

## Nomor 1

```
Nomor 1.py X  Nomor 4.py  Nomor 5.py  Nomor 6.py  1.py  N

Nomor 1.py > ...
1  print("\n")
2
3  import math
4  list_no = 0
5  list_nama = []
6  list_nilai = []
7  total = 0
8
9  batas = 5
10 for n in range(batas):
11     list_nama.append(input("Masukkan Nama : "))
12     list_nilai.append(int(input("Masukkan Nilai : ")))
13     print()
14     jml = n + 1
15     total += list_nilai[n]
16     rt_rt = total / jml
17
18 #output
19 print("-----")
20 print("No      Nama      Nilai  Keterangan")
21 print("-----")
22 for i in range(batas):
23     list_no += 1
24     print(list_no, "\t", list_nama[i], "\t\t", list_nilai[i], "\t")
25 print("-----")
26 print("Jumlah Mahasiswa =", jml)
27 print("Rata-rata      =", rt_rt)
28 print("\n")
```

```
PROBLEMS  OUTPUT  TERMINAL  DEBUG CONSOLE

2021.11.1422169775\pythonFiles\lib\python\debugpy\launc

Masukkan Nama : Hilmy
Masukkan Nilai : 94

Masukkan Nama : Rifqi
Masukkan Nilai : 96

Masukkan Nama : Rossi
Masukkan Nilai : 95

Masukkan Nama : Messi
Masukkan Nilai : 98

Masukkan Nama : Izull
Masukkan Nilai : 91

-----
No      Nama      Nilai  Keterangan
-----
1       Hilmy      94
2       Rifqi      96
3       Rossi      95
4       Messi      98
5       Izull      91
-----

Jumlah Mahasiswa = 5
Rata-rata      = 94.8

PS D:\TI\AI\Tugas Praktikum Python 4> |
```

## Nomor 2

```
Nomor 1.py  Nomor 2.py X  Nomor 4.py  Nomor 5.py  Nomor 6.py  Nomor 2.py > ...
1  print("\n")
2
3  import math
4  list_no = 0
5  list_nama = []
6  list_nilai = []
7  total = 0
8
9  batas = 5
10 for n in range(batas):
11     list_nama.append(input("Masukkan Nama : "))
12     list_nilai.append(int(input("Masukkan Nilai : ")))
13     print()
14     jml = n + 1
15     total += list_nilai[n]
16     rt_rt = total / jml
17
18 #output
19 print("-----")
20 print("No      Nama      Nilai  Keterangan")
21 print("-----")
22 for i in range(batas):
23     list_no += 1
24     print(list_no, "\t", list_nama[i], "\t\t", list_nilai[i], "\t")
25 print("-----")
26 print("Jumlah Mahasiswa =", jml)
27 print("Rata-rata      =", rt_rt)
28 print("Nilai tertinggi =", max(list_nilai))
29 print("Nilai tertinggi =", min(list_nilai))
30 print("\n")
```

1 print("\n")

Masukkan Nama : Hilmy  
Masukkan Nilai : 94

Masukkan Nama : Rifqi  
Masukkan Nilai : 96

Masukkan Nama : Rossi  
Masukkan Nilai : 95

Masukkan Nama : Messi  
Masukkan Nilai : 98

Masukkan Nama : Izull  
Masukkan Nilai : 91

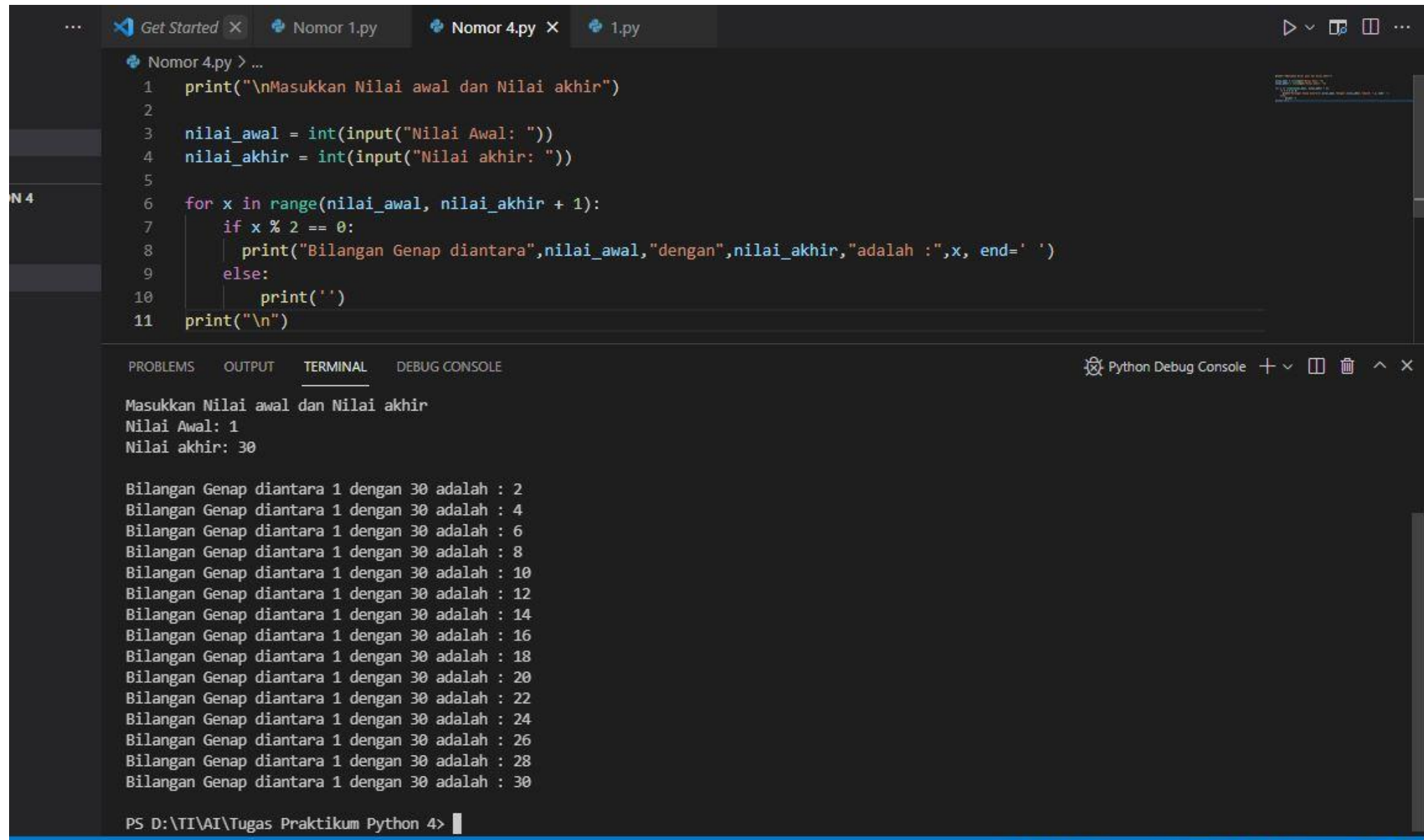
No	Nama	Nilai	Keterangan
1	Hilmy	94	
2	Rifqi	96	
3	Rossi	95	
4	Messi	98	
5	Izull	91	

