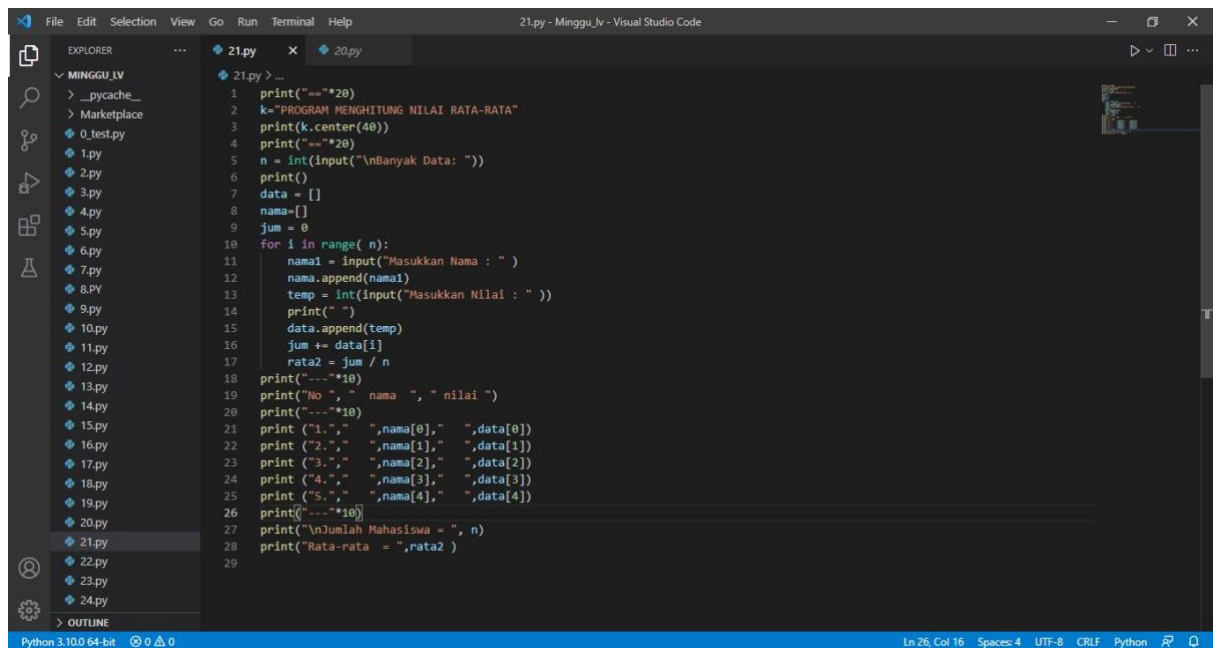


Nama : Yuni Sukana

Nim : 20.01.013.031

Kelas : Kecerdasan buatan A

## 1. Menghitung Nilai Rata-Rata Mahasiswa

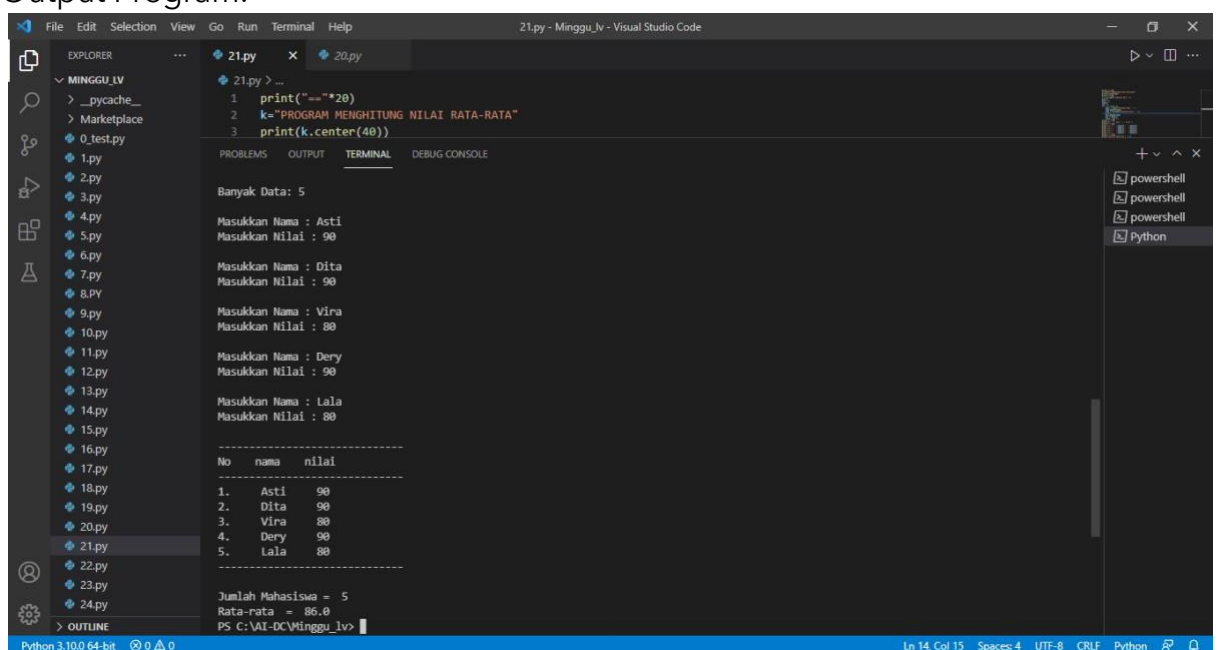


```
File Edit Selection View Go Run Terminal Help
21.py - Minggu_lv - Visual Studio Code

EXPLORER
MINGGU_LV
  _pycache_
  Marketplace
  0_test.py
  1.py
  2.py
  3.py
  4.py
  5.py
  6.py
  7.py
  8.py
  9.py
  10.py
  11.py
  12.py
  13.py
  14.py
  15.py
  16.py
  17.py
  18.py
  19.py
  20.py
  21.py
  22.py
  23.py
  24.py
  OUTLINE

21.py
1 print("--*20)
2 k="PROGRAM MENGHITUNG NILAI RATA-RATA"
3 print(k.center(40))
4 print("--*20)
5 n = int(input("\nBanyak Data: "))
6 print()
7 data = []
8 nama=[]
9 jum = 0
10 for i in range( n):
11     nama1 = input("Masukkan Nama : " )
12     nama.append(nama1)
13     temp = int(input("Masukkan Nilai : " ))
14     print(" ")
15     data.append(temp)
16     jum += data[i]
17     rata2 = jum / n
18 print("--*10)
19 print("No ", " nama ", " nilai ")
20 print("--*10)
21 print ("1.", " ",nama[0]," ",data[0])
22 print ("2.", " ",nama[1]," ",data[1])
23 print ("3.", " ",nama[2]," ",data[2])
24 print ("4.", " ",nama[3]," ",data[3])
25 print ("5.", " ",nama[4]," ",data[4])
26 print("--*10)
27 print("\nJumlah Mahasiswa = ", n)
28 print("Rata-rata = ",rata2 )
29
```

