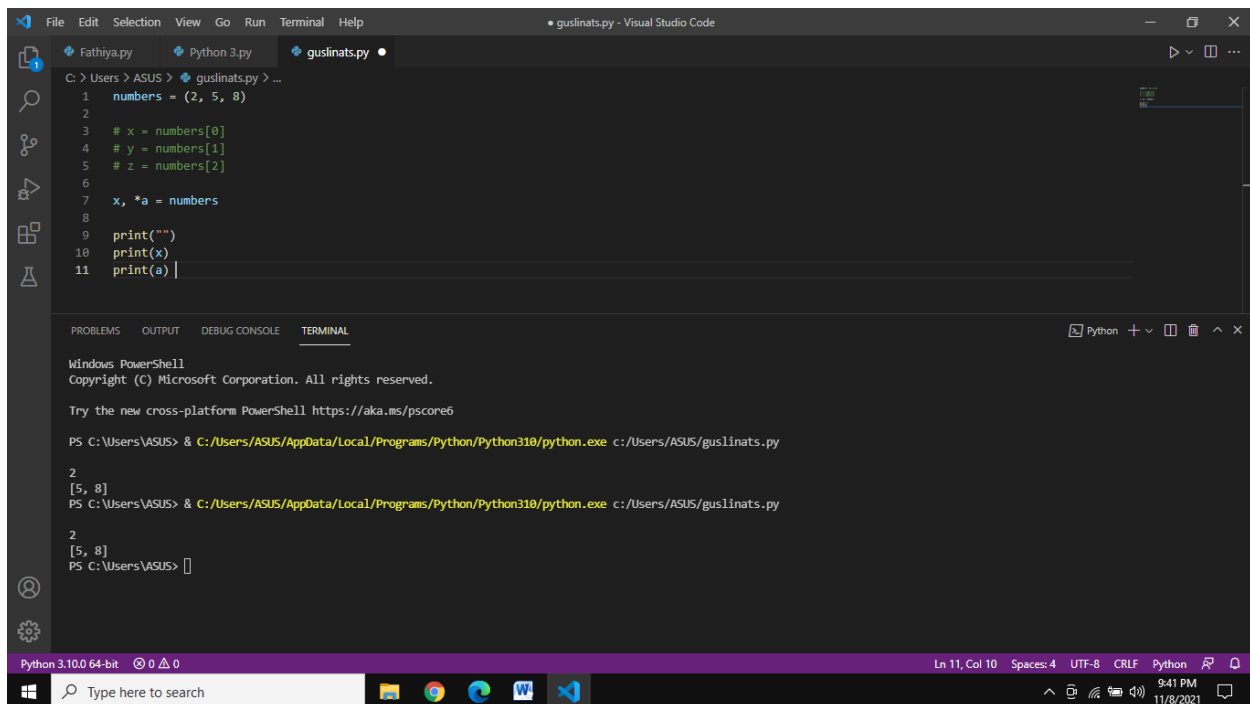
```
1 numbers = [2,4,5,6,8]
2 print(numbers[4])
```

The terminal output shows the execution of the script, which results in an error:

```
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
[2, 4, 5, 6, 8]
[10, 4, 5, 6, 8]
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
(2, 4, 5, 6, 8)
Traceback (most recent call last):
  File "c:\Users\ASUS\guslinats.py", line 3, in <module>
    numbers[0] = 10
TypeError: 'tuple' object does not support item assignment
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
8
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
8
PS C:\Users\ASUS> |
```

Tuple (immutable) = Nilai di dalam index tidak bisa di ubah-ubah tidak seperti list method.