Jumlah Mahasiswa = 5  
Rata-rata = 94.8  
Nilai tertinggi = 98  
Nilai tertinggi = 91

PS D:\TI\AI\Tugas Praktikum Python 4> |

**Nomor 3**

## Nomor 4



The screenshot shows a Python IDE with a file named 'Nomor 4.py'. The code in the editor is as follows:

```
1 print("\nMasukkan Nilai awal dan Nilai akhir")
2
3 nilai_awal = int(input("Nilai Awal: "))
4 nilai_akhir = int(input("Nilai akhir: "))
5
6 for x in range(nilai_awal, nilai_akhir + 1):
7     if x % 2 == 0:
8         print("Bilangan Genap diantara", nilai_awal, "dengan", nilai_akhir, "adalah :", x, end=' ')
9     else:
10        print(' ')
11 print("\n")
```

The terminal output shows the program execution with inputs 1 and 30, resulting in a list of even numbers from 2 to 30. The prompt at the bottom is 'PS D:\TI\AI\Tugas Praktikum Python 4>'.

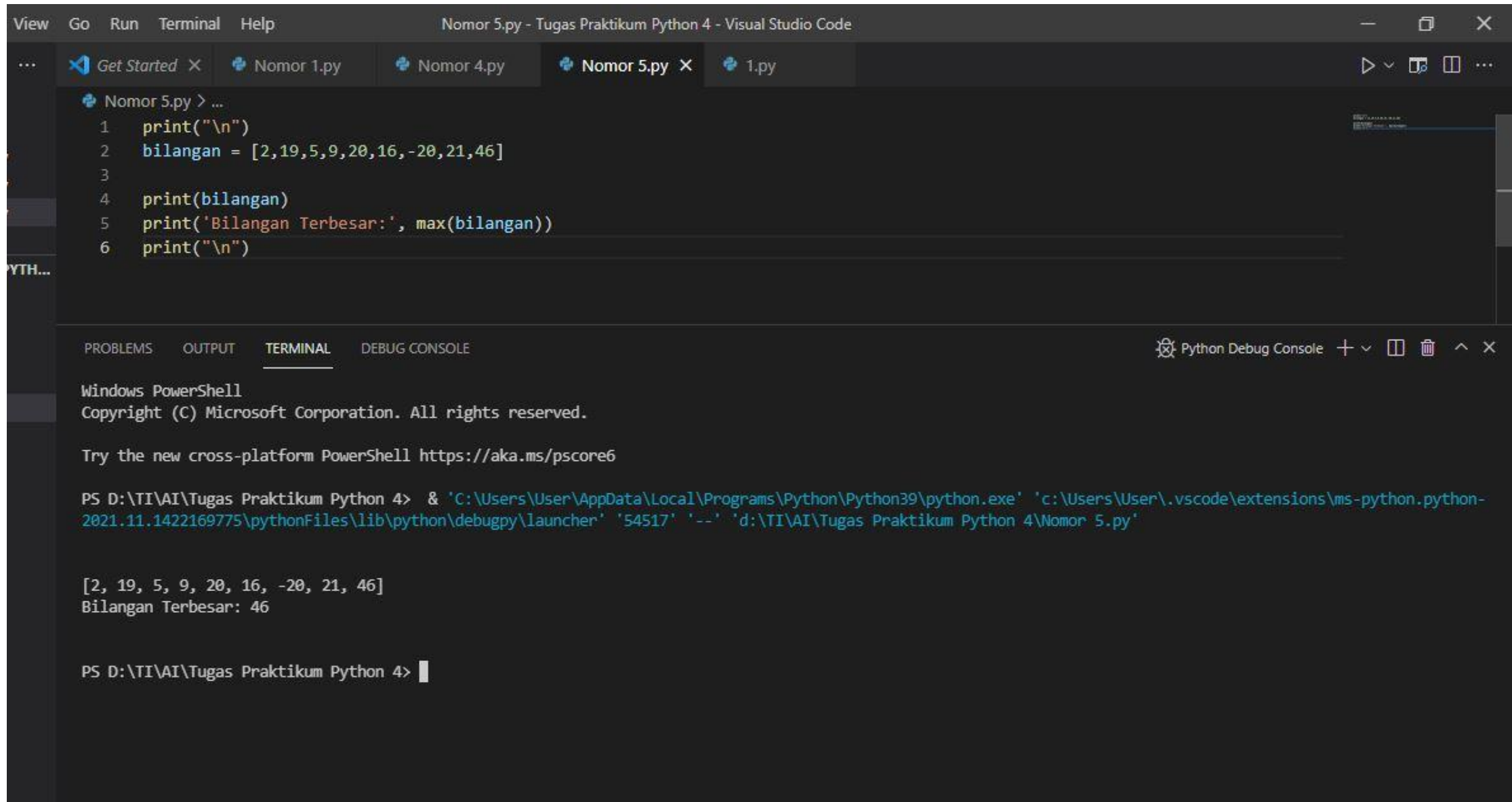
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