## Output Program:



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

EXPLORER
MINGGU_LV
  _pycache_
  Marketplace
  0_test.py
  1.py
  2.py
  3.py
  4.py
  5.py
  6.py
  7.py
  8.py
  9.py
  10.py
  11.py
  12.py
  13.py
  14.py
  15.py
  16.py
  17.py
  18.py
  19.py
  20.py
  21.py
  22.py
  23.py
  24.py
  OUTLINE

21.py
1 print("--*20)
2 k="PROGRAM MENGHITUNG NILAI RATA-RATA"
3 print(k.center(40))

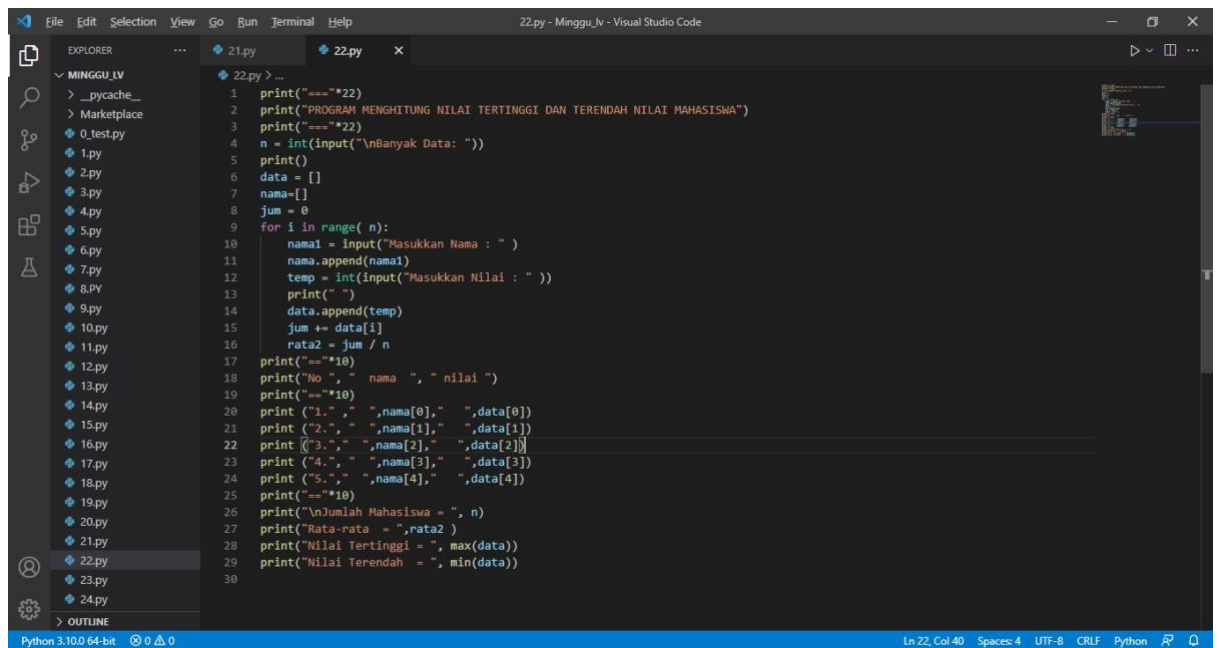
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

