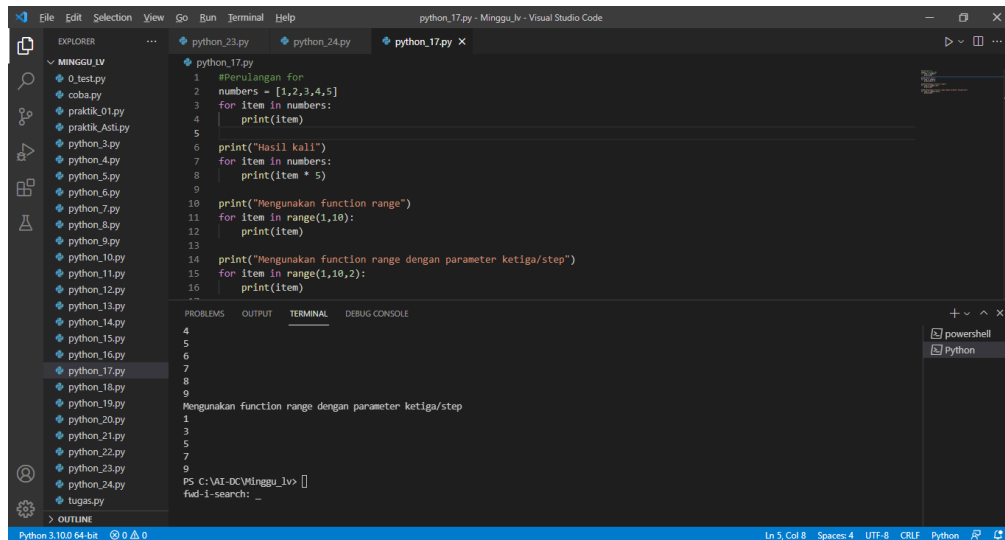


Praktikum Pemrograman Python

Perulangan For



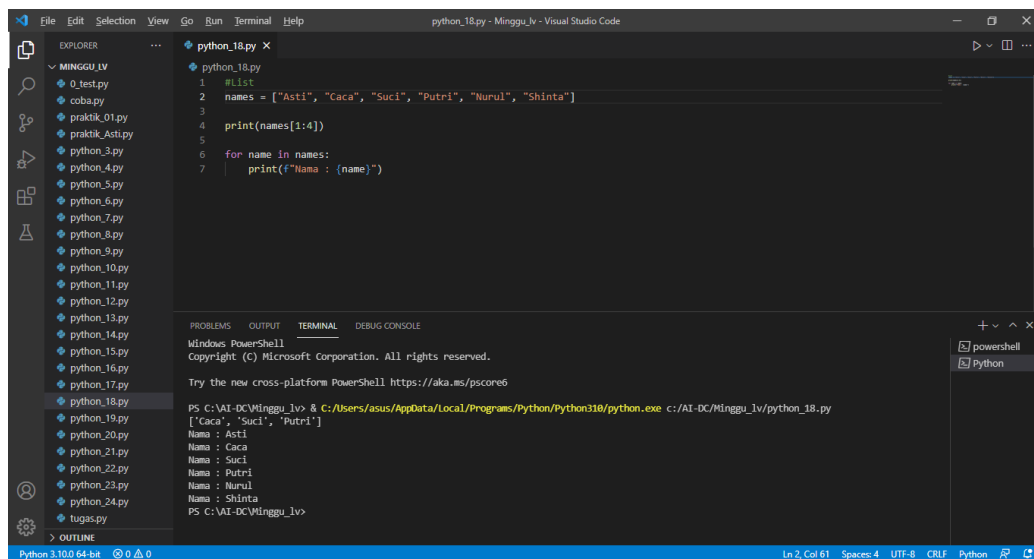
The screenshot shows the Visual Studio Code interface with a Python file named `python_17.py` open. The code defines a list `numbers = [1,2,3,4,5]` and uses a `for` loop to print each item. It also demonstrates the `range()` function with and without a step parameter. The terminal output shows the execution results.

```
python_17.py
1 #Perulangan for
2 numbers = [1,2,3,4,5]
3 for item in numbers:
4     print(item)
5
6 print("Hasil kali")
7 for item in numbers:
8     print(item * 5)
9
10 print("Mengunakan function range")
11 for item in range(1,10):
12     print(item)
13
14 print("Mengunakan function range dengan parameter ketiga/step")
15 for item in range(1,10,2):
16     print(item)
```

