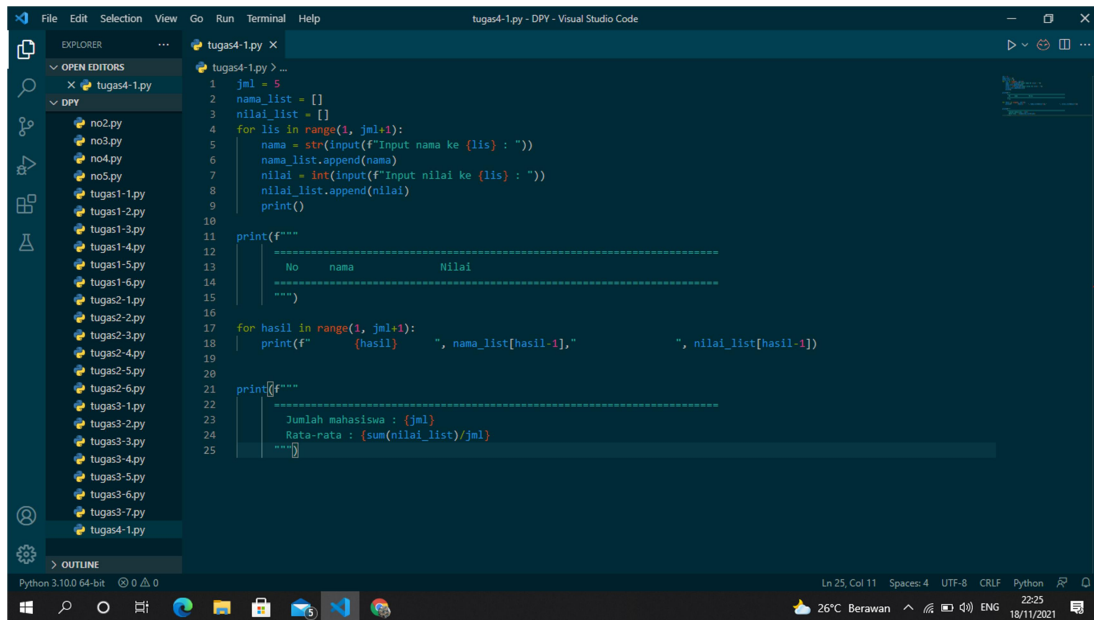
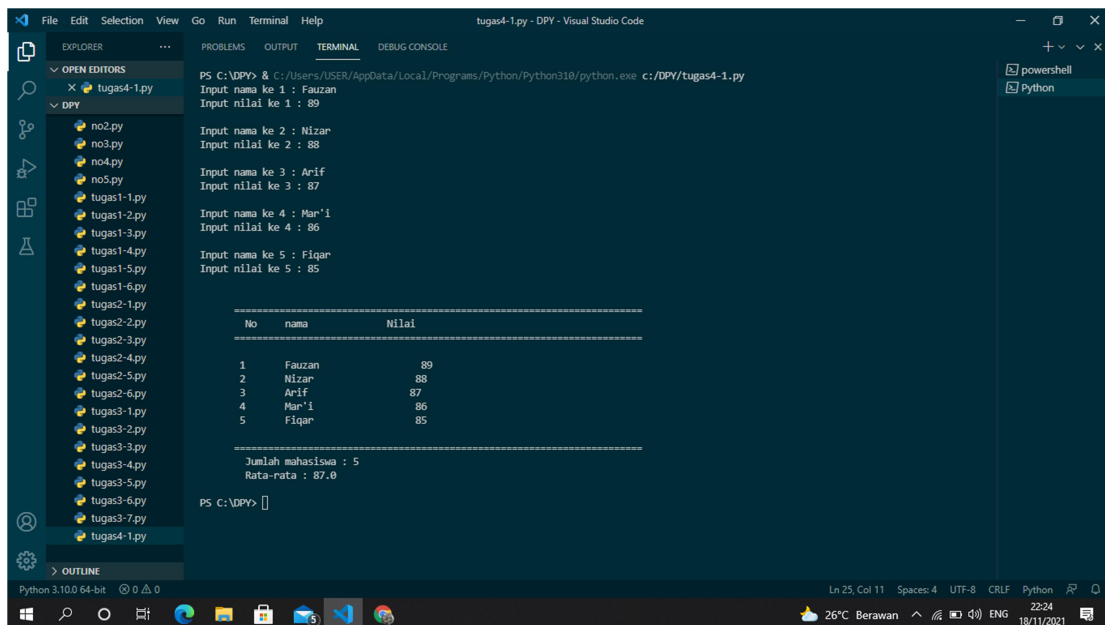


