

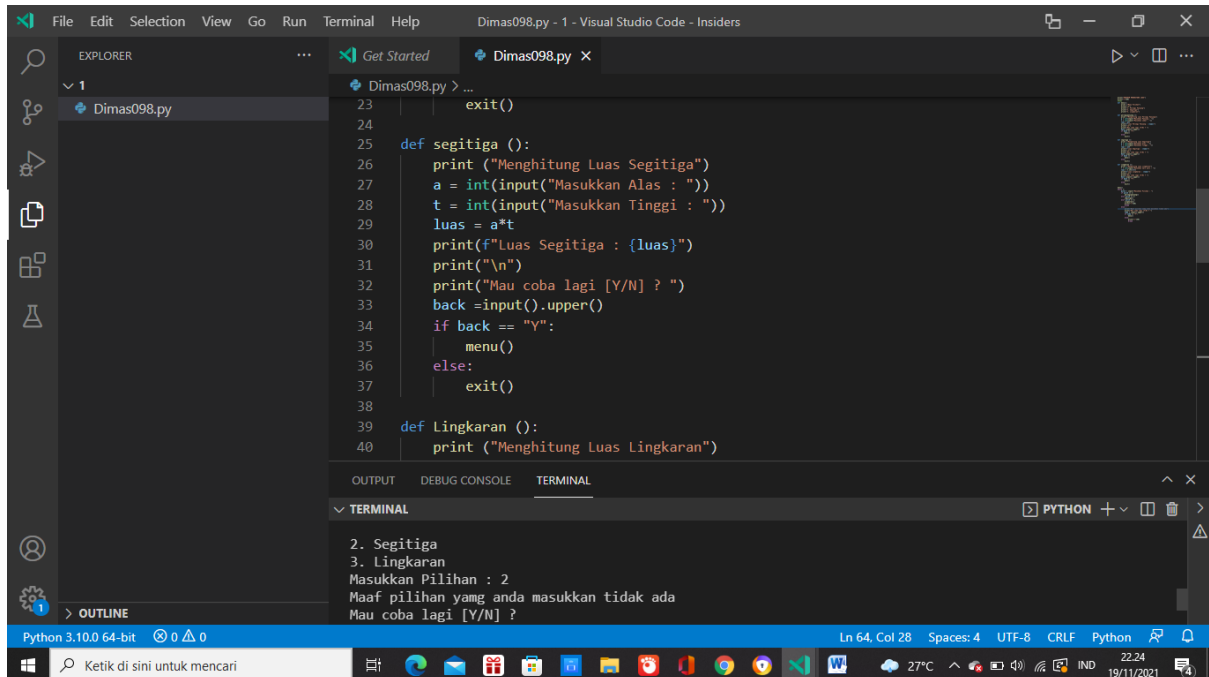
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NIM : 20.01.013.037

Matkul : Artificial Intelligence

## Python V

1.