Masukkan Nilai awal dan Nilai akhir  
Nilai Awal: 1  
Nilai akhir: 30

Bilangan Genap diantara 1 dengan 30 adalah : 2  
Bilangan Genap diantara 1 dengan 30 adalah : 4  
Bilangan Genap diantara 1 dengan 30 adalah : 6  
Bilangan Genap diantara 1 dengan 30 adalah : 8  
Bilangan Genap diantara 1 dengan 30 adalah : 10  
Bilangan Genap diantara 1 dengan 30 adalah : 12  
Bilangan Genap diantara 1 dengan 30 adalah : 14  
Bilangan Genap diantara 1 dengan 30 adalah : 16  
Bilangan Genap diantara 1 dengan 30 adalah : 18  
Bilangan Genap diantara 1 dengan 30 adalah : 20  
Bilangan Genap diantara 1 dengan 30 adalah : 22  
Bilangan Genap diantara 1 dengan 30 adalah : 24  
Bilangan Genap diantara 1 dengan 30 adalah : 26  
Bilangan Genap diantara 1 dengan 30 adalah : 28  
Bilangan Genap diantara 1 dengan 30 adalah : 30

PS D:\TI\AI\Tugas Praktikum Python 4>

## Nomor 5



The image shows a Visual Studio Code window titled "Nomor 5.py - Tugas Praktikum Python 4 - Visual Studio Code". The editor displays a Python script in "Nomor 5.py" with the following code:

```
Nomor 5.py > ...
1  print("\n")
2  bilangan = [2,19,5,9,20,16,-20,21,46]
3
4  print(bilangan)
5  print('Bilangan Terbesar:', max(bilangan))
6  print("\n")
```

The bottom panel shows the "TERMINAL" tab, which contains the output of the script execution in a Windows PowerShell environment:

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

PS D:\TI\AI\Tugas Praktikum Python 4> & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '54517' '--' 'd:\TI\AI\Tugas Praktikum Python 4\Nomor 5.py'

[2, 19, 5, 9, 20, 16, -20, 21, 46]
Bilangan Terbesar: 46

PS D:\TI\AI\Tugas Praktikum Python 4> |
```



## Nomor 6

Nomor 6.py > ...

```
1 print("\n")
2 data = [-1,20,12,6,-3,10,18]
3 print(data,"\n")
4
5 print("Nomor 6.a")
6 for x in data:
7     if x % 2 == 0:
8         print("Bilangan Berindeks Genap :",x)
9
10 print("\n\nNomor 6.b")
11 for y in data:
12     if y>=0:
13         print("Bilangan Positif : ",y)
14
15 print("\n\nNomor 6.c")
16 i = 1
17 a = 0
18 for i in data:
19     if i %3 == 0:
20         a = i + a
21         print(a)
22
23 print("\n\nNomor 6.d")
24 for value in data:
25     if value % 3 == 0:
26         print(value)
27
28 print("\n")
29
```

```
[-1, 20, 12, 6, -3, 10, 18]
```

Nomor 6.a

```
Bilangan Berindeks Genap : 20
Bilangan Berindeks Genap : 12
Bilangan Berindeks Genap : 6
Bilangan Berindeks Genap : 10
Bilangan Berindeks Genap : 18
```

Nomor 6.b

```
Bilangan Positif : 20
Bilangan Positif : 12
Bilangan Positif : 6
Bilangan Positif : 10
Bilangan Positif : 18
```

Nomor 6.c

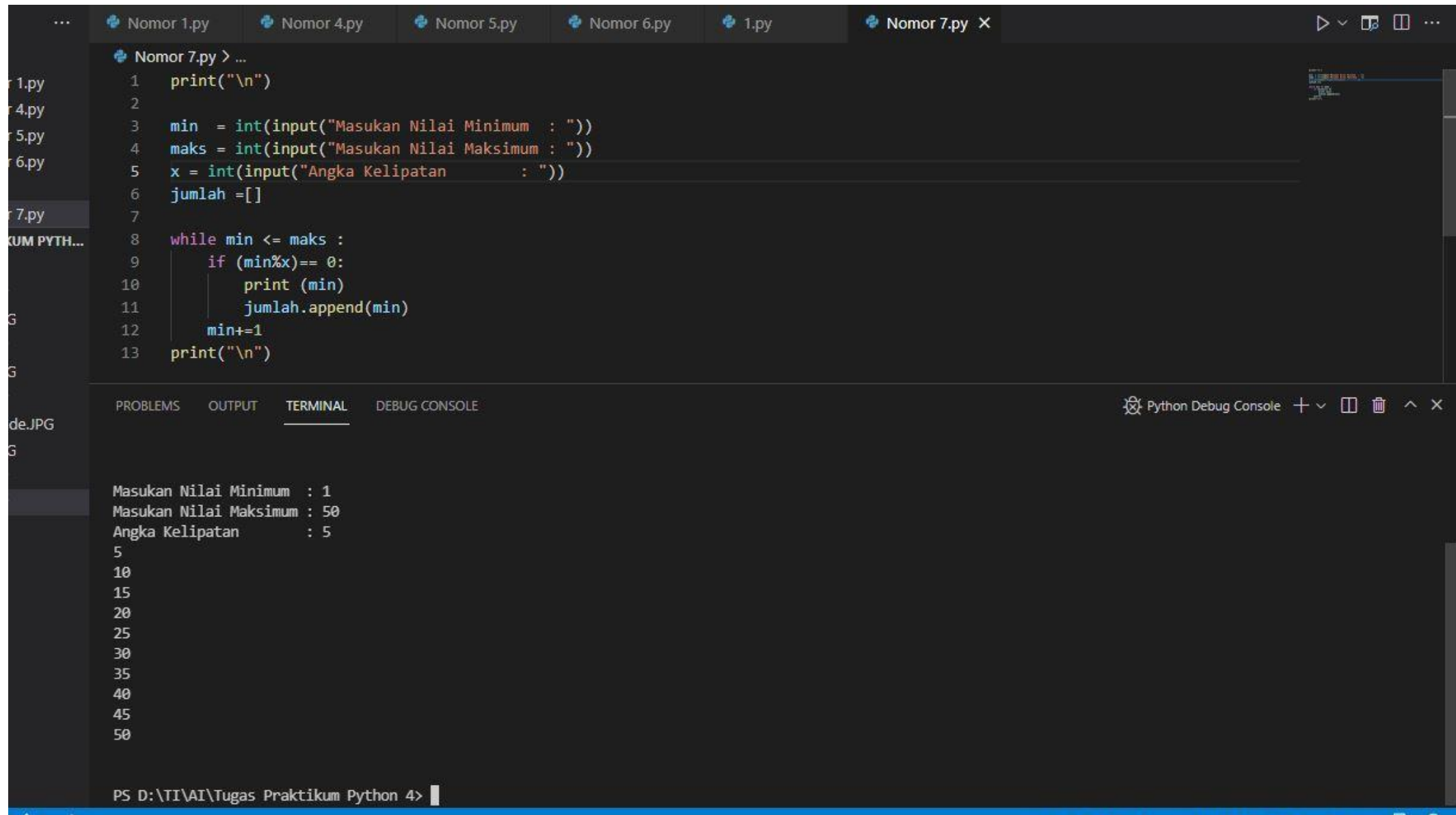
```
12
18
15
33
```

Nomor 6.d