# UAS – 18 November 2021

## 1. Memasukkan dan Menampilkan Nama dan Nilai Mahasiswa



```
1 jml = 5
2 nama_list = []
3 nilai_list = []
4 for lis in range(1, jml+1):
5     nama = str(input(f"Input nama ke {lis} : "))
6     nama_list.append(nama)
7     nilai = int(input(f"Input nilai ke {lis} : "))
8     nilai_list.append(nilai)
9     print()
10
11 print(f"""
12     =====
13     No    nama    Nilai
14     =====
15 """)
16
17 for hasil in range(1, jml+1):
18     print(f"        {hasil}      ", nama_list[hasil-1], "        ", nilai_list[hasil-1])
19
20 print(f"""
21     =====
22     Jumlah mahasiswa : {jml}
23     Rata-rata : {sum(nilai_list)/jml}
24 """)
25
```



```
PS C:\DPY> & c:\Users\USER\AppData\Local\Programs\Python\Python310\python.exe c:/DPY/tugas4-1.py
Input nama ke 1 : Fauzan
Input nilai ke 1 : 89

Input nama ke 2 : Nizar
Input nilai ke 2 : 88

Input nama ke 3 : Arif
Input nilai ke 3 : 87

Input nama ke 4 : Mar'i
Input nilai ke 4 : 86

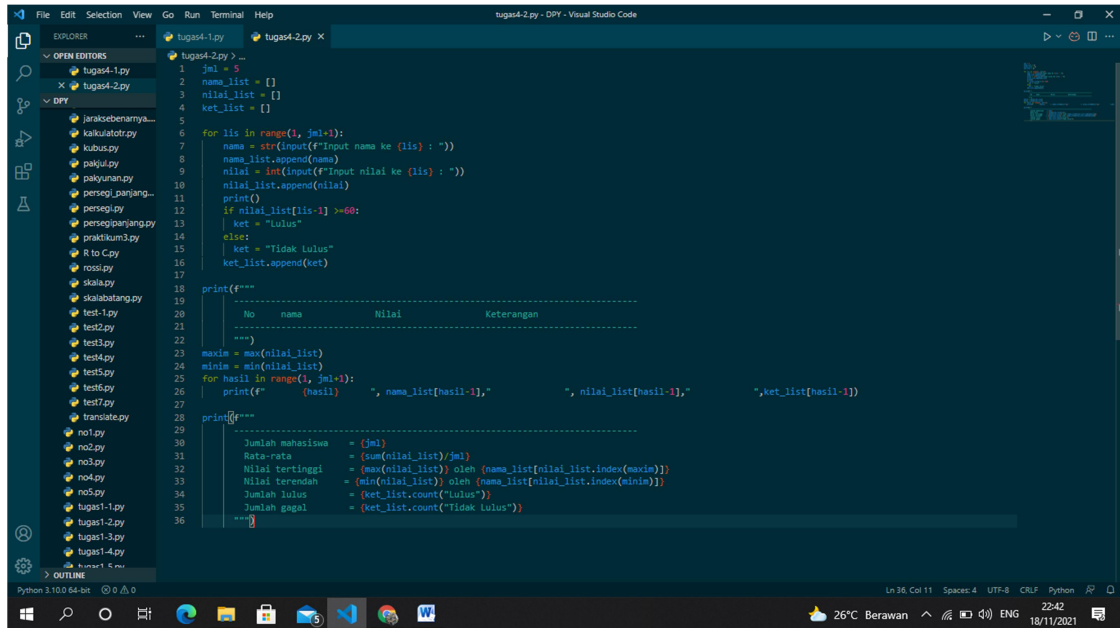
Input nama ke 5 : Fiqar
Input nilai ke 5 : 85

=====
No    nama    Nilai
=====
1     Fauzan      89
2     Nizar       88
3     Arif        87
4     Mar'i       86
5     Fiqar       85
=====

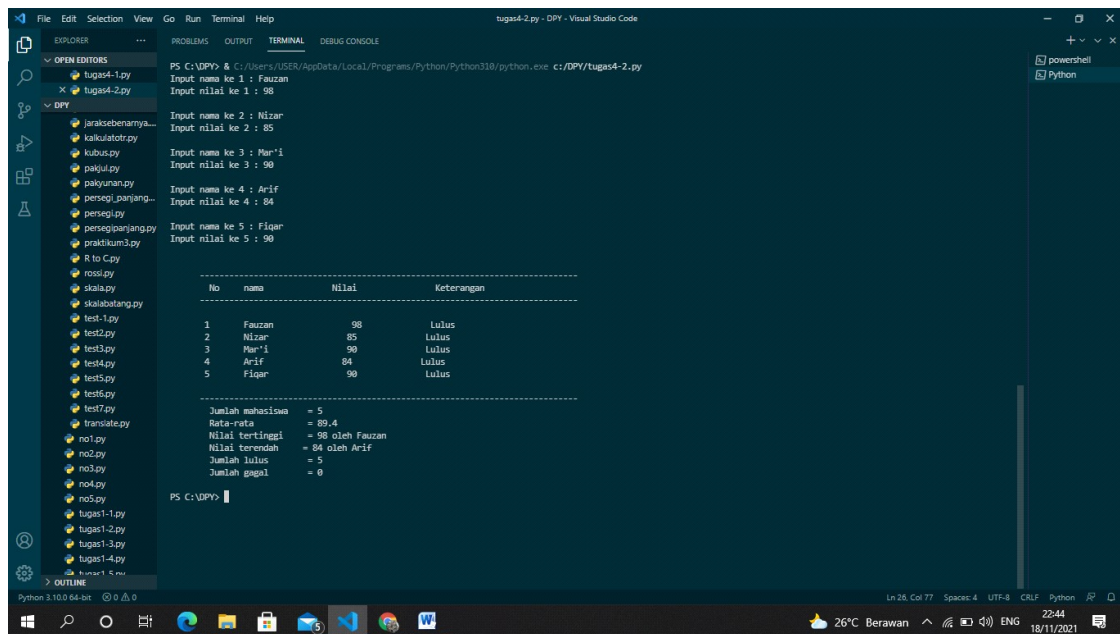
Jumlah mahasiswa : 5
Rata-rata : 87.0

PS C:\DPY>
```

2. Memasukkan dan Menampilkan Nama dan Nilai Mahasiswa dengan Menentukan nilai tertinggi dan terendah.



```
1 jml = 5
2 nama_list = []
3 nilai_list = []
4 ket_list = []
5
6 for lis in range(1, jml+1):
7     nama = str(input(f"Input nama ke {lis} : "))
8     nama_list.append(nama)
9     nilai = int(input(f"Input nilai ke {lis} : "))
10    nilai_list.append(nilai)
11    print()
12    if nilai_list[lis-1] >= 60:
13        ket = "Lulus"
14    else:
15        ket = "Tidak Lulus"
16    ket_list.append(ket)
17
18 print(f'''
19 -----
20      No      Nama      Nilai      Keterangan
21 -----
22 ''')
23 maxm = max(nilai_list)
24 minm = min(nilai_list)
25 for hasil in range(1, jml+1):
26     print(f'''
27         {hasil}      {nama_list[hasil-1]}      {nilai_list[hasil-1]}      {ket_list[hasil-1]}
28     ''')
29
30 print(f'''
31 -----
32 Jumlah mahasiswa = {jml}
33 Rata-rata = {sum(nilai_list)/jml}
34 Nilai tertinggi = {max(nilai_list)} oleh {nama_list[nilai_list.index(maxm)]}
35 Nilai terendah = {min(nilai_list)} oleh {nama_list[nilai_list.index(minm)]}
36 Jumlah Lulus = {ket_list.count("Lulus")}
37 Jumlah gagal = {ket_list.count("Tidak Lulus")}
38 ''')
```