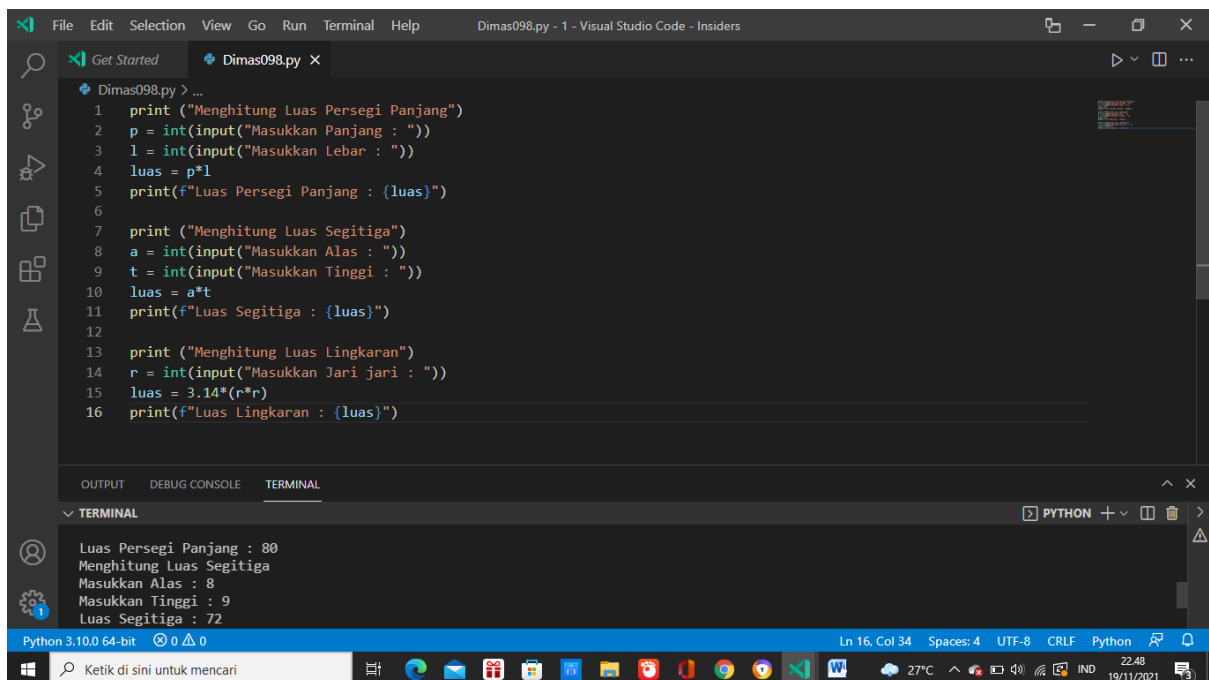


```
File Edit Selection View Go Run Terminal Help Dimas098.py - 1 - Visual Studio Code - Insiders
EXPLORER
  Dimas098.py
  Dimas098.py > ...
    23 | exit()
    24 |
    25 | def segitiga ():
    26 |     print ("Menghitung Luas Segitiga")
    27 |     a = int(input("Masukkan Alas : "))
    28 |     t = int(input("Masukkan Tinggi : "))
    29 |     luas = a*t
    30 |     print(f"Luas Segitiga : {luas}")
    31 |     print("\n")
    32 |     print("Mau coba lagi [Y/N] ? ")
    33 |     back =input().upper()
    34 |     if back == "Y":
    35 |         menu()
    36 |     else:
    37 |         exit()
    38 |
    39 | def Lingkaran ():
    40 |     print ("Menghitung Luas Lingkaran")

OUTPUT DEBUG CONSOLE TERMINAL
  2. Segitiga
  3. Lingkaran
  Masukkan Pilihan : 2
  Maaf pilihan yang anda masukkan tidak ada
  Mau coba lagi [Y/N] ?

Python 3.10.0 64-bit 0 0 0 Ln 64, Col 28 Spaces: 4 UTF-8 CRLF Python 22:24 19/11/2021
```

2.



```
File Edit Selection View Go Run Terminal Help Dimas098.py - 1 - Visual Studio Code - Insiders
  Get Started Dimas098.py x
  Dimas098.py > ...
    1 | print ("Menghitung Luas Persegi Panjang")
    2 | p = int(input("Masukkan Panjang : "))
    3 | l = int(input("Masukkan Lebar : "))
    4 | luas = p*l
    5 | print(f"Luas Persegi Panjang : {luas}")
    6 |
    7 | print ("Menghitung Luas Segitiga")
    8 | a = int(input("Masukkan Alas : "))
    9 | t = int(input("Masukkan Tinggi : "))
   10 | luas = a*t
   11 | print(f"Luas Segitiga : {luas}")
   12 |
   13 | print ("Menghitung Luas Lingkaran")
   14 | r = int(input("Masukkan Jari jari : "))
   15 | luas = 3.14*(r*r)
   16 | print(f"Luas Lingkaran : {luas}")

OUTPUT DEBUG CONSOLE TERMINAL
  Luas Persegi Panjang : 80
  Menghitung Luas Segitiga
  Masukkan Alas : 8
  Masukkan Tinggi : 9
  Luas Segitiga : 72

Python 3.10.0 64-bit 0 0 0 Ln 16, Col 34 Spaces: 4 UTF-8 CRLF Python 22:48 19/11/2021
```

3.