Terminal Output:

```
4
5
6
7
8
9
Mengunakan function range dengan parameter ketiga/step
1
3
5
7
9
PS C:\AI-DC\Minggu_1v>
```

List



The screenshot shows the Visual Studio Code interface with a Python file named `python_18.py` open. The code creates a list `names = ["Asti", "Caca", "Suci", "Putri", "Nurul", "Shinta"]` and uses a `for` loop to print each name. The terminal output shows the execution results.

```
python_18.py
1 #List
2 names = ["Asti", "Caca", "Suci", "Putri", "Nurul", "Shinta"]
3
4 print(names[1:4])
5
6 for name in names:
7     print("Nama : (name)")
```

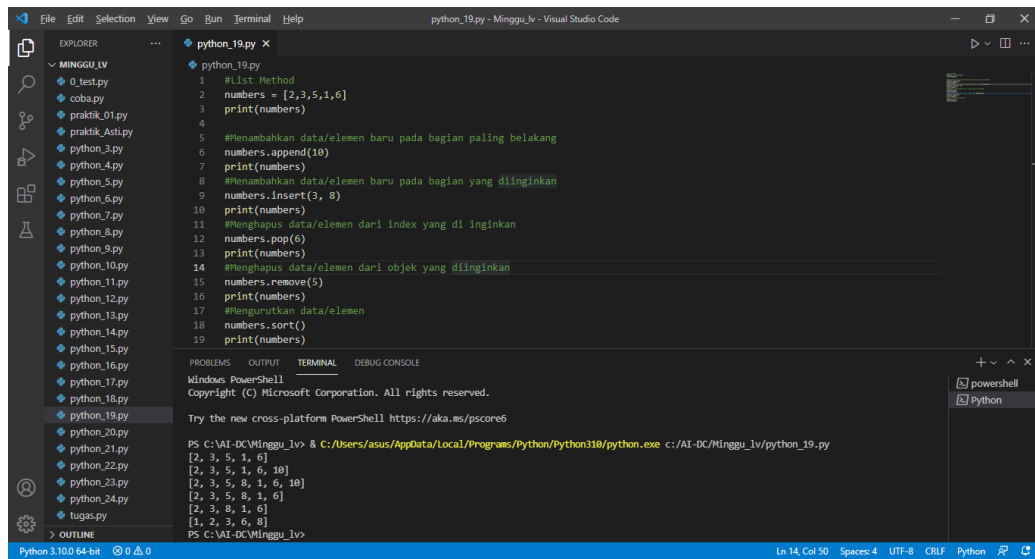
Terminal Output:

```
Windows PowerShell
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PS C:\AI-DC\Minggu_1v & C:\Users\asus\AppData\Local\Programs\Python\Python310\python.exe c:/AI-DC/Minggu_1v/python_18.py
['Caca', 'Suci', 'Putri']
Nama : Asti
Nama : Caca
Nama : Suci
Nama : Putri
Nama : Nurul
Nama : Shinta
PS C:\AI-DC\Minggu_1v>
```