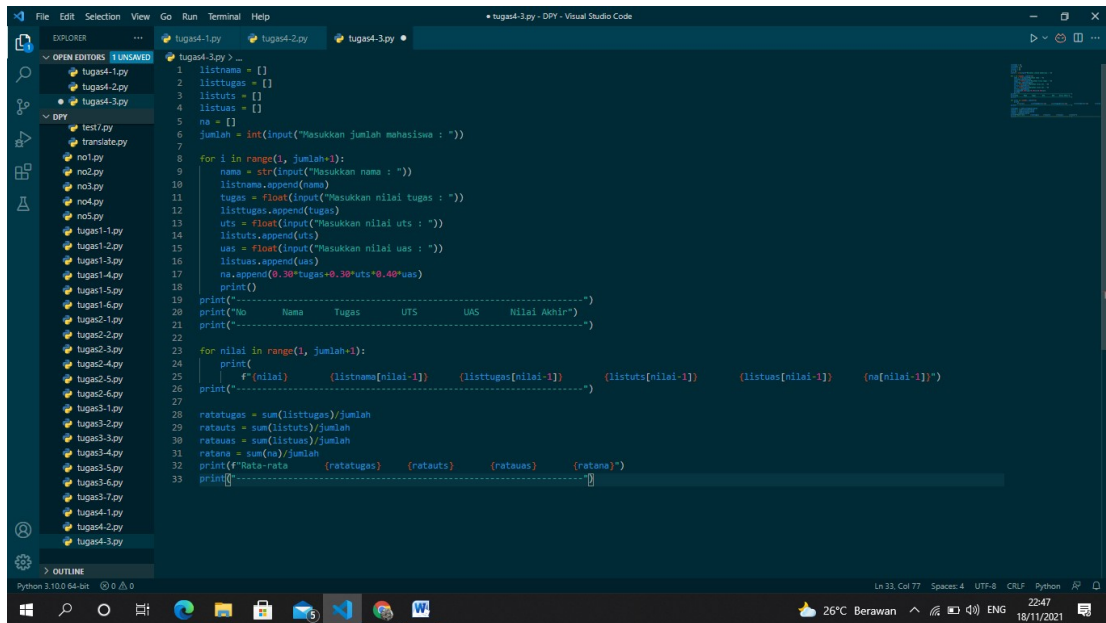
```
PS C:\DPY> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe c:/DPY/tugas4-2.py
Input nama ke 1 : Fauzan
Input nilai ke 1 : 98
Input nama ke 2 : Nizar
Input nilai ke 2 : 85
Input nama ke 3 : Mer'i
Input nilai ke 3 : 90
Input nama ke 4 : Arif
Input nilai ke 4 : 84
Input nama ke 5 : Fiqar
Input nilai ke 5 : 90

-----
No      Nama      Nilai      Keterangan
-----
1      Fauzan      98      Lulus
2      Nizar      85      Lulus
3      Mer'i      90      Lulus
4      Arif      84      Lulus
5      Fiqar      90      Lulus

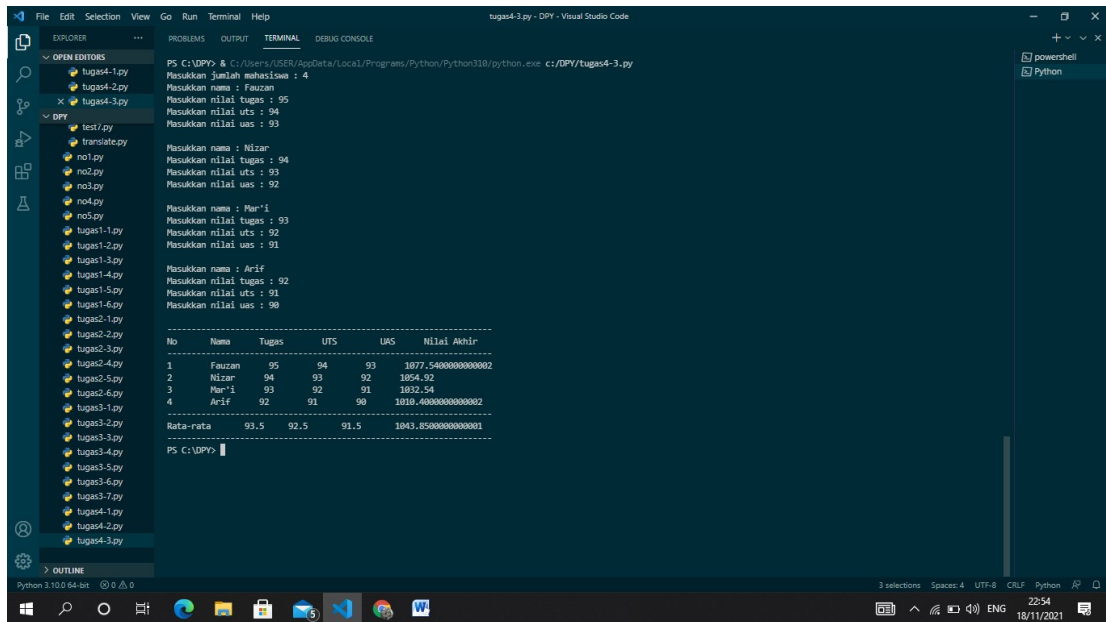
-----
Jumlah mahasiswa = 5
Rata-rata = 89.4
Nilai tertinggi = 98 oleh Fauzan
Nilai terendah = 84 oleh Arif
Jumlah Lulus = 5
Jumlah gagal = 0

PS C:\DPY>
```

### 3. Program Pengolahan Nilai Mahasiswa



```
1 listnama = []
2 listugas = []
3 listuts = []
4 listuas = []
5 na = []
6 jumlah = int(input("Masukkan jumlah mahasiswa : "))
7
8 for i in range(1, jumlah+1):
9     nama = str(input("Masukkan nama : "))
10    listnama.append(nama)
11    tugas = float(input("Masukkan nilai tugas : "))
12    listugas.append(tugas)
13    uts = float(input("Masukkan nilai uts : "))
14    listuts.append(uts)
15    uas = float(input("Masukkan nilai uas : "))
16    listuas.append(uas)
17    na.append(0.30*tugas+0.30*uts+0.40*uas)
18    print()
19    print("-----")
20    print("No      Nama      Tugas      UTS      UAS      Nilai Akhir")
21    print("-----")
22
23 for nilai in range(1, jumlah+1):
24     print(
25         f"({nilai})      ({listnama[nilai-1]})      ({listugas[nilai-1]})      ({listuts[nilai-1]})      ({listuas[nilai-1]})      ({na[nilai-1]})")
26     print("-----")
27
28 ratatugas = sum(listugas)/jumlah
29 ratauts = sum(listuts)/jumlah
30 ratauas = sum(listuas)/jumlah
31 ratana = sum(na)/jumlah
32 print(f"Rata-rata      ({ratatugas})      ({ratauts})      ({ratauas})      ({ratana}")
33 print("-----")
```