The screenshot shows the Visual Studio Code interface with a file named `Dimas.py` open. The code defines a function `luassgt` to calculate the area of a triangle and takes user input for the base and height.

```
1 def luassgt(alas, tinggi):
2     luas = 0.5*alas*tinggi
3     print(f"Luas Segitiga adalah {luas}")
4
5 alas = int(input("Masukkan Nilai Alas = "))
6 tinggi = int(input("Masukkan Nilai Tinggi = "))
7
8 luassgt(alas,tinggi)
```

The terminal window shows the execution of the script, where the user enters 10 for the base and 13 for the height, resulting in an area of 65.0.

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

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

PS E:\VSCode DIMs\UAS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe "e:/VSCode DIMs/UAS/Dimas AI/Dimas.py"
Masukkan Nilai Alas = 10
Masukkan Nilai Tinggi = 13
Luas Segitiga adalah 65.0
PS E:\VSCode DIMs\UAS>
```

4.

The screenshot shows the Visual Studio Code interface with a file named `Dimas.py` open. The code takes user input for the number of data points, reads them into a list, and finds the maximum value.

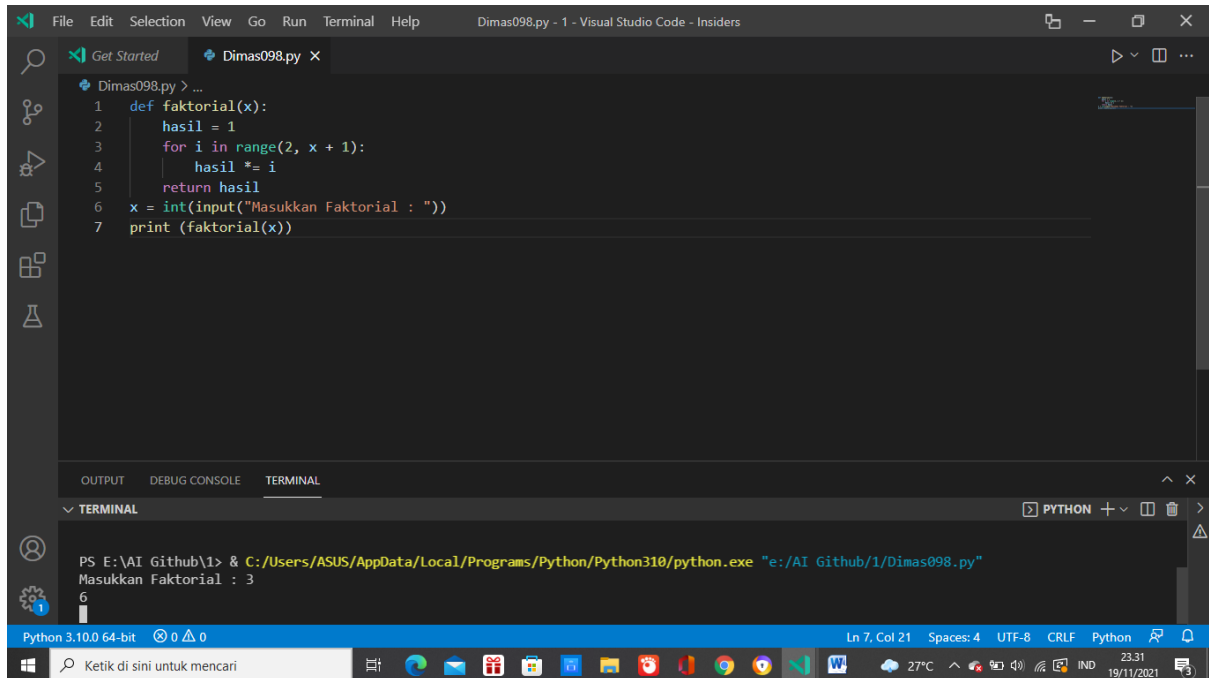
```
1 N = int(input("Banyak Data = "))
2
3 data = []
4 for i in range(0, N):
5     nilai = int(input("Masukkan data ke-%d: " % (i+1)))
6     data.append(nilai)
7
8 max_number = max(data)
9
10 print(f"Jadi angka Terbesar dari semua bilangan adalah {max_number}")
```

The terminal window shows the execution of the script, where the user enters 10 for the number of data points and provides a list of numbers (2, 3, 4, 5, 6, 7, 8, 9, 10). The output is "Jadi angka Terbesar dari semua bilangan adalah 10".