Banyak Data: 5
Masukkan Nama : Asti
Masukkan Nilai : 90
Masukkan Nama : Dita
Masukkan Nilai : 90
Masukkan Nama : Vira
Masukkan Nilai : 80
Masukkan Nama : Dery
Masukkan Nilai : 90
Masukkan Nama : Lala
Masukkan Nilai : 80

-----
No  nama  nilai
-----
1.  Asti  90
2.  Dita  90
3.  Vira  80
4.  Dery  90
5.  Lala  80
-----

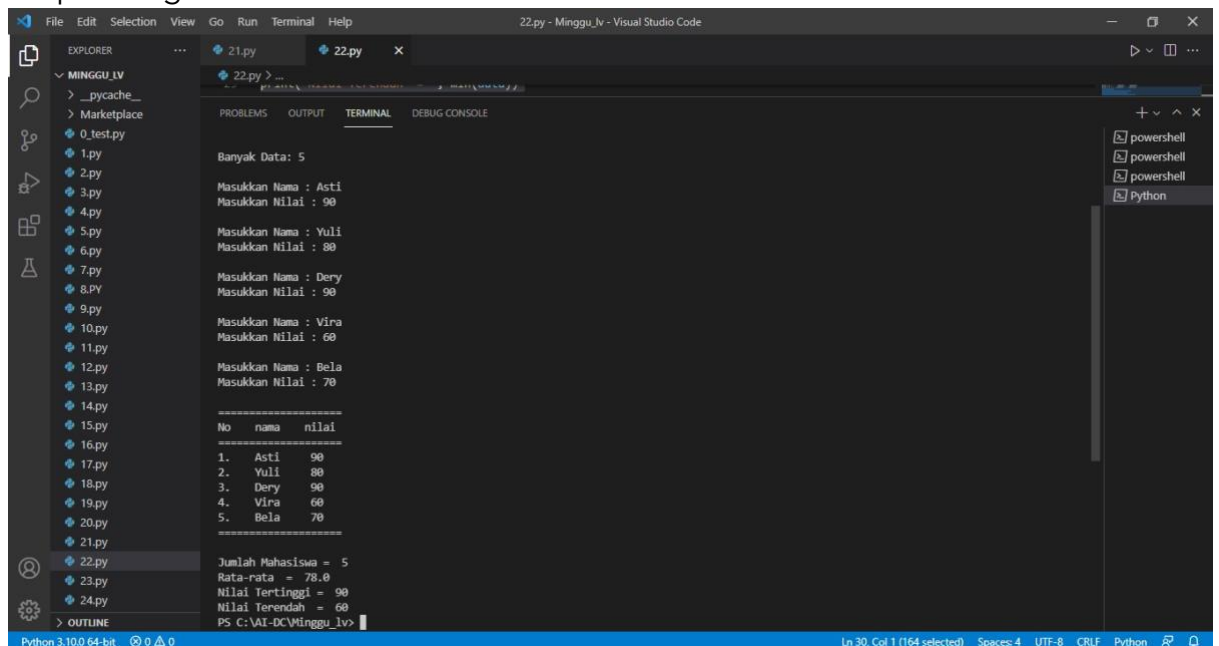
Jumlah Mahasiswa = 5
Rata-rata = 86.8
PS C:\AI-DC\Minggu_lv>
```

## 2. Program Menentukan Nilai Tertinggi Dan Terendah Dari Nilai Mahasiswa



```
22.py > ...
1  print("====*22")
2  print("PROGRAM MENGHITUNG NILAI TERTINGGI DAN TERENDAH NILAI MAHASISWA")
3  print("====*22")
4  n = int(input("\nBanyak Data: "))
5  print()
6  data = []
7  nama=[]
8  jum = 0
9  for i in range( n):
10     nama1 = input("Masukkan Nama : " )
11     nama.append(nama1)
12     temp = int(input("Masukkan Nilai : " ))
13     print(" ")
14     data.append(temp)
15     jum += data[i]
16     rata2 = jum / n
17 print("====*10)
18 print("No ", " nama ", " nilai ")
19 print("====*10)
20 print ("1.", " ",nama[0]," ",data[0])
21 print ("2.", " ",nama[1]," ",data[1])
22 print ("3.", " ",nama[2]," ",data[2])
23 print ("4.", " ",nama[3]," ",data[3])
24 print ("5.", " ",nama[4]," ",data[4])
25 print("====*10)
26 print("\nJumlah Mahasiswa = ", n)
27 print("Rata-rata = ",rata2 )
28 print("Nilai Tertinggi = ", max(data))
29 print("Nilai Terendah = ", min(data))
30
```

### Output Program :