List Method



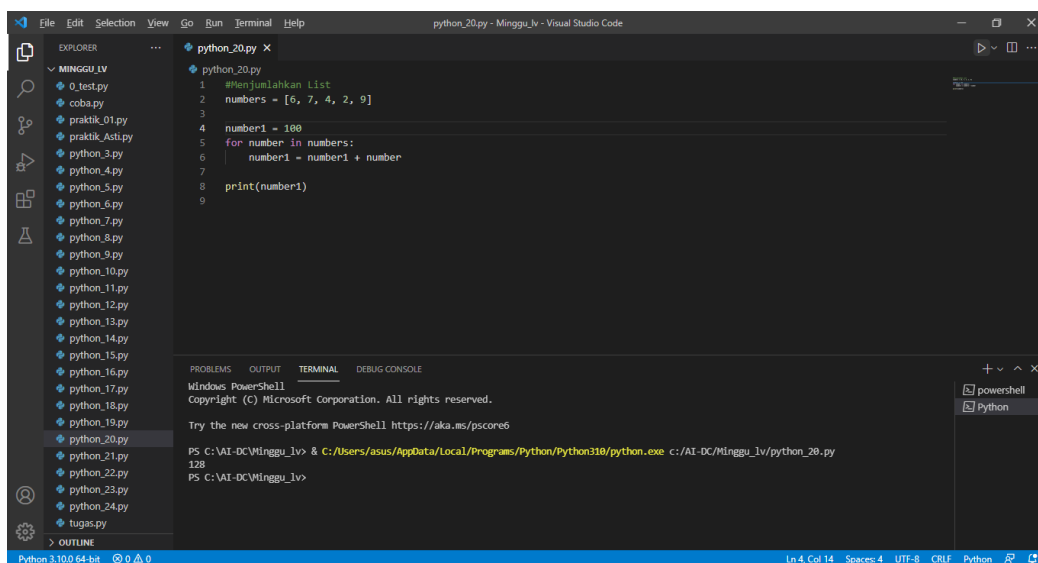
The screenshot shows a Visual Studio Code window with a Python file named `python_19.py`. The code demonstrates various list methods: `list()`, `append()`, `insert()`, `pop()`, `remove()`, and `sort()`. The terminal output shows the state of the `numbers` list after each operation.

```
1 #List Method
2 numbers = [2,3,5,1,6]
3 print(numbers)
4
5 #Menambahkan data/eleman baru pada bagian paling belakang
6 numbers.append(10)
7 print(numbers)
8 #Menambahkan data/eleman baru pada bagian yang diinginkan
9 numbers.insert(3, 8)
10 print(numbers)
11 #Menghapus data/eleman dari index yang di inginkan
12 numbers.pop(6)
13 print(numbers)
14 #Menghapus data/eleman dari objek yang diinginkan
15 numbers.remove(5)
16 print(numbers)
17 #Mengurutkan data/eleman
18 numbers.sort()
19 print(numbers)
```

Terminal Output:

```
PS C:\AI-DC\Minggu_lv> & C:/Users/asus/AppData/Local/Programs/Python/Python310/python.exe c:/AI-DC/Minggu_lv/python_19.py
[2, 3, 5, 1, 6]
[2, 3, 5, 1, 6, 10]
[2, 3, 5, 8, 1, 6, 10]
[2, 3, 5, 8, 1, 6]
[2, 3, 8, 1, 6]
[1, 2, 3, 6, 8]
```