```
Masukkan data ke-2: 2
Masukkan data ke-3: 3
Masukkan data ke-4: 4
Masukkan data ke-5: 5
Masukkan data ke-6: 6
Masukkan data ke-7: 7
Masukkan data ke-8: 8
Masukkan data ke-9: 9
Masukkan data ke-10: 10
Jadi angka Terbesar dari semua bilangan adalah 10
PS E:\VSCode DIMs\UAS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe "e:/VSCode DIMs/UAS/Dimas AI/Dimas.py"
Banyak Data = 10
```

5.

6.



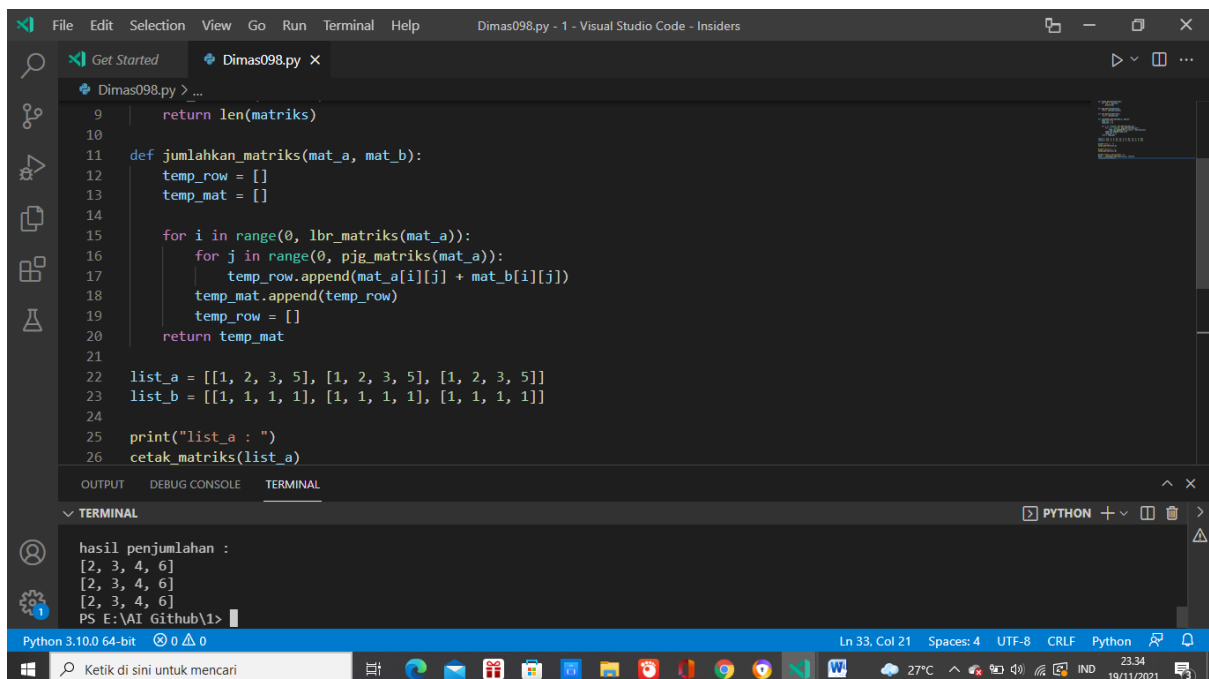
The screenshot shows the Visual Studio Code editor with a file named `Dimas098.py`. The code defines a `faktorial` function and prompts the user for input. The terminal shows the command to run the script and the resulting output.