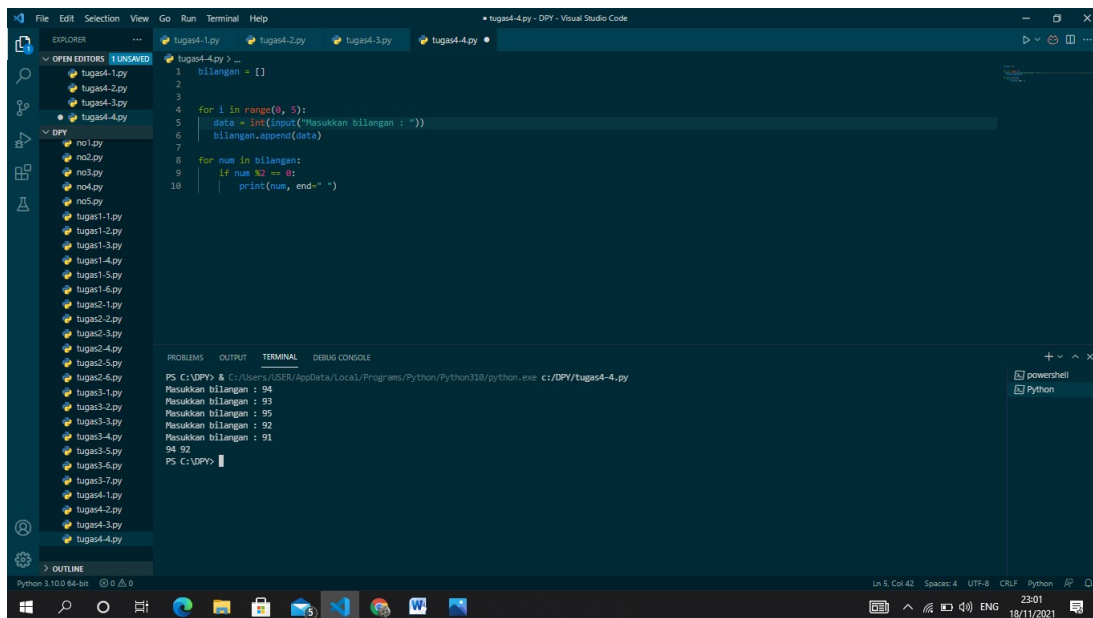
```
PS C:\Users\A\Documents\Python\Python310\Programs\Python\Python310\python.exe c:/DPV/tugas4-3.py
Masukkan jumlah mahasiswa : 4
Masukkan nama : Fauzan
Masukkan nilai tugas : 95
Masukkan nilai uts : 94
Masukkan nilai uas : 93
Masukkan nama : Nizar
Masukkan nilai tugas : 94
Masukkan nilai uts : 93
Masukkan nilai uas : 92
Masukkan nama : Mur'i
Masukkan nilai tugas : 93
Masukkan nilai uts : 92
Masukkan nilai uas : 91
Masukkan nama : Arif
Masukkan nilai tugas : 92
Masukkan nilai uts : 91
Masukkan nilai uas : 90

No      Nama      Tugas      UTS      UAS      Nilai Akhir
-----
1      Fauzan      95      94      93      1077.540000000000002
2      Nizar      94      93      92      1054.92
3      Mur'i      93      92      91      1032.54
4      Arif      92      91      90      1010.400000000000002

Rata-rata      93.5      92.5      91.5      1043.850000000000001

PS C:\Users\A\Documents\Python\Python310\Programs\Python\Python310\python.exe c:/DPV/tugas4-3.py
```

#### 4. Membuat Inputan dan Menampilkan Bilangan Genap



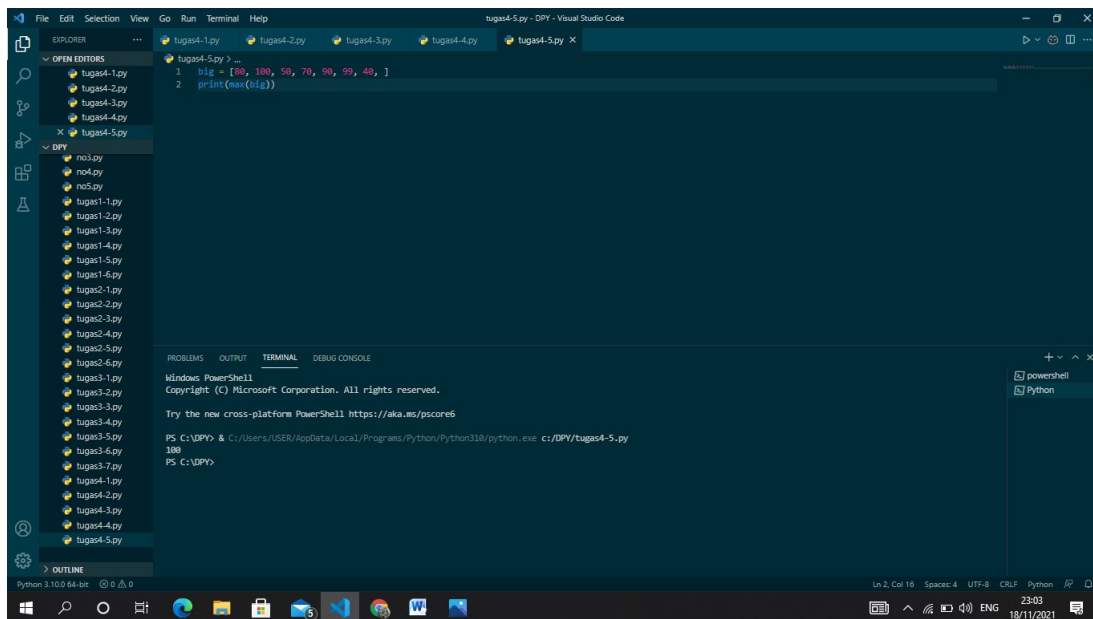
The screenshot shows the Visual Studio Code interface with a Python file named `tugas4-4.py` open. The code in the editor is as follows:

```
1 bilangan = []
2
3
4 for i in range(0, 5):
5     data = int(input("Masukkan bilangan : "))
6     bilangan.append(data)
7
8 for num in bilangan:
9     if num % 2 == 0:
10        print(num, end=" ")
```