```
12
6
-3
18
```

PS D:\TII\AI\Tugas Praktikum Python 4> |

## Nomor 7



The image shows a Python IDE with a file explorer on the left, a code editor in the center, and a terminal at the bottom. The code editor displays a Python script named 'Nomor 7.py' which prompts the user for a minimum value, a maximum value, and a multiplier. It then prints all multiples of the multiplier within the specified range. The terminal shows the execution of the script with inputs 1, 50, and 5, resulting in a list of multiples from 5 to 50.

```
Nomor 7.py > ...
1  print("\n")
2
3  min = int(input("Masukan Nilai Minimum : "))
4  maks = int(input("Masukan Nilai Maksimum : "))
5  x = int(input("Angka Kelipatan      : "))
6  jumlah = []
7
8  while min <= maks :
9      if (min%x)== 0:
10         print (min)
11         jumlah.append(min)
12     min+=1
13 print("\n")
```

PROBLEMS OUTPUT **TERMINAL** DEBUG CONSOLE Python Debug Console

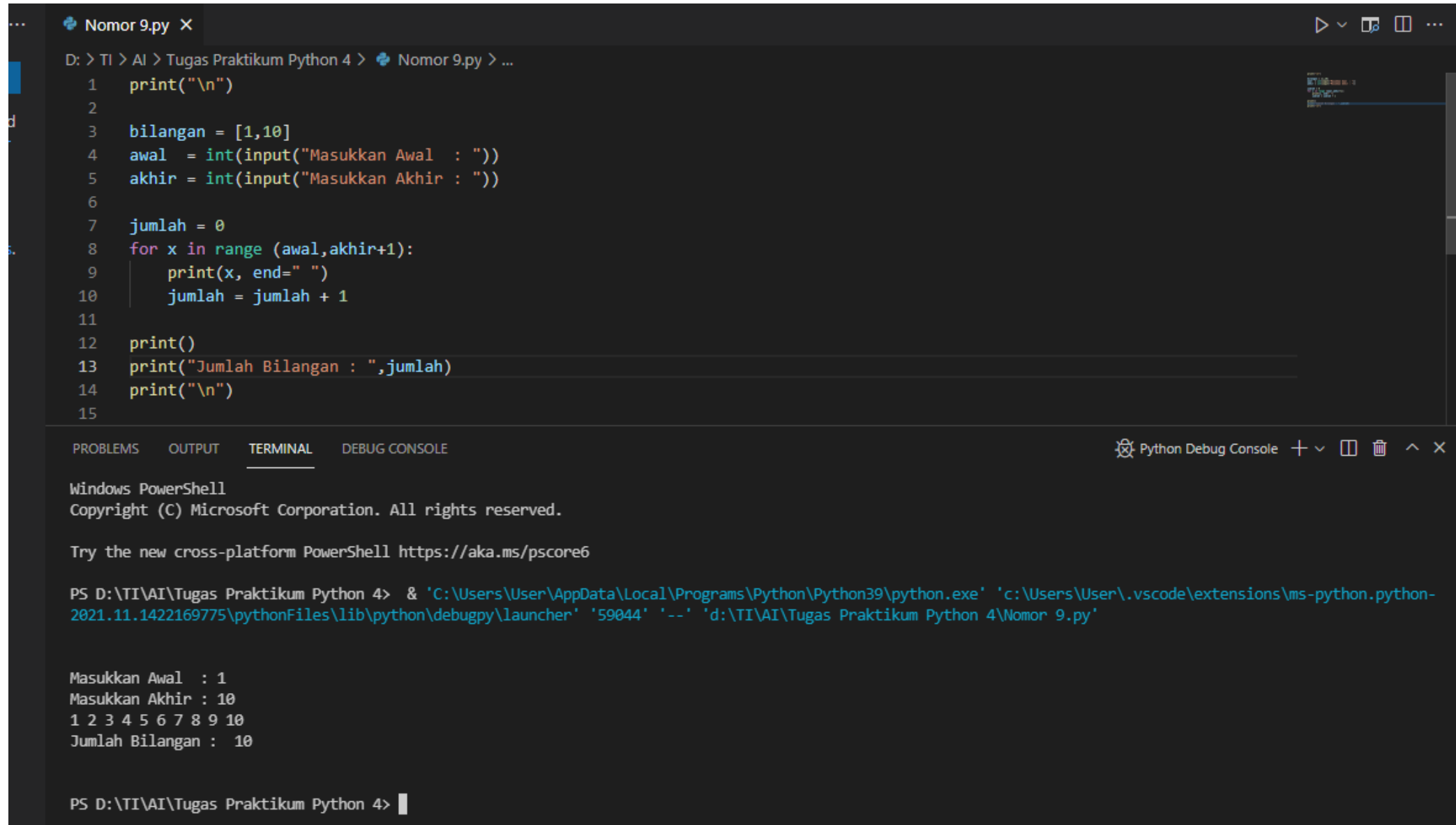
```
Masukan Nilai Minimum : 1
Masukan Nilai Maksimum : 50
Angka Kelipatan      : 5
5
10
15
20
25
30
35
40
45
50