```
Dimas098.py > ...
1 def faktorial(x):
2     hasil = 1
3     for i in range(2, x + 1):
4         hasil *= i
5     return hasil
6 x = int(input("Masukkan Faktorial : "))
7 print (faktorial(x))
```

Terminal output:

```
PS E:\AI Github\1> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe "e:/AI Github/1/Dimas098.py"
Masukkan Faktorial : 3
6
```

7.



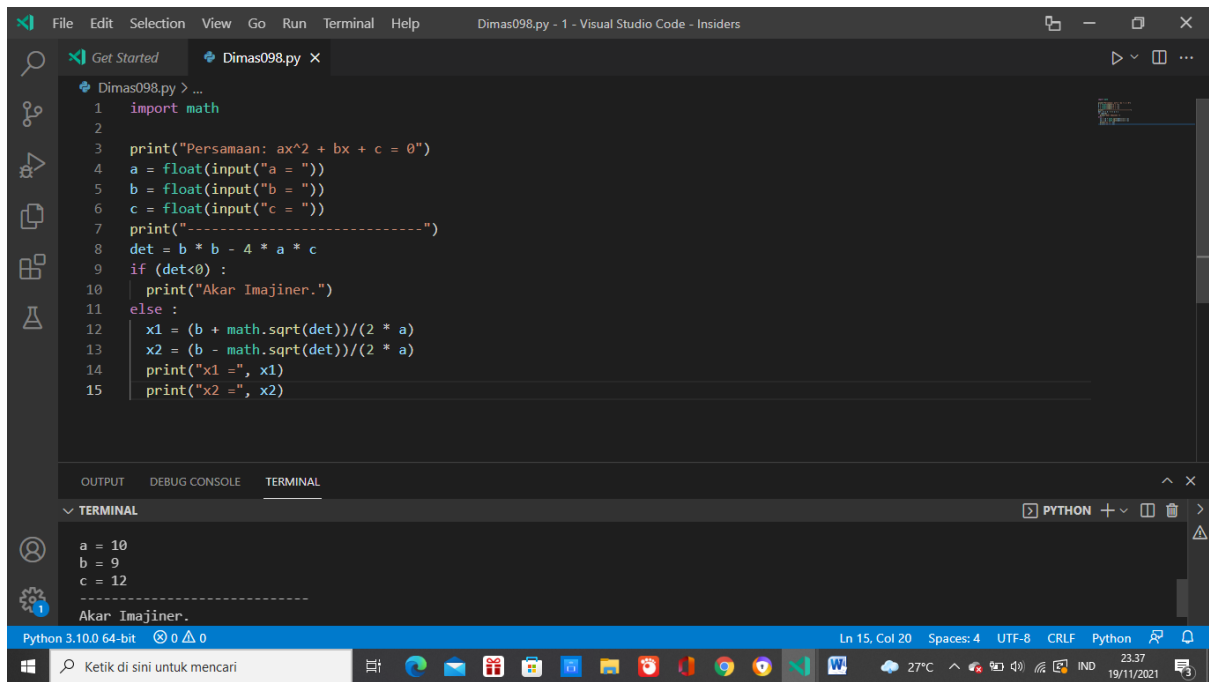
The screenshot shows the Visual Studio Code editor with a file named `Dimas098.py`. The code defines a `jumlahkan_matriks` function and prints the result of adding two matrices. The terminal shows the command to run the script and the resulting output.

```
Dimas098.py > ...
9     return len(matriks)
10
11 def jumlahkan_matriks(mat_a, mat_b):
12     temp_row = []
13     temp_mat = []
14
15     for i in range(0, lbr_matriks(mat_a)):
16         for j in range(0, pjtg_matriks(mat_a)):
17             temp_row.append(mat_a[i][j] + mat_b[i][j])
18             temp_mat.append(temp_row)
19             temp_row = []
20     return temp_mat
21
22 list_a = [[1, 2, 3, 5], [1, 2, 3, 5], [1, 2, 3, 5]]
23 list_b = [[1, 1, 1, 1], [1, 1, 1, 1], [1, 1, 1, 1]]
24
25 print("list_a : ")
26 cetak_matriks(list_a)
```

Terminal output:

```
hasil penjumlahan :
[2, 3, 4, 6]
[2, 3, 4, 6]
[2, 3, 4, 6]
PS E:\AI Github\1>
```

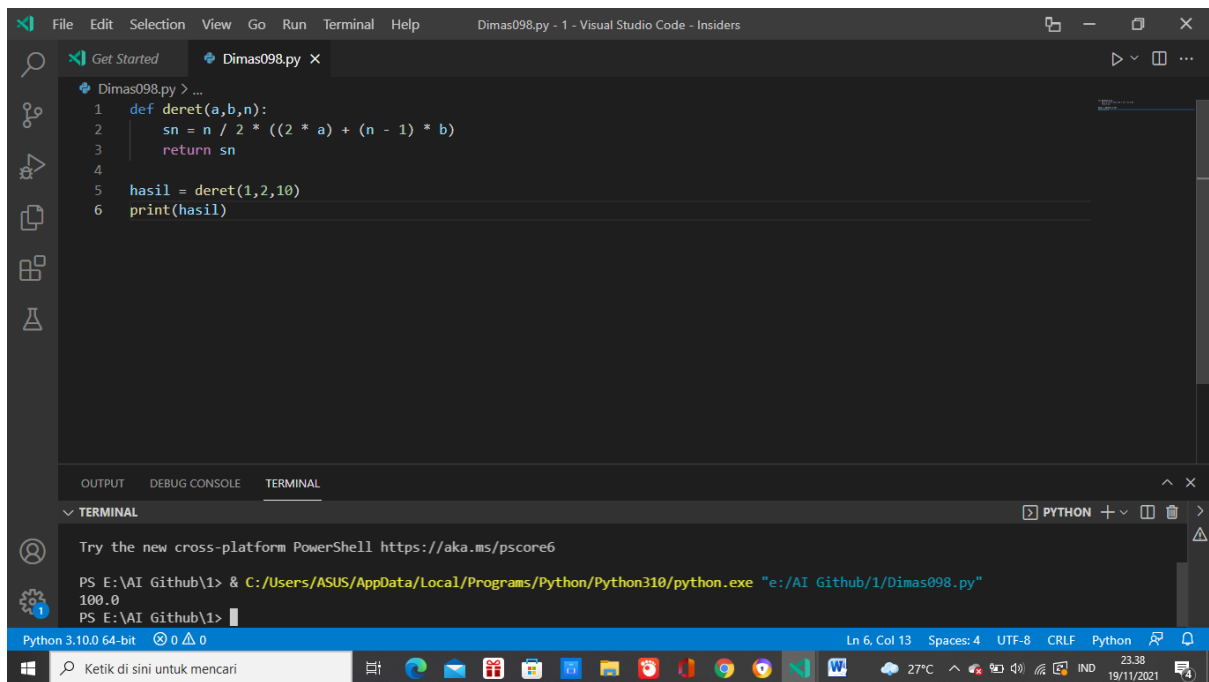
8.



```
File Edit Selection View Go Run Terminal Help Dimas098.py - 1 - Visual Studio Code - Insiders
Dimas098.py x
Dimas098.py > ...
1 import math
2
3 print("Persamaan: ax^2 + bx + c = 0")
4 a = float(input("a = "))
5 b = float(input("b = "))
6 c = float(input("c = "))
7 print("-----")
8 det = b * b - 4 * a * c
9 if (det<0) :
10     print("Akar Imaginer.")
11 else :
12     x1 = (b + math.sqrt(det))/(2 * a)
13     x2 = (b - math.sqrt(det))/(2 * a)
14     print("x1 =", x1)
15     print("x2 =", x2)

OUTPUT DEBUG CONSOLE TERMINAL
TERMINAL PYTHON + -
a = 10
b = 9
c = 12
-----
Akar Imaginer.
Python 3.10.0 64-bit 0 0 0 Ln 15, Col 20 Spaces: 4 UTF-8 CRLF Python 23.37 19/11/2021
Ketik di sini untuk mencari
```

9.



```
File Edit Selection View Go Run Terminal Help Dimas098.py - 1 - Visual Studio Code - Insiders
Dimas098.py x
Dimas098.py > ...
1 def deret(a,b,n):
2     sn = n / 2 * ((2 * a) + (n - 1) * b)
3     return sn
4
5 hasil = deret(1,2,10)
6 print(hasil)

OUTPUT DEBUG CONSOLE TERMINAL
TERMINAL PYTHON + -
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS E:\AI Github\1> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe "e:/AI Github/1/Dimas098.py"
100.0
PS E:\AI Github\1>
Python 3.10.0 64-bit 0 0 0 Ln 6, Col 13 Spaces: 4 UTF-8 CRLF Python 23.38 19/11/2021
Ketik di sini untuk mencari
```