The terminal at the bottom shows the execution of the script, with the following output:

```
PS C:\DPY> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe c:/DPY/tugas4-4.py
Masukkan bilangan : 94
Masukkan bilangan : 93
Masukkan bilangan : 95
Masukkan bilangan : 92
Masukkan bilangan : 91
94 92
PS C:\DPY>
```

#### 5. Mencari Bilangan Terbesar Dari Sekelompok Data



The screenshot shows the Visual Studio Code interface with a Python file named `tugas4-5.py` open. The code in the editor is as follows:

```
1 big = [80, 100, 50, 70, 90, 99, 40, 1]
2 print(max(big))
```

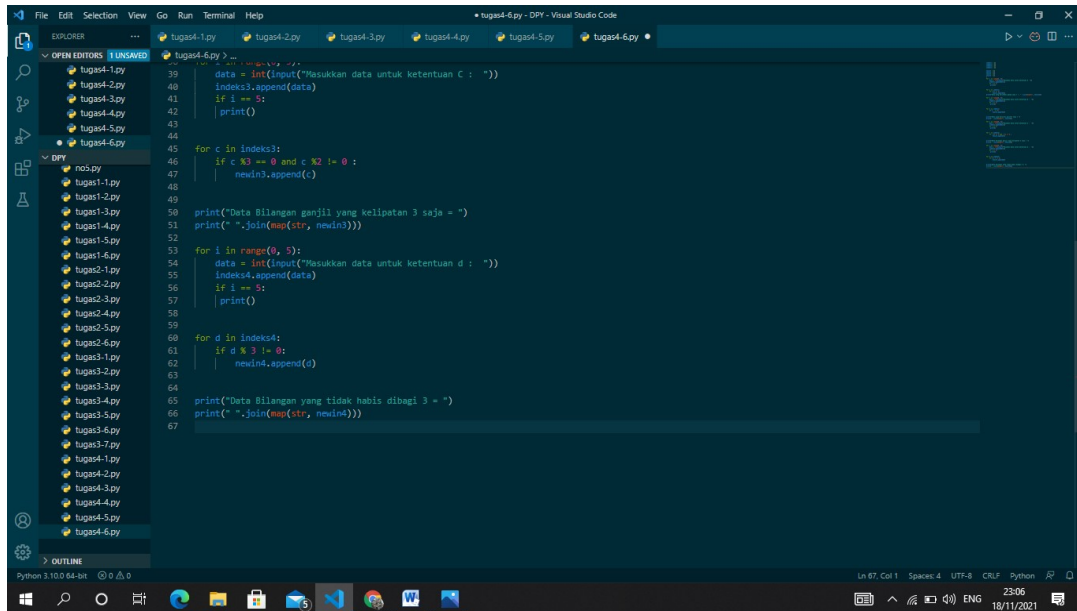
The terminal at the bottom shows the execution of the script, with the following output:

```
Windows PowerShell
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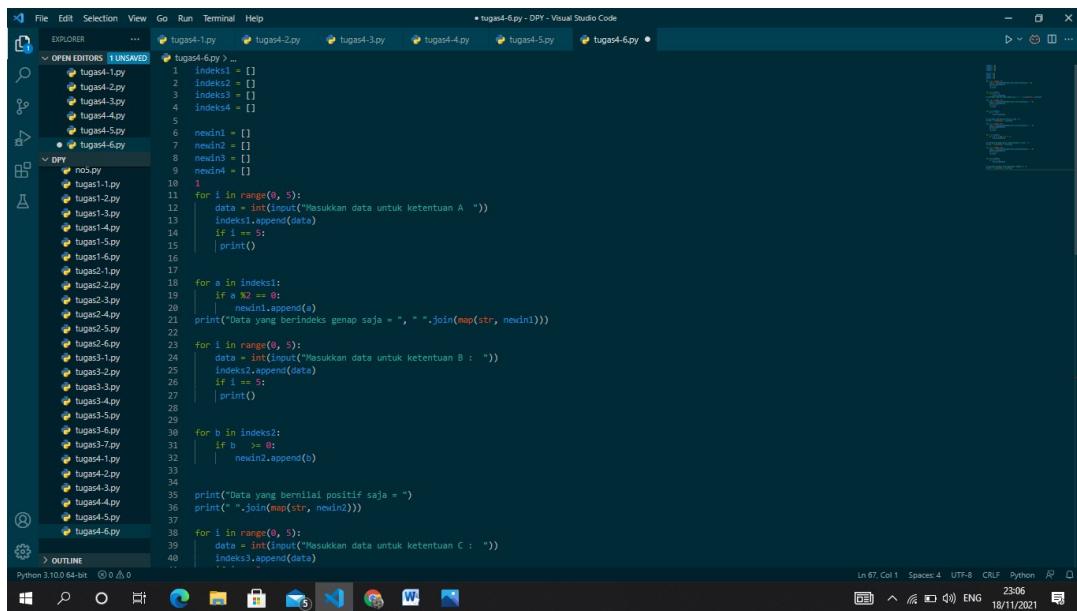
PS C:\DPY> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe c:/DPY/tugas4-5.py
100
PS C:\DPY>
```