PS D:\TI\AI\Tugas Praktikum Python 4>
```

**Nomor 8**



## Nomor 9



The image shows a Visual Studio Code editor window with a Python file named 'Nomor 9.py'. The code is a script that calculates the sum of integers from 1 to 10. The terminal output shows the execution of the script, including the input prompts and the final result.

```
Nomor 9.py X
D: > TI > AI > Tugas Praktikum Python 4 > Nomor 9.py > ...
1  print("\n")
2
3  bilangan = [1,10]
4  awal = int(input("Masukkan Awal : "))
5  akhir = int(input("Masukkan Akhir : "))
6
7  jumlah = 0
8  for x in range (awal,akhir+1):
9      print(x, end=" ")
10     jumlah = jumlah + 1
11
12  print()
13  print("Jumlah Bilangan : ",jumlah)
14  print("\n")
15

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
Python Debug Console + - [] [X] ^ X

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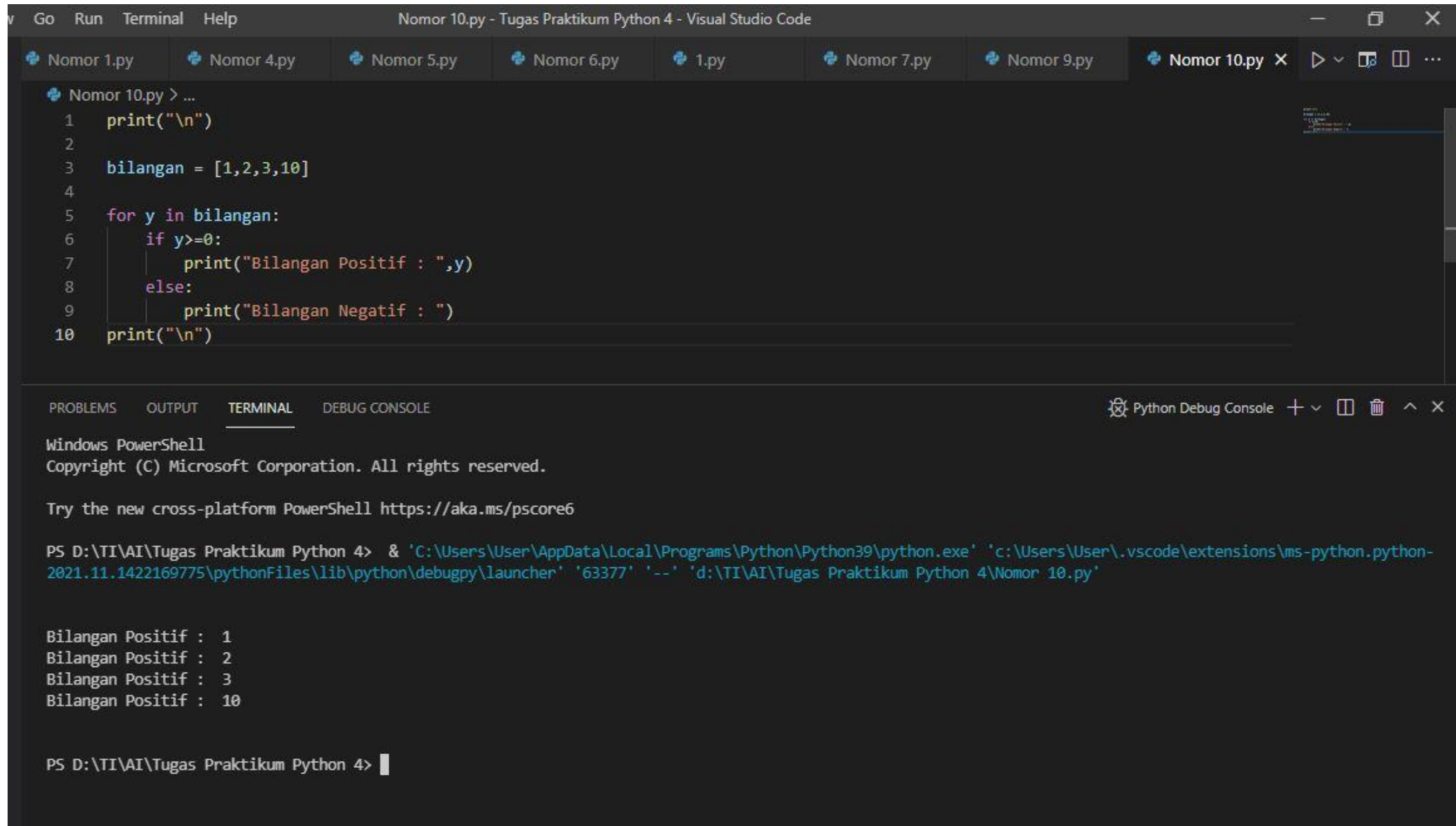
Try the new cross-platform PowerShell https://aka.ms/pscore6