```
22.py > ...
Banyak Data: 5

Masukkan Nama : Asti
Masukkan Nilai : 90

Masukkan Nama : Yuli
Masukkan Nilai : 80

Masukkan Nama : Dery
Masukkan Nilai : 90

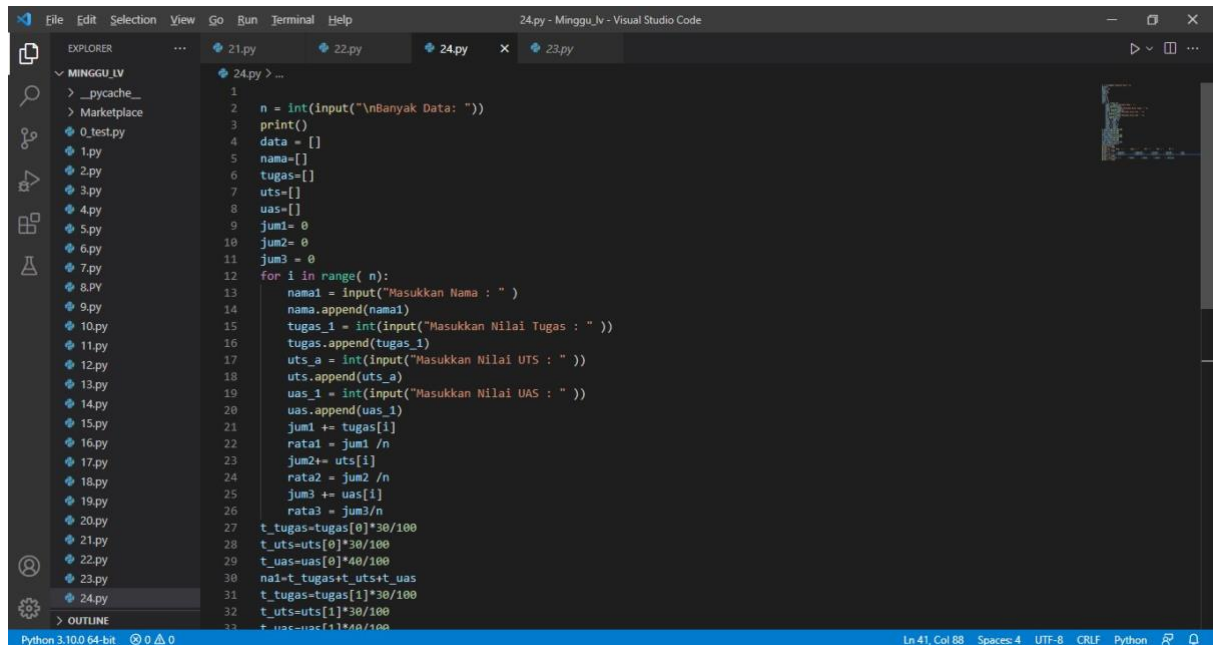
Masukkan Nama : Vira
Masukkan Nilai : 60

Masukkan Nama : Bela
Masukkan Nilai : 70

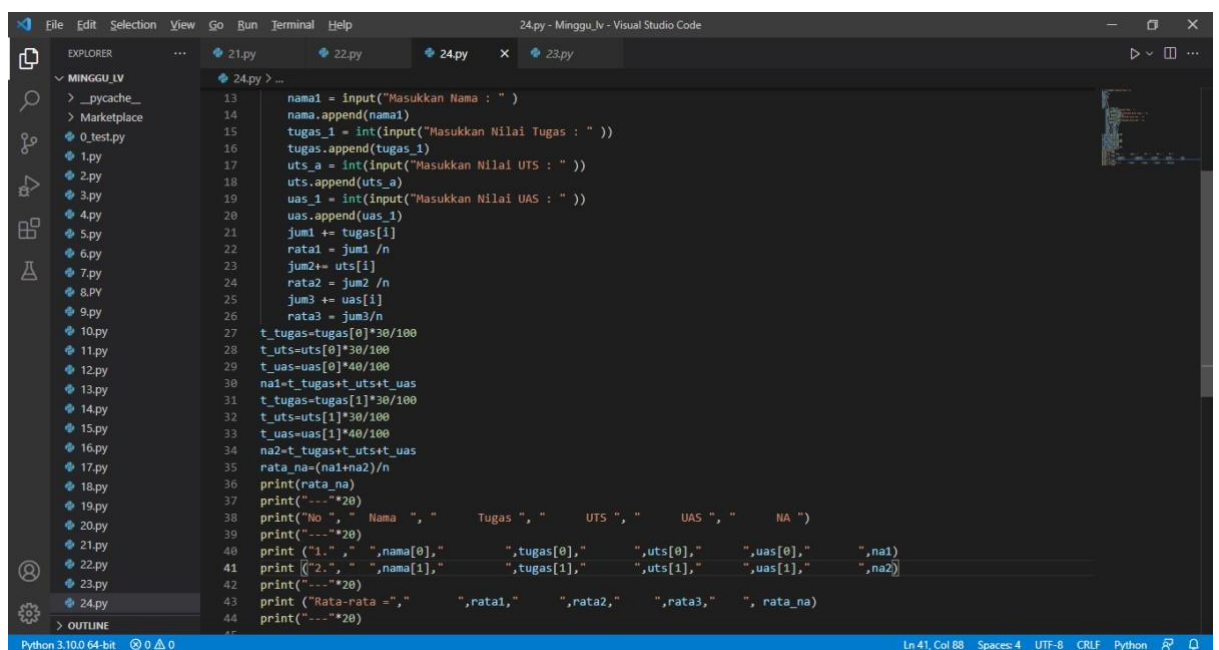
=====
No  nama  nilai
=====
1.  Asti  90
2.  Yuli  80
3.  Dery  90
4.  Vira  60
5.  Bela  70
=====