## 6. Program Menampilkan Sejumlah Data Dari Masukkan



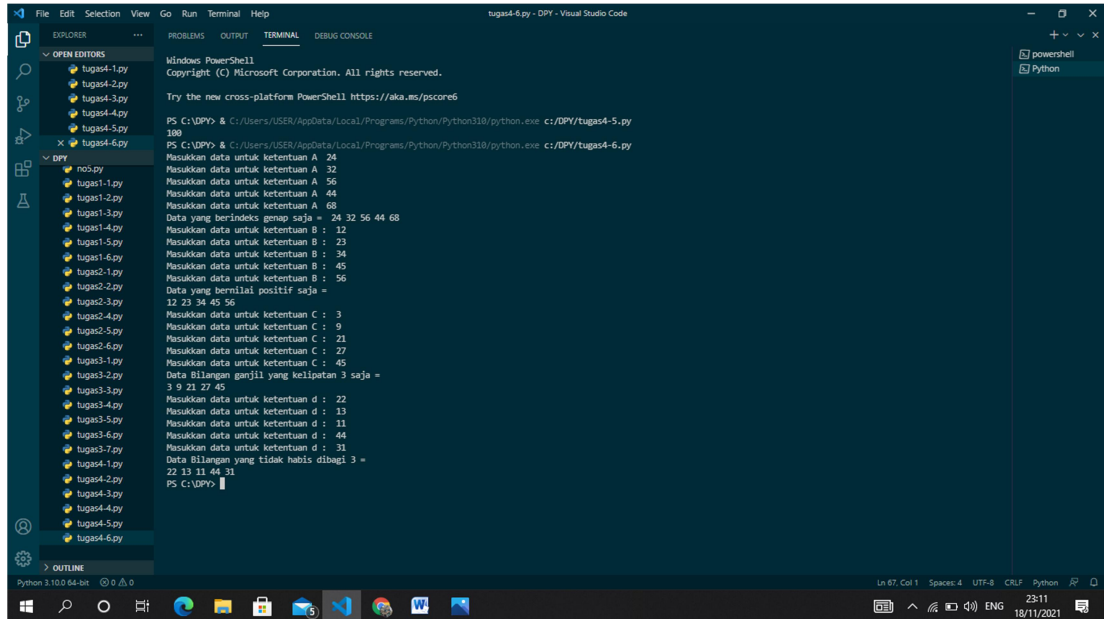
The screenshot shows a Visual Studio Code editor with a Python file named `tugas4-6.py`. The script is designed to process input data and filter it based on specific conditions. It uses lists to store data and loops to iterate through them. The code is as follows:

```
39 data = int(input("Masukkan data untuk ketentuan C : "))
40 indeks1.append(data)
41 if i == 5:
42     print()
43
44
45 for c in indeks1:
46     if c % 3 == 0 and c % 2 != 0:
47         newin3.append(c)
48
49
50 print("Data Bilangan ganjil yang kelipatan 3 saja = ")
51 print(" ".join(map(str, newin3)))
52
53 for i in range(0, 5):
54     data = int(input("Masukkan data untuk ketentuan d : "))
55     indeks4.append(data)
56     if i == 5:
57         print()
58
59
60 for d in indeks4:
61     if d % 3 != 0:
62         newin4.append(d)
63
64
65 print("Data Bilangan yang tidak habis dibagi 3 = ")
66 print(" ".join(map(str, newin4)))
67
```



The screenshot shows a Visual Studio Code editor with a Python file named `tugas4-6.py`. The script is designed to process input data and filter it based on specific conditions. It uses lists to store data and loops to iterate through them. The code is as follows:

```
1 indeks1 = []
2 indeks2 = []
3 indeks3 = []
4 indeks4 = []
5
6 newin1 = []
7 newin2 = []
8 newin3 = []
9 newin4 = []
10
11 for i in range(0, 5):
12     data = int(input("Masukkan data untuk ketentuan A : "))
13     indeks1.append(data)
14     if i == 5:
15         print()
16
17
18 for a in indeks1:
19     if a % 2 == 0:
20         newin1.append(a)
21
22 print("Data yang berindeks genap saja = ", " ".join(map(str, newin1)))
23
24 for i in range(0, 5):
25     data = int(input("Masukkan data untuk ketentuan B : "))
26     indeks2.append(data)
27     if i == 5:
28         print()
29
30 for b in indeks2:
31     if b % 2 == 0:
32         newin2.append(b)
33
34
35 print("Data yang bernilai positif saja = ")
36 print(" ".join(map(str, newin2)))
37
38 for i in range(0, 5):
39     data = int(input("Masukkan data untuk ketentuan C : "))
40     indeks3.append(data)
```

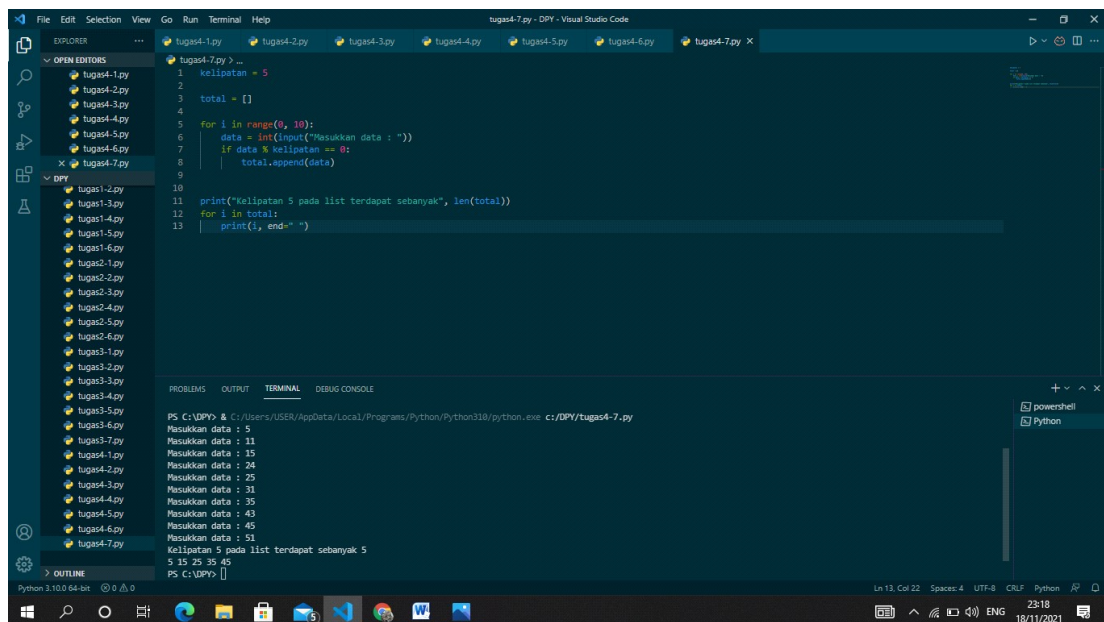


```
Windows PowerShell
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PS C:\DPY> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe c:/DPY/tugas4-5.py
108
PS C:\DPY> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe c:/DPY/tugas4-6.py
Masukkan data untuk ketentuan A : 24
Masukkan data untuk ketentuan A : 32
Masukkan data untuk ketentuan A : 56
Masukkan data untuk ketentuan A : 44
Masukkan data untuk ketentuan A : 68
Data yang berindeks genap saja = 24 32 56 44 68
Masukkan data untuk ketentuan B : 12
Masukkan data untuk ketentuan B : 23
Masukkan data untuk ketentuan B : 34
Masukkan data untuk ketentuan B : 45
Masukkan data untuk ketentuan B : 56
Data yang bernilai positif saja =
12 23 34 45 56
Masukkan data untuk ketentuan C : 3
Masukkan data untuk ketentuan C : 9
Masukkan data untuk ketentuan C : 21
Masukkan data untuk ketentuan C : 27
Masukkan data untuk ketentuan C : 45
Data Bilangan ganjil yang kelipatan 3 saja =
3 9 21 27 45
Masukkan data untuk ketentuan d : 22
Masukkan data untuk ketentuan d : 13
Masukkan data untuk ketentuan d : 11
Masukkan data untuk ketentuan d : 44
Masukkan data untuk ketentuan d : 31
Data Bilangan yang tidak habis dibagi 3 =
22 13 11 44 31
PS C:\DPY>
```