Menjumlahkan List



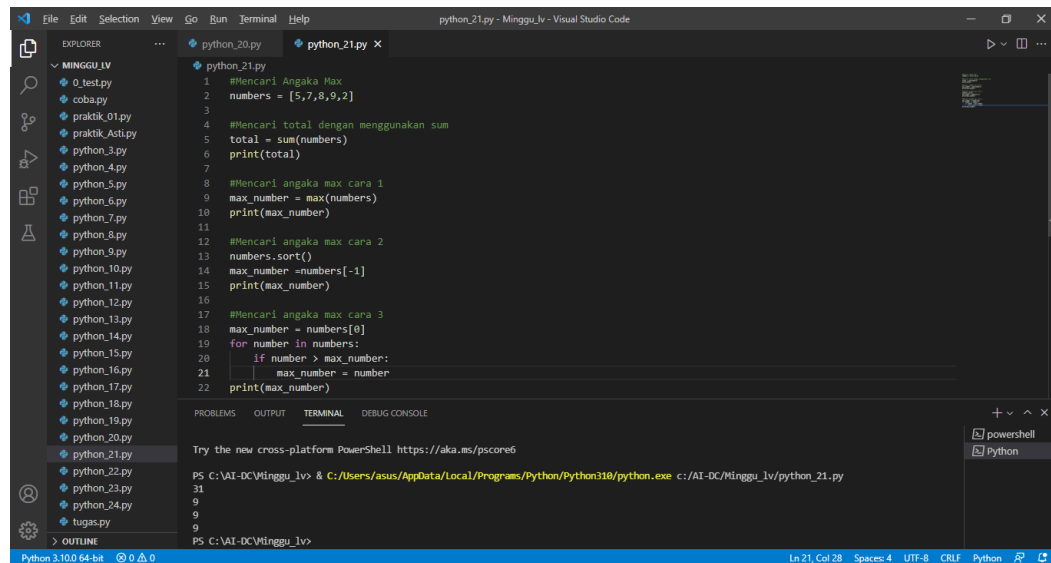
The screenshot shows a Visual Studio Code window with a Python file named `python_20.py`. The code calculates the sum of all elements in a list using a `for` loop. The terminal output shows the final sum.

```
1 #Menjumlahkan List
2 numbers = [6, 7, 4, 2, 9]
3
4 number1 = 100
5 for number in numbers:
6     number1 = number1 + number
7
8 print(number1)
9
```

Terminal Output:

```
PS C:\AI-DC\Minggu_lv> & C:/Users/asus/AppData/Local/Programs/Python/Python310/python.exe c:/AI-DC/Minggu_lv/python_20.py
138
PS C:\AI-DC\Minggu_lv>
```