Jumlah Mahasiswa = 5
Rata-rata = 78.0
Nilai Tertinggi = 90
Nilai Terendah = 60
PS C:\VAI-DC\Minggu_lv>
```

### 3. Program Pengolahan Nilai Mahasiswa

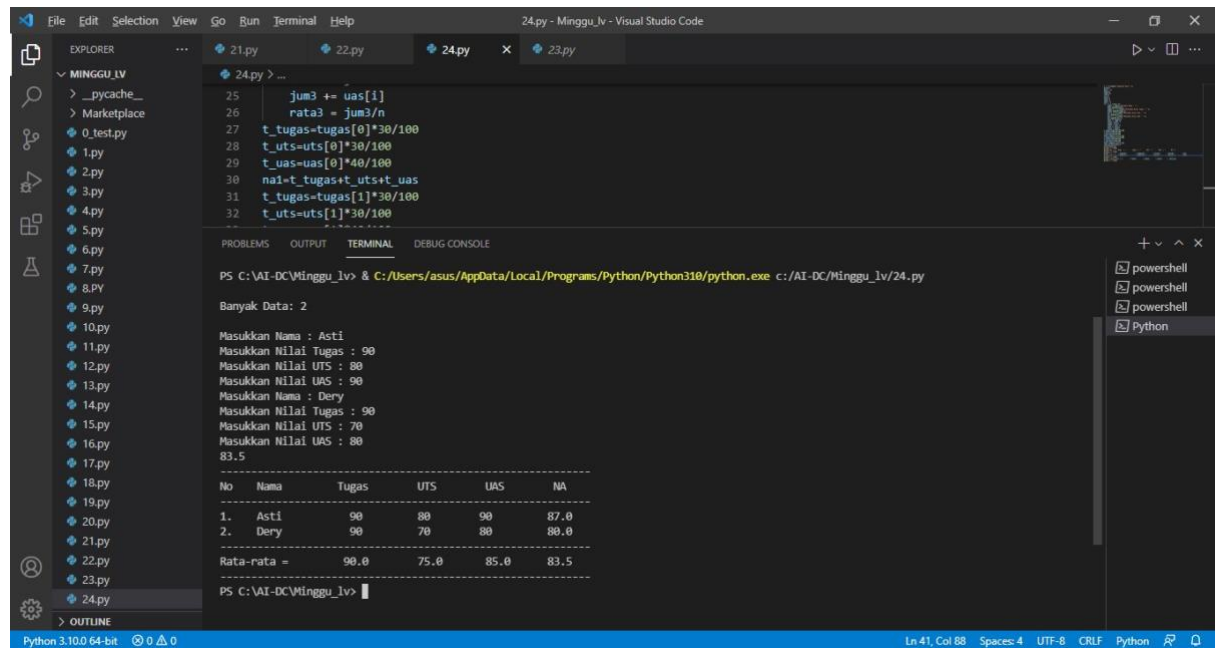


```
1
2 n = int(input("\nBanyak Data: "))
3 print()
4 data = []
5 nama=[]
6 tugas=[]
7 uts=[]
8 uas=[]
9 jum1= 0
10 jum2= 0
11 jum3 = 0
12 for i in range( n):
13     nama1 = input("Masukkan Nama : " )
14     nama.append(nama1)
15     tugas_1 = int(input("Masukkan Nilai Tugas : " ))
16     tugas.append(tugas_1)
17     uts_a = int(input("Masukkan Nilai UTS : " ))
18     uts.append(uts_a)
19     uas_1 = int(input("Masukkan Nilai UAS : " ))
20     uas.append(uas_1)
21     jum1 += tugas[i]
22     rata1 = jum1 /n
23     jum2+= uts[i]
24     rata2 = jum2 /n
25     jum3 += uas[i]
26     rata3 = jum3/n
27 t_tugas=tugas[0]*30/100
28 t_uts=uts[0]*30/100
29 t_uas=uas[0]*40/100
30 na1=t_tugas+t_uts+t_uas
31 t_tugas=tugas[1]*30/100
32 t_uts=uts[1]*30/100
33 t_uas=uas[1]*40/100
```



```
13     nama1 = input("Masukkan Nama : " )
14     nama.append(nama1)
15     tugas_1 = int(input("Masukkan Nilai Tugas : " ))
16     tugas.append(tugas_1)
17     uts_a = int(input("Masukkan Nilai UTS : " ))
18     uts.append(uts_a)
19     uas_1 = int(input("Masukkan Nilai UAS : " ))
20     uas.append(uas_1)
21     jum1 += tugas[i]
22     rata1 = jum1 /n
23     jum2+= uts[i]
24     rata2 = jum2 /n
25     jum3 += uas[i]
26     rata3 = jum3/n
27 t_tugas=tugas[0]*30/100
28 t_uts=uts[0]*30/100
29 t_uas=uas[0]*40/100
30 na1=t_tugas+t_uts+t_uas
31 t_tugas=tugas[1]*30/100
32 t_uts=uts[1]*30/100
33 t_uas=uas[1]*40/100
34 na2=t_tugas+t_uts+t_uas
35 rata_na=(na1+na2)/n
36 print(rata_na)
37 print("----*20)
38 print("No ", " Nama ", " Tugas ", " UTS ", " UAS ", " NA ")
39 print("----*20)
40 print ("1.", " ",nama[0]," ",tugas[0]," ",uts[0]," ",uas[0]," ",na1)
41 print ("2.", " ",nama[1]," ",tugas[1]," ",uts[1]," ",uas[1]," ",na2)
42 print("----*20)
43 print ("Rata-rata =", " ",rata1," ",rata2," ",rata3," ", rata_na)
44 print("----*20)
```

Output Program :