PS D:\TI\AI\Tugas Praktikum Python 4> & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '59044' '--' 'd:\TI\AI\Tugas Praktikum Python 4\Nomor 9.py'

Masukkan Awal : 1
Masukkan Akhir : 10
1 2 3 4 5 6 7 8 9 10
Jumlah Bilangan : 10

PS D:\TI\AI\Tugas Praktikum Python 4> |
```

## Nomor 10



The image shows a Visual Studio Code window with a Python file named 'Nomor 10.py' open. The code in the editor is a script that prints a newline, defines a list 'bilangan' with values [1, 2, 3, 10], and then iterates over the list. For each element 'y', it checks if 'y' is greater than or equal to 0. If true, it prints 'Bilangan Positif : ' followed by 'y'. If false, it prints 'Bilangan Negatif : '. The script ends with another print statement for a newline.

```
1 print("\n")
2
3 bilangan = [1,2,3,10]
4
5 for y in bilangan:
6     if y>=0:
7         print("Bilangan Positif : ",y)
8     else:
9         print("Bilangan Negatif : ")
10 print("\n")
```

The terminal at the bottom shows the execution of the script. It starts with a Windows PowerShell prompt, followed by the command to run the script using Python. The output of the script is displayed in the terminal, showing four lines of 'Bilangan Positif : ' followed by the values 1, 2, 3, and 10 respectively. The terminal prompt is currently at 'PS D:\TI\AI\Tugas Praktikum Python 4>'.

PROBLEMS OUTPUT **TERMINAL** DEBUG CONSOLE Python Debug Console

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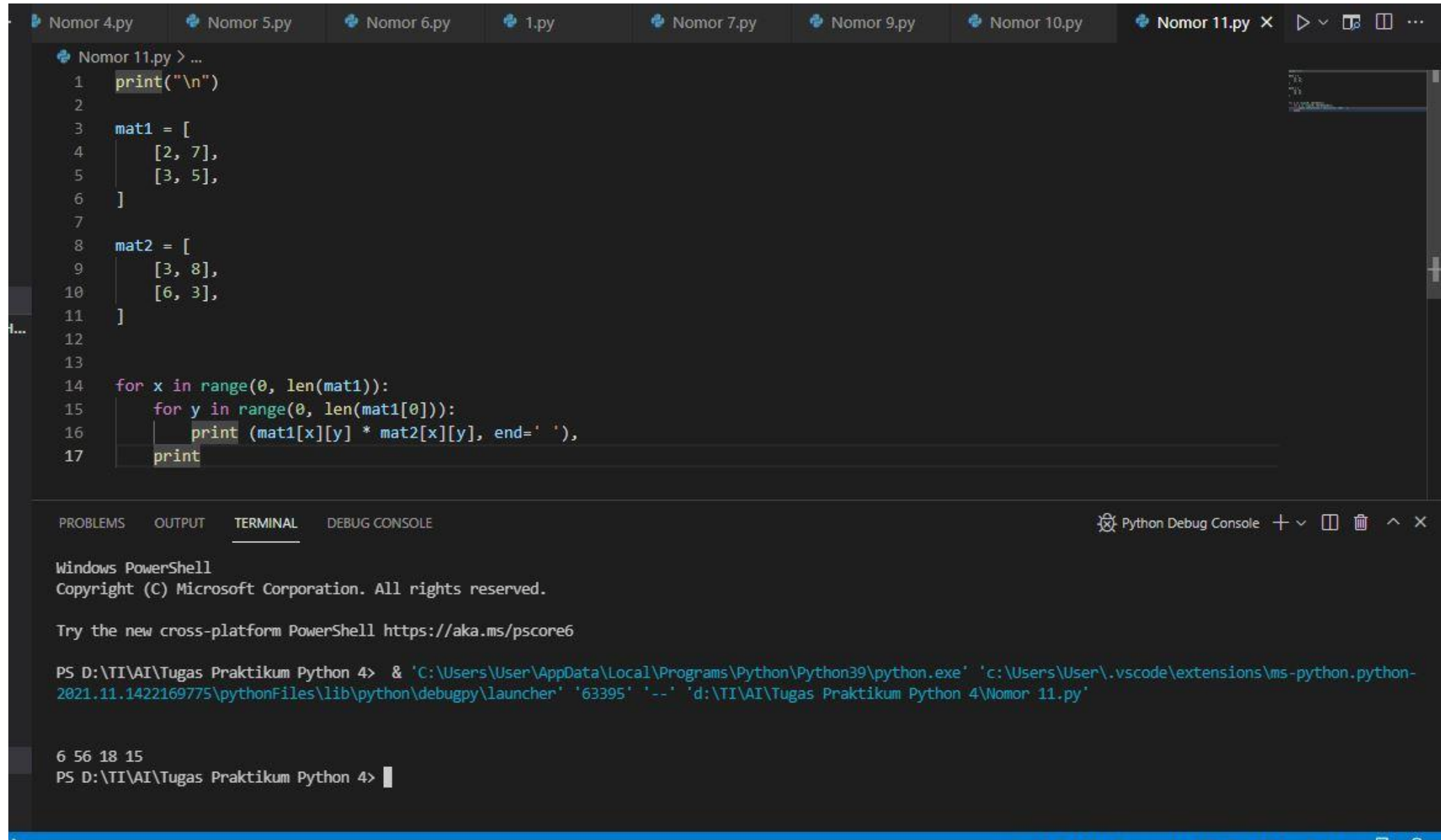
Try the new cross-platform PowerShell <https://aka.ms/pscore6>

PS D:\TI\AI\Tugas Praktikum Python 4> & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '63377' '--' 'd:\TI\AI\Tugas Praktikum Python 4\Nomor 10.py'

Bilangan Positif : 1  
Bilangan Positif : 2  
Bilangan Positif : 3  
Bilangan Positif : 10

PS D:\TI\AI\Tugas Praktikum Python 4> |

## Nomor 11



The image shows a Visual Studio Code editor window with a Python file named 'Nomor 11.py'. The script defines two matrices, 'mat1' and 'mat2', and calculates their element-wise product. The terminal output shows the result of the calculation: '6 56 18 15'.