Mencari Angka Max

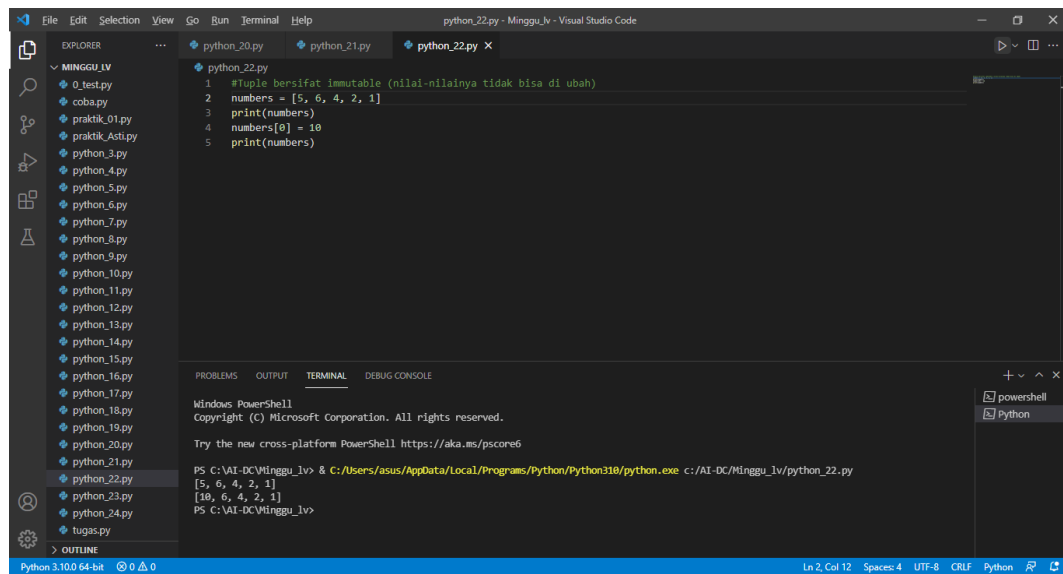


The screenshot shows the Visual Studio Code interface with a Python file named `python_21.py` open. The code defines a list `numbers = [5, 7, 8, 9, 2]` and implements three methods to find the maximum value: using the `sum` function, the `max` function, sorting the list, and a manual loop. The terminal shows the command to run the script using Python 3.10.0.

```
python_21.py
1 #Mencari Angka Max
2 numbers = [5,7,8,9,2]
3
4 #Mencari total dengan menggunakan sum
5 total = sum(numbers)
6 print(total)
7
8 #Mencari angka max cara 1
9 max_number = max(numbers)
10 print(max_number)
11
12 #Mencari angka max cara 2
13 numbers.sort()
14 max_number = numbers[-1]
15 print(max_number)
16
17 #Mencari angka max cara 3
18 max_number = numbers[0]
19 for number in numbers:
20     if number > max_number:
21         max_number = number
22 print(max_number)
```

```
PS C:\AI-DC\Minggu_1v> & C:/Users/asus/AppData/Local/Programs/Python/Python310/python.exe c:/AI-DC/Minggu_1v/python_21.py
31
9
9
9
PS C:\AI-DC\Minggu_1v>
```

Tuple

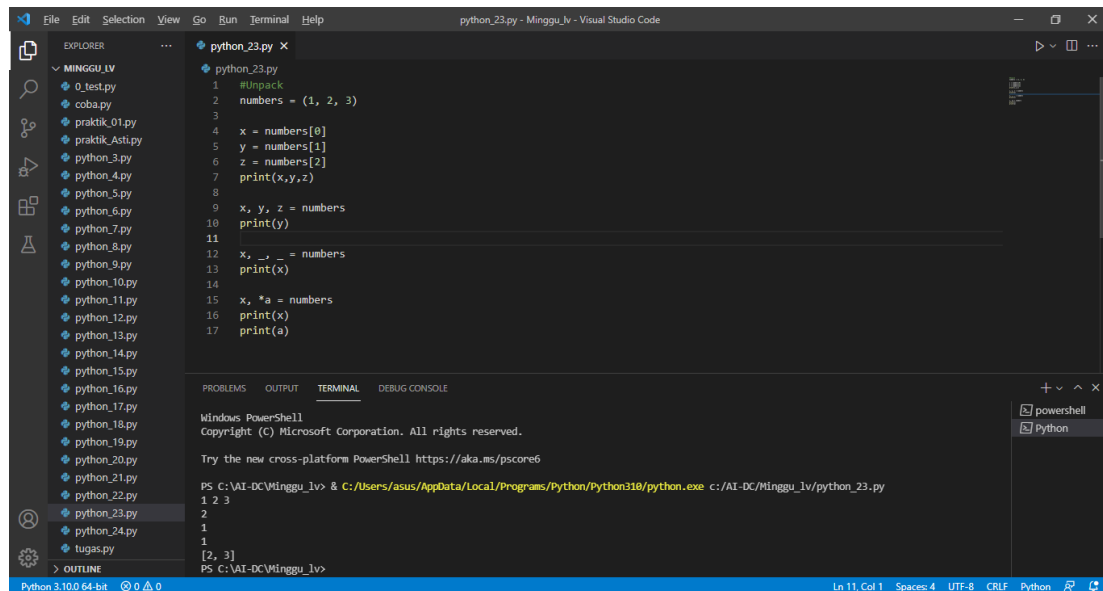


The screenshot shows the Visual Studio Code interface with a Python file named `python_22.py` open. The code creates a tuple `numbers = (5, 6, 4, 2, 1)` and demonstrates that its elements are immutable by attempting to modify the first element, which results in a `TypeError`. The terminal shows the command to run the script using Python 3.10.0.

```
python_22.py
1 #Tuple bersifat immutable (nilai-nilainya tidak bisa di ubah)
2 numbers = (5, 6, 4, 2, 1)
3 print(numbers)
4 numbers[0] = 10
5 print(numbers)
```

```
PS C:\AI-DC\Minggu_1v> & C:/Users/asus/AppData/Local/Programs/Python/Python310/python.exe c:/AI-DC/Minggu_1v/python_22.py
[5, 6, 4, 2, 1]
[10, 6, 4, 2, 1]
PS C:\AI-DC\Minggu_1v>
```