## 7. Menampilkan Angka Kelipatan 5 Dari Beberapa Data

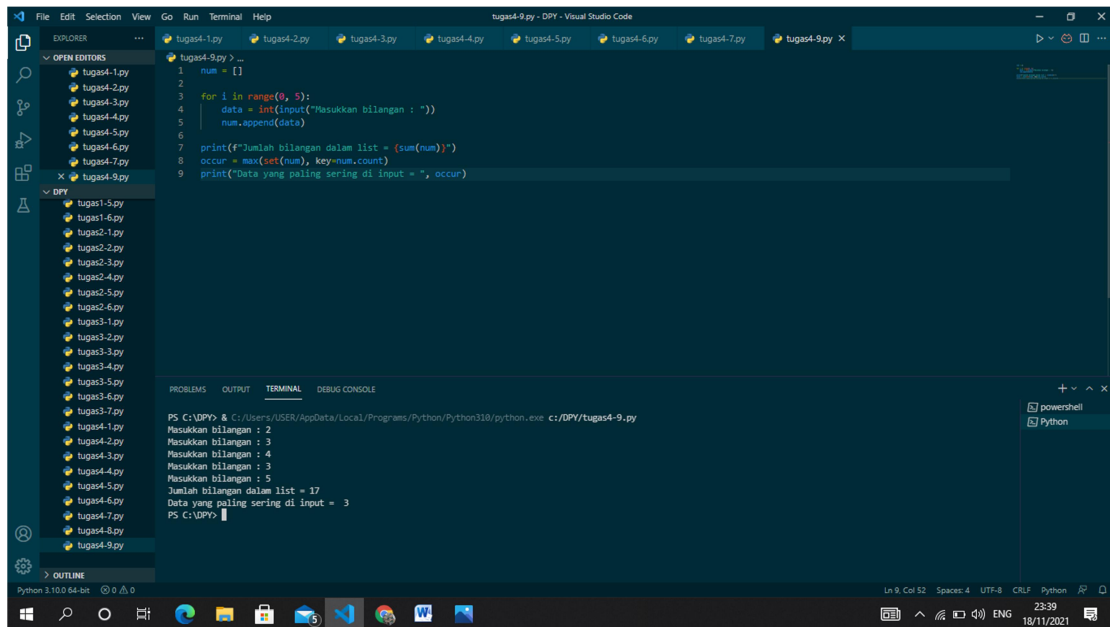


```
1 kelipatan = 5
2
3 total = []
4
5 for i in range(0, 10):
6     data = int(input("Masukkan data : "))
7     if data % kelipatan == 0:
8         total.append(data)
9
10
11 print("Kelipatan 5 pada list terdapat sebanyak", len(total))
12 for i in total:
13     print(i, end=" ")

PS C:\DPY> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe c:/DPY/tugas4-7.py
Masukkan data : 5
Masukkan data : 11
Masukkan data : 15
Masukkan data : 24
Masukkan data : 25
Masukkan data : 31
Masukkan data : 35
Masukkan data : 43
Masukkan data : 45
Masukkan data : 51
Kelipatan 5 pada list terdapat sebanyak 5
5 15 25 35 45
PS C:\DPY>
```



## 9. Menghitung Banyaknya Bilangan X



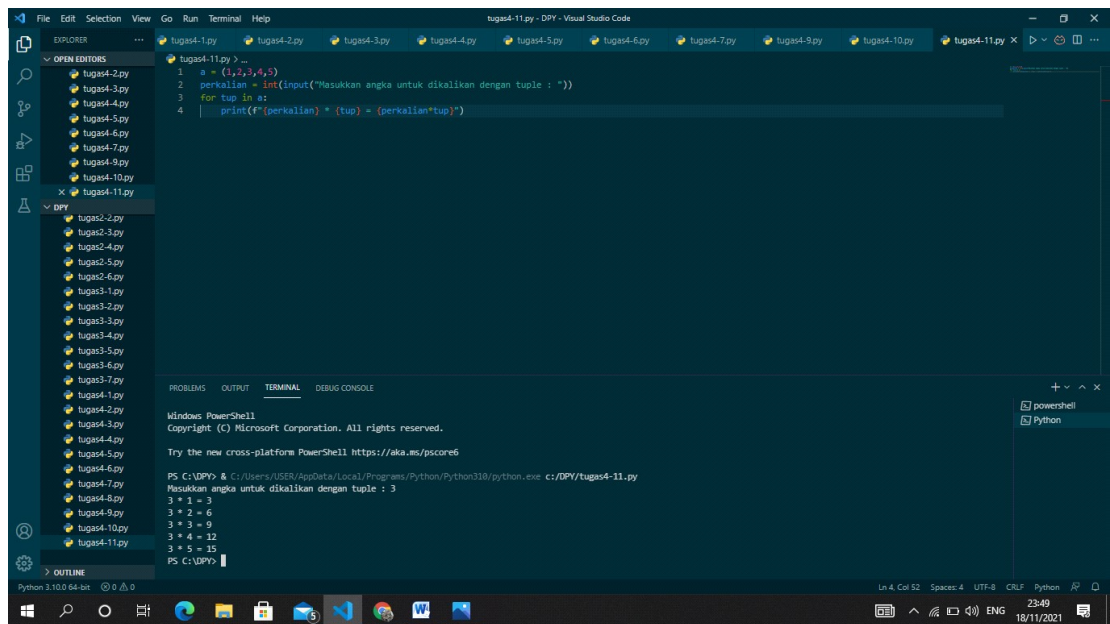
The screenshot shows a Visual Studio Code editor with a Python file named `tugas4-9.py`. The code defines a list `num` and iterates over a range from 0 to 5, prompting the user to input numbers. It then calculates the sum of the numbers, finds the maximum value, and prints the frequency of each input.

```
1 num = []
2
3 for i in range(0, 5):
4     data = int(input("Masukkan bilangan : "))
5     num.append(data)
6
7 print(f"Jumlah bilangan dalam list = {sum(num)}")
8 occur = max(set(num), key=num.count)
9 print("Data yang paling sering di input = ", occur)
```