```
Nomor 11.py > ...
1  print("\n")
2
3  mat1 = [
4      [2, 7],
5      [3, 5],
6  ]
7
8  mat2 = [
9      [3, 8],
10     [6, 3],
11 ]
12
13
14 for x in range(0, len(mat1)):
15     for y in range(0, len(mat1[0])):
16         print(mat1[x][y] * mat2[x][y], end=' '),
17     print
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE Python Debug Console + - [ ] [X] ^ X

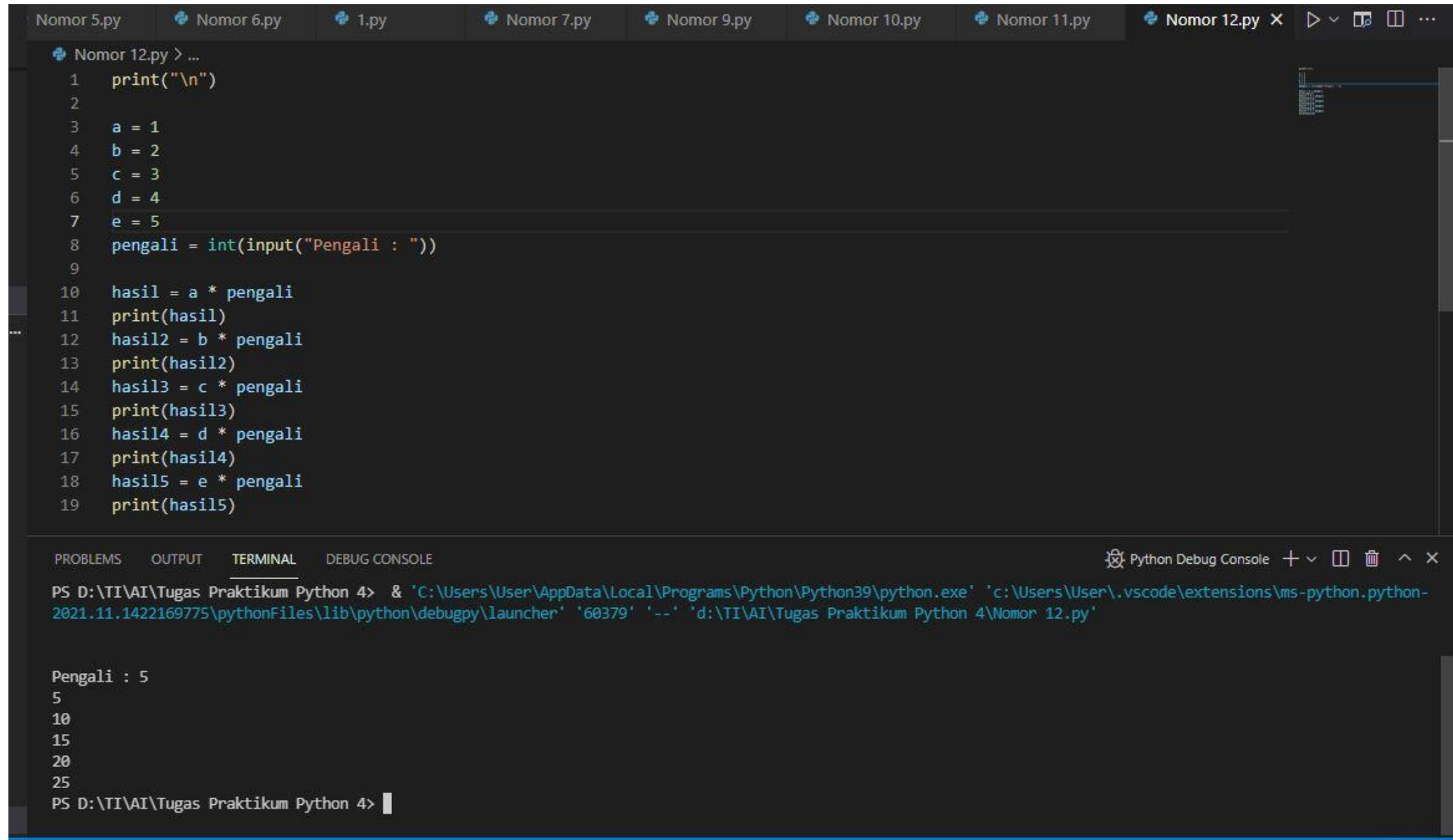
Windows PowerShell  
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Try the new cross-platform PowerShell <https://aka.ms/pscore6>

PS D:\TI\AI\Tugas Praktikum Python 4> & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '63395' '--' 'd:\TI\AI\Tugas Praktikum Python 4\Nomor 11.py'

6 56 18 15  
PS D:\TI\AI\Tugas Praktikum Python 4> |

## Nomor 12



The image shows a Visual Studio Code editor window with a file explorer on the left and a terminal at the bottom. The editor has several tabs open, with 'Nomor 12.py' selected. The code in the editor is a Python script that calculates the product of a variable 'pengali' and five constants 'a' through 'e'. The terminal shows the command used to run the script and the output of the program.

```
Nomor 5.py  Nomor 6.py  1.py  Nomor 7.py  Nomor 9.py  Nomor 10.py  Nomor 11.py  Nomor 12.py X
```