```
25     jum3 += uas[1]
26     rata3 = jum3/n
27     t_tugas=tugas[0]*30/100
28     t_uts=uts[0]*30/100
29     t_uas=uas[0]*40/100
30     na1=t_tugas+t_uts+t_uas
31     t_tugas=tugas[1]*30/100
32     t_uts=uts[1]*30/100
```

PS C:\VAI-DC\minggu\_lv> & C:/Users/asus/AppData/Local/Programs/Python/Python310/python.exe c:/AI-DC/Minggu\_lv/24.py

Banyak Data: 2

Masukkan Nama : Asti  
Masukkan Nilai Tugas : 90  
Masukkan Nilai UTS : 80  
Masukkan Nilai UAS : 90  
Masukkan Nama : Dery  
Masukkan Nilai Tugas : 90  
Masukkan Nilai UTS : 70  
Masukkan Nilai UAS : 80

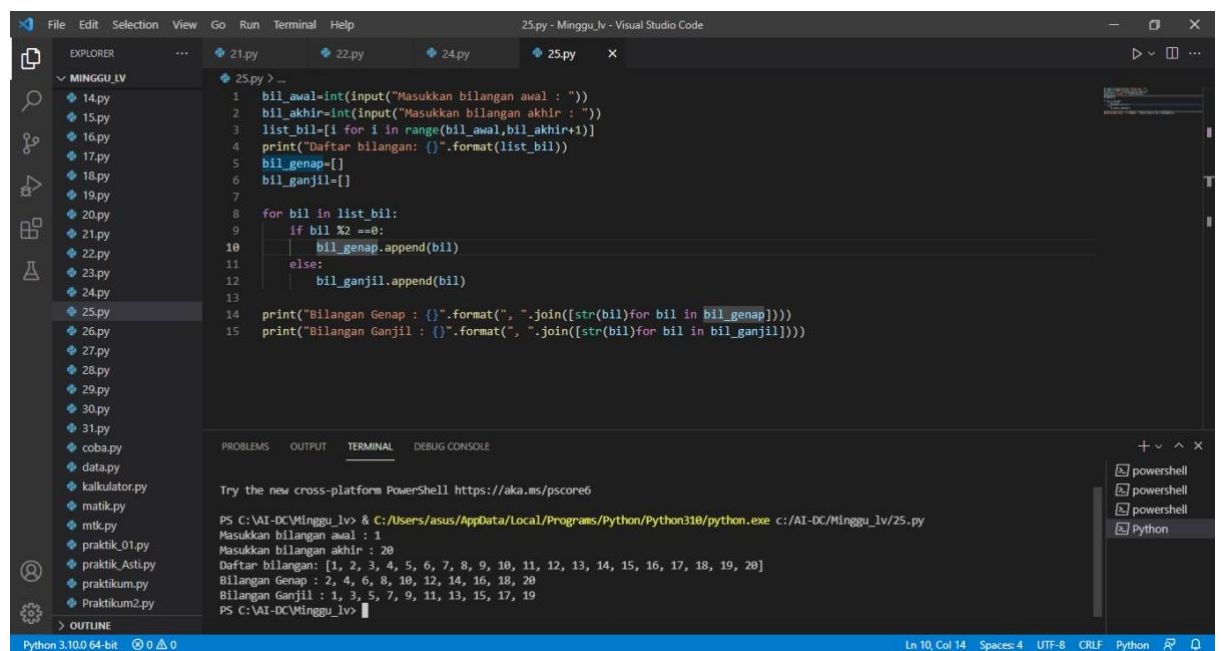
83.5

No	Nama	Tugas	UTS	UAS	NA
1.	Asti	90	80	90	87.0
2.	Dery	90	70	80	80.0

Rata-rata = 90.0 75.0 85.0 83.5

PS C:\VAI-DC\minggu\_lv>

#### 4. Program Menampilkan Bilangan Genap Dan Ganjil