○ Unpack



The screenshot shows the Visual Studio Code editor with a file named `guslinats.py` open. The code in the editor is:

```
1 numbers = (2, 5, 8)
2
3 # x = numbers[0]
4 # y = numbers[1]
5 # z = numbers[2]
6
7 x, *a = numbers
8
9 print("")
10 print(x)
11 print(a)
```

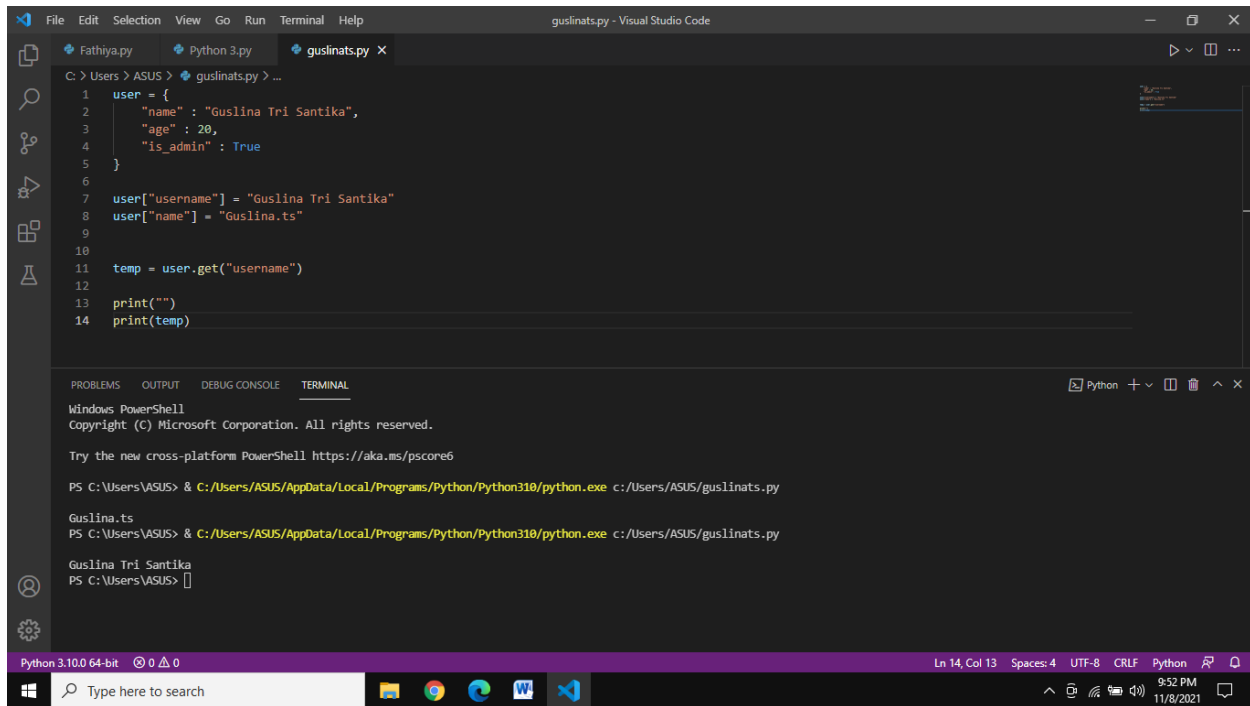
The terminal output shows the execution of the script, which results in the following output:

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

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

PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
2
[5, 8]
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py
2
[5, 8]
PS C:\Users\ASUS> |
```

○ Dictionary



The screenshot shows the Visual Studio Code editor with a file named `guslinats.py` open. The code defines a dictionary `user` with keys `name`, `age`, and `is_admin`. It then assigns a username to the dictionary and prints the value. The terminal window shows the command to run the script, which outputs the value of the `username` key.

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

C:\Users\ASUS> guslinats.py
1 user = {
2     "name" : "Guslina Tri Santika",
3     "age" : 20,
4     "is_admin" : True
5 }
6
7 user["username"] = "Guslina Tri Santika"
8 user["name"] = "Guslina.ts"
9
10
11 temp = user.get("username")
12
13 print("")
14 print(temp)

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

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

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

Guslina.ts
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ASUS/guslinats.py

Guslina Tri Santika
PS C:\Users\ASUS>

Python 3.10.0 64-bit 0 0 0 Ln 14, Col 13 Spaces: 4 UTF-8 CRLF Python 9:52 PM 11/8/2021
```