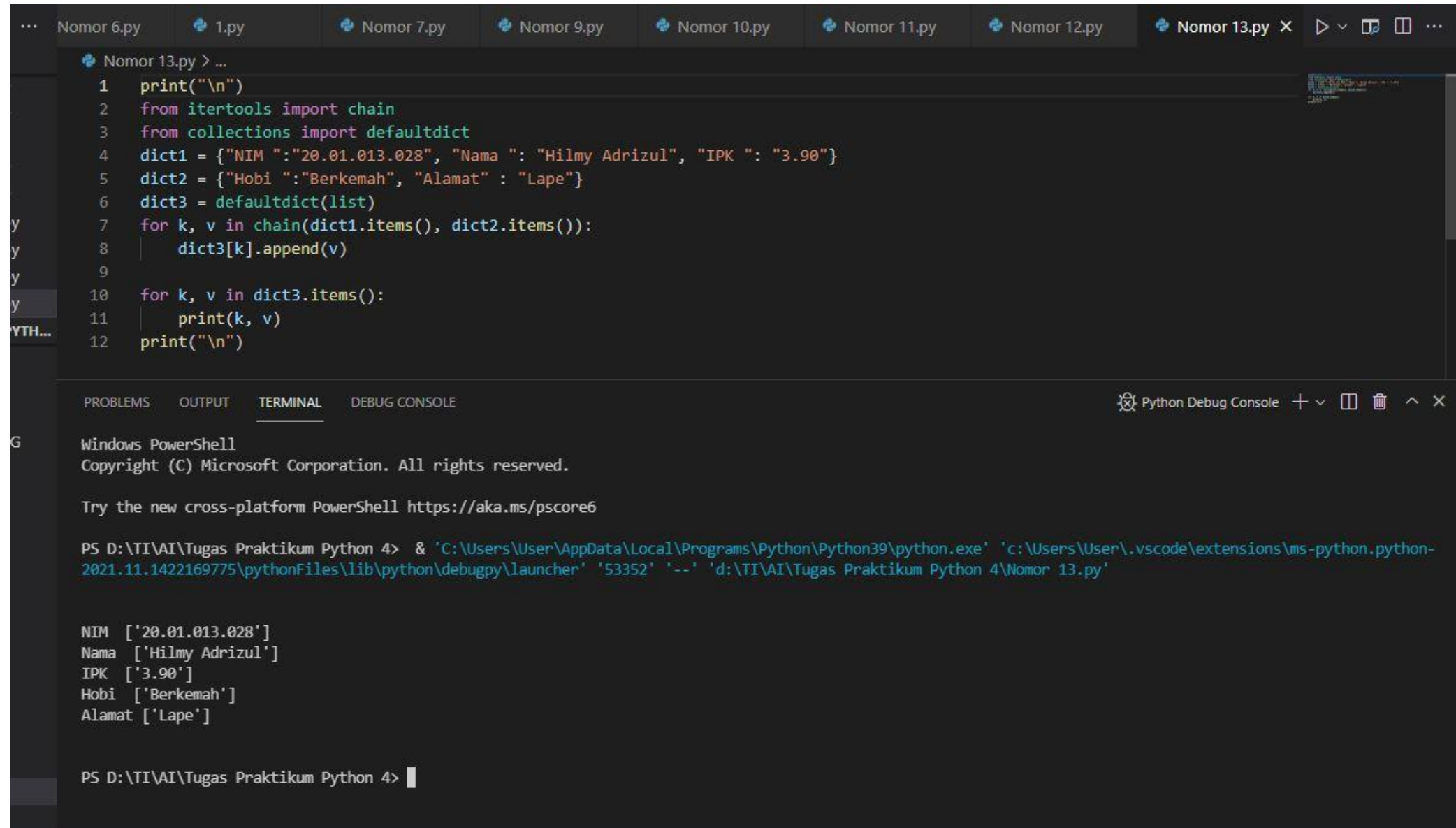
```
Nomor 12.py > ...
1  print("\n")
2
3  a = 1
4  b = 2
5  c = 3
6  d = 4
7  e = 5
8  pengali = int(input("Pengali : "))
9
10 hasil = a * pengali
11 print(hasil)
12 hasil2 = b * pengali
13 print(hasil2)
14 hasil3 = c * pengali
15 print(hasil3)
16 hasil4 = d * pengali
17 print(hasil4)
18 hasil5 = e * pengali
19 print(hasil5)
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE Python Debug Console

```
PS D:\TI\AI\Tugas Praktikum Python 4> & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '60379' '--' 'd:\TI\AI\Tugas Praktikum Python 4\Nomor 12.py'

Pengali : 5
5
10
15
20
25
PS D:\TI\AI\Tugas Praktikum Python 4> 
```

## Nomor 13



The image shows a Visual Studio Code editor window with a Python file named 'Nomor 13.py' open. The code in the editor uses the `chain` function from `itertools` and `defaultdict` from `collections` to merge two dictionaries into a single structure. The terminal at the bottom shows the command used to run the script, which successfully executes and prints the combined data as lists.

```
Nomor 13.py > ...
1  print("\n")
2  from itertools import chain
3  from collections import defaultdict
4  dict1 = {"NIM ": "20.01.013.028", "Nama ": "Hilmy Adrizul", "IPK ": "3.90"}
5  dict2 = {"Hobi ": "Berkemah", "Alamat" : "Lape"}
6  dict3 = defaultdict(list)
7  for k, v in chain(dict1.items(), dict2.items()):
8      dict3[k].append(v)
9
10 for k, v in dict3.items():
11     print(k, v)
12 print("\n")
```

PROBLEMS OUTPUT **TERMINAL** DEBUG CONSOLE Python Debug Console

Windows PowerShell  
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PS D:\TI\AI\Tugas Praktikum Python 4> & 'C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe' 'c:\Users\User\.vscode\extensions\ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '53352' '--' 'd:\TI\AI\Tugas Praktikum Python 4\Nomor 13.py'

NIM ['20.01.013.028']  
Nama ['Hilmy Adrizul']  
IPK ['3.90']  
Hobi ['Berkemah']  
Alamat ['Lape']

PS D:\TI\AI\Tugas Praktikum Python 4>