```
1  bil_awal=int(input("Masukkan bilangan awal : "))
2  bil_akhir=int(input("Masukkan bilangan akhir : "))
3  list_bil=[i for i in range(bil_awal,bil_akhir+1)]
4  print("Daftar bilangan: {}".format(list_bil))
5  bil_genap=[]
6  bil_ganjil=[]
7
8  for bil in list_bil:
9      if bil %2 ==0:
10         bil_genap.append(bil)
11     else:
12         bil_ganjil.append(bil)
13
14 print("Bilangan Genap : {}".format(", ".join([str(bil)for bil in bil_genap])))
15 print("Bilangan Ganjil : {}".format(", ".join([str(bil)for bil in bil_ganjil])))
```

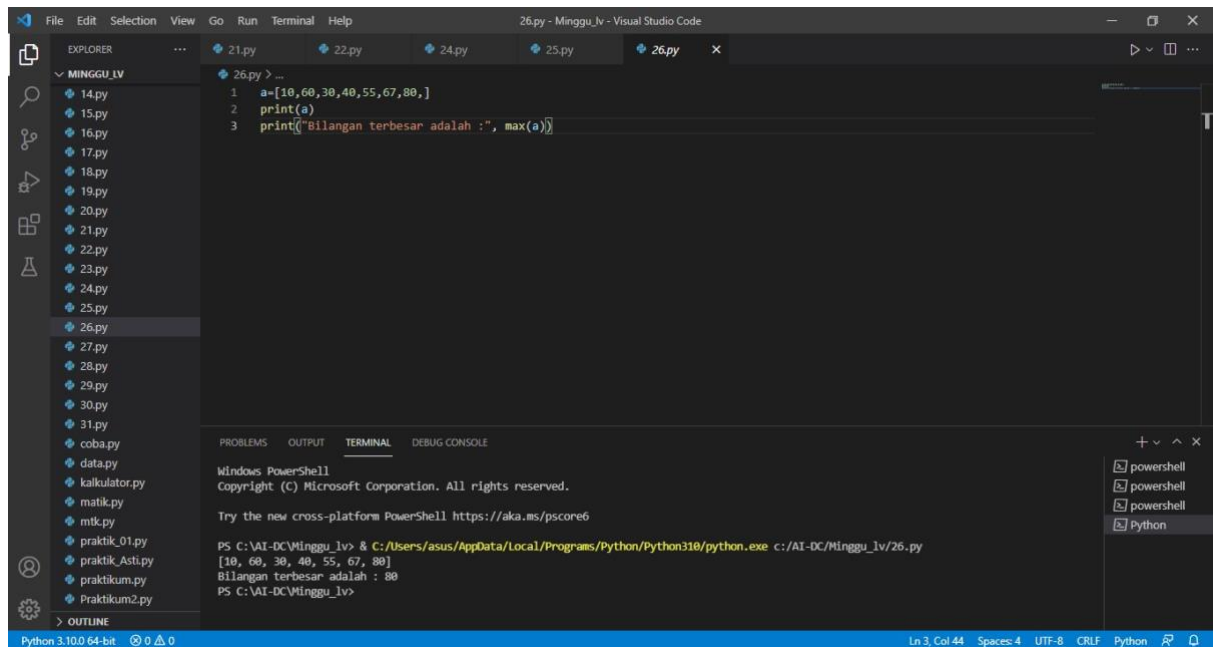
Try the new cross-platform PowerShell <https://aka.ms/pscore6>

PS C:\VAI-DC\minggu\_lv> & C:/Users/asus/AppData/Local/Programs/Python/Python310/python.exe c:/AI-DC/Minggu\_lv/25.py

Masukkan bilangan awal : 1  
Masukkan bilangan akhir : 20  
Daftar bilangan: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20]  
Bilangan Genap : 2, 4, 6, 8, 10, 12, 14, 16, 18, 20  
Bilangan Ganjil : 1, 3, 5, 7, 9, 11, 13, 15, 17, 19

PS C:\VAI-DC\minggu\_lv>

## 5. Program Mencari Bilangan Terbesar Dari Sekelompok Data



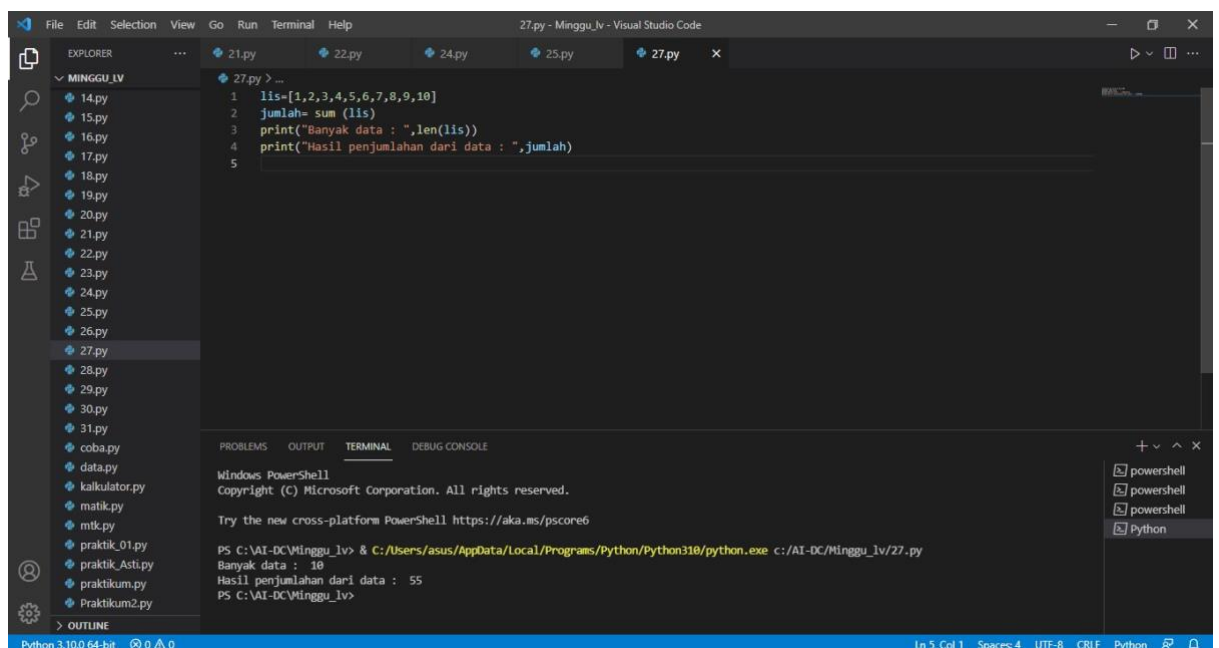
The screenshot shows the Visual Studio Code interface with a file explorer on the left containing a folder named 'MINGGU IV' with various Python files. The main editor displays a file named '26.py' with the following code:

```
1 a=[10,60,30,40,55,67,80,]  
2 print(a)  
3 print("Bilangan terbesar adalah :", max(a))
```

The bottom panel shows the terminal output for the execution of '26.py':

```
PS C:\VAI-DC\Minggu_iv> & C:\Users\asus\AppData\Local\Programs\Python\Python310\python.exe c:/AI-DC/Minggu_iv/26.py  
[10, 60, 30, 40, 55, 67, 80]  
Bilangan terbesar adalah : 80  
PS C:\VAI-DC\Minggu_iv>
```

## 6. Program Menghitung Banyak Bilangan X Yang Tersimpan Di List



The screenshot shows the Visual Studio Code interface with a file explorer on the left containing a folder named 'MINGGU IV' with various Python files. The main editor displays a file named '27.py' with the following code:

```
1 lis=[1,2,3,4,5,6,7,8,9,10]  
2 jumlah= sum(lis)  
3 print("Banyak data : ",len(lis))  
4 print("Hasil penjumlahan dari data : ",jumlah)  
5
```

The bottom panel shows the terminal output for the execution of '27.py':

```
PS C:\VAI-DC\Minggu_iv> & C:\Users\asus\AppData\Local\Programs\Python\Python310\python.exe c:/AI-DC/Minggu_iv/27.py  
Banyak data : 10  
Hasil penjumlahan dari data : 55  
PS C:\VAI-DC\Minggu_iv>
```

## 7. Program Menghitung Perkalian Matriks 2x2

```
File Edit Selection View Go Run Terminal Help
• 28.py - Minggu_lv - Visual Studio Code

EXPLORER
MINGGU_IV
  14.py
  15.py
  16.py
  17.py
  18.py
  19.py
  20.py
  21.py
  22.py
  23.py
  24.py
  25.py
  26.py
  27.py
  28.py
  29.py
  30.py
  31.py
  coba.py
  data.py
  kalkulator.py
  matik.py
  mtk.py
  praktik_01.py
  praktik_Asti.py
  praktikum.py
  praktikum2.py

28.py
1 X = [
2   [12,7],
3   [4,5],
4   ]
5 Y = [
6   [5,8],
7   [6,7],
8   ]
9 result = [[0,0],
10  [0,0]]
11
12 for i in range(len(X)):
13     for j in range(len(Y[0])):
14         for k in range(len(Y)):
15             result[i][j] += X[i][k] * Y[k][j]
16 print("\nHasil Perkalian Matriks")
17 for r in result:
18     print(r)

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

PS C:\AI-DC\Minggu_lv> & C:\Users\asus\AppData\Local\Programs\Python\Python310\python.exe c:/AI-DC/Minggu_lv/28.py

Hasil Perkalian Matriks
[182, 145]
[58, 67]
PS C:\AI-DC\Minggu_lv>

Python 3.10.0 64-bit  Ln 10, Col 16  Spaces 4  UTF-8  CRLF  Python
```

## 8. Program Menggabungkan Isi Dictionary

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

EXPLORER
MINGGU_IV
  14.py
  15.py
  16.py
  17.py
  18.py
  19.py
  20.py
  21.py
  22.py
  23.py
  24.py
  25.py
  26.py
  27.py
  28.py
  29.py
  30.py
  31.py
  coba.py
  data.py
  kalkulator.py
  matik.py
  mtk.py
  praktik_01.py
  praktik_Asti.py
  praktikum.py
  praktikum2.py

30.py
1 data1= {'nim': '12345678', 'nama': 'Bella', 'IPK': 3.90}
2 data2= {'hobi': 'main bola', 'alamat': 'bandung'}
3 siswa = {}
4 for k in data1:
5     siswa[k]=data1[k]
6 for k in data2:
7     siswa[k]=data2[k]
8 print("\nHasil Penggabungan Data ")
9 print(f'Siswa : {siswa}')

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

PS C:\AI-DC\Minggu_lv> & C:\Users\asus\AppData\Local\Programs\Python\Python310\python.exe c:/AI-DC/Minggu_lv/30.py

Hasil Penggabungan Data
Siswa : {'nim': '12345678', 'nama': 'Bella', 'IPK': 3.9, 'hobi': 'main bola', 'alamat': 'bandung'}
PS C:\AI-DC\Minggu_lv>

Python 3.10.0 64-bit  Ln 8, Col 30  Spaces 4  UTF-8  CRLF  Python
```