The terminal output shows the execution of the script, where the user has entered the numbers 2, 3, 4, 3, and 5. The output indicates that the sum is 17, the maximum value is 5, and the most frequent input is 3.

```
PS C:\DPV> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe c:/DPV/tugas4-9.py
Masukkan bilangan : 2
Masukkan bilangan : 3
Masukkan bilangan : 4
Masukkan bilangan : 3
Masukkan bilangan : 5
Jumlah bilangan dalam list = 17
Data yang paling sering di input = 3
PS C:\DPV>
```

## 12. Membuat Inputan Yang Akan Dikalikan Dengan Bilangan Tuple



The screenshot shows a Visual Studio Code editor with a Python file named `tugas4-11.py`. The code defines a tuple `a` and prompts the user to input a number. It then iterates over the tuple and prints the result of multiplying each element by the user input.

```
1 a = (1,2,3,4,5)
2 perkalian = int(input("Masukkan angka untuk dikalikan dengan tuple : "))
3 for tup in a:
4     print(f"{perkalian} * {tup} = {perkalian*tup}")
```

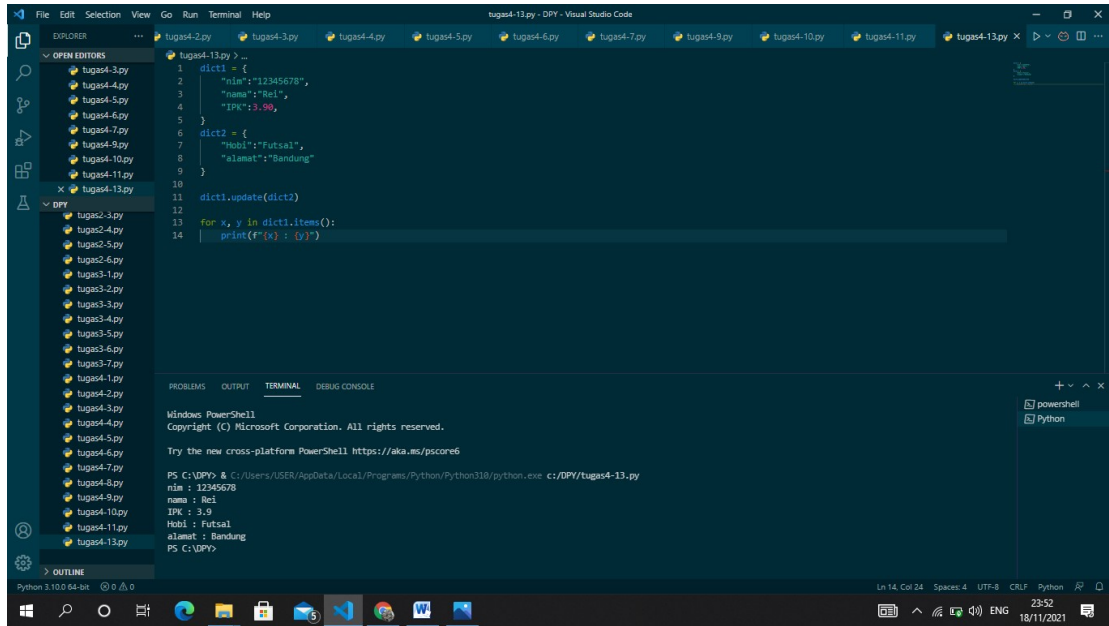
The terminal output shows the execution of the script, where the user has entered the number 3. The output displays the multiplication of each tuple element by 3.

```
Windows PowerShell
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PS C:\DPV> & C:/Users/USER/AppData/Local/Programs/Python/Python310/python.exe c:/DPV/tugas4-11.py
Masukkan angka untuk dikalikan dengan tuple : 3
3 * 1 = 3
3 * 2 = 6
3 * 3 = 9
3 * 4 = 12
3 * 5 = 15
PS C:\DPV>
```

### 13. Program Menghubungkan Dengan Dictionary



The screenshot shows the Visual Studio Code interface with a Python file named `tugas4-13.py` open. The code defines two dictionaries, `dict1` and `dict2`, and updates `dict1` with the contents of `dict2`. It then iterates over the items of `dict1` and prints them in a formatted string.

```
1 dict1 = {  
2     "nim": "12345678",  
3     "nama": "Rei",  
4     "IPK": 3.90,  
5 }  
6  
7 dict2 = {  
8     "hobi": "Futsal",  
9     "alamat": "Bandung"  
10 }  
11  
12 dict1.update(dict2)  
13  
14 for x, y in dict1.items():  
15     print(f'{x} : {y}')
```

The terminal output shows the execution of the program, displaying the dictionary contents:

```
PS C:\DPY & C:\Users\USER\AppData\Local\Programs\Python\Python310\python.exe c:/DPY/tugas4-13.py  
nim : 12345678  
nama : Rei  
IPK : 3.9  
Hobi : Futsal  
alamat : Bandung  
PS C:\DPY>
```