Unpack



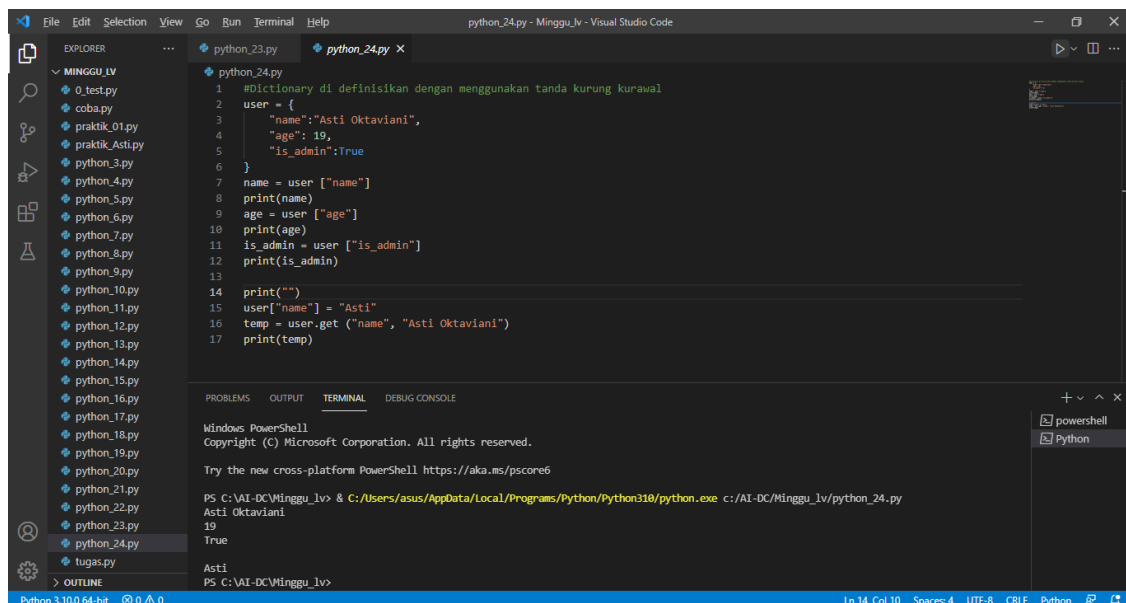
```
python_23.py
1 #Unpack
2 numbers = (1, 2, 3)
3
4 x = numbers[0]
5 y = numbers[1]
6 z = numbers[2]
7 print(x,y,z)
8
9 x, y, z = numbers
10 print(y)
11
12 x, _, _ = numbers
13 print(x)
14
15 x, *a = numbers
16 print(x)
17 print(a)
```

```
Windows PowerShell
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PS C:\AI-DC\Minggu_1v> & C:/Users/asus/AppData/Local/Programs/Python/Python310/python.exe c:/AI-DC/Minggu_1v/python_23.py
1 2 3
2
1
1
[2, 3]
PS C:\AI-DC\Minggu_1v>
```

Dictionary



```
python_24.py
1 #Dictionary di definisikan dengan menggunakan tanda kurung kurawal
2 user = {
3     "name": "Asti Oktaviani",
4     "age": 19,
5     "is_admin": True
6 }
7 name = user ["name"]
8 print(name)
9 age = user ["age"]
10 print(age)
11 is_admin = user ["is_admin"]
12 print(is_admin)
13
14 print("")
15 user["name"] = "Asti"
16 temp = user.get ("name", "Asti Oktaviani")
17 print(temp)
```

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

PS C:\AI-DC\Minggu_1v> & C:/Users/asus/AppData/Local/Programs/Python/Python310/python.exe c:/AI-DC/Minggu_1v/python_24.py
Asti Oktaviani
19
True
Asti
PS C:\AI-DC\Minggu_1v>
```