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Kelas: AI-B

Praktikum python IV.UTS

1.

The screenshot shows the Visual Studio Code interface with a Python script named 'Untitled-1.py' open in the editor. The code prompts the user to input names and scores for five students, calculates the total and average scores, and prints a summary table. The code is as follows:

```
1 #list
2 import math
3 list_no = 0
4 list_nama = []
5 list_nilai = []
6 total = 0
7
8 #input nama dan nilai
9 print("*"*40)
10 print("*"*39)
11 batas = 5
12 for n in range(batas):
13     list_nama.append(input("Masukkan nama : "))
14     list_nilai.append(int(input("Masukkan nilai : ")))
15     print()
16     jml = n + 1
17     total += list_nilai[n]
18     rata = total / jml
19
20 #output
21 print("-----")
22 print("No      Nama          Nilai    Keterangan")
23 print("-----")
24 for i in range(batas):
25     list_no += 1
26     print(list_no," ",list_nama[i]," ",list_nilai[i]," ")
27 print("-----")
28 print("Jumlah Mahasiswa = ",jml)
29 print("Rata-rata       = ",rata)
30 print("Nilai tertinggi = ",max(list_nilai))
31 print("Nilai terendah = ",min(list_nilai))
```

Outputnya:

The screenshot shows the Visual Studio Code interface with the terminal tab active, displaying the execution of the Python script. The user inputs names and scores for five students, and the script outputs a summary table and statistics. The terminal output is as follows:

```
PS C:\Users\ACER\Downloads> & C:/Users/ACER/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ACER/Downloads/Untitled-1.py
=====
Masukkan nama : Fay
Masukkan nilai : 95

Masukkan nama : Steve
Masukkan nilai : 99

Masukkan nama : Zack
Masukkan nilai : 90

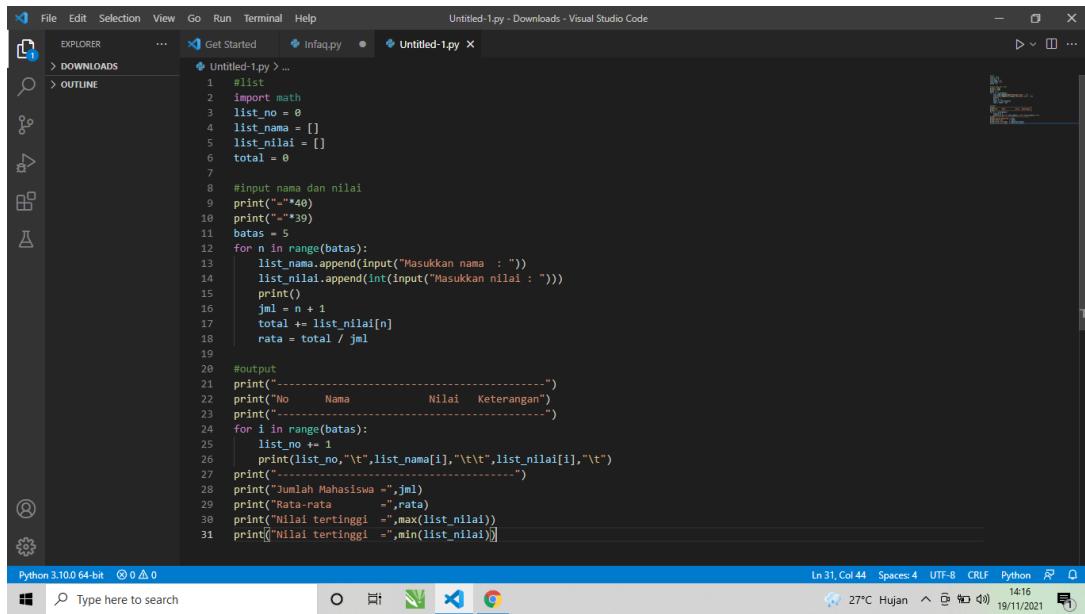
Masukkan nama : Linde
Masukkan nilai : 93

Masukkan nama : Boy
Masukkan nilai : 89

-----
No      Nama          Nilai    Keterangan
1      Fay           95
2      Steve         99
3      Zack          90
4      Linde         93
5      Boy           89

-----
Jumlah Mahasiswa = 5
Rata-rata       = 93.2
Nilai tertinggi = 99
Nilai terendah = 89
```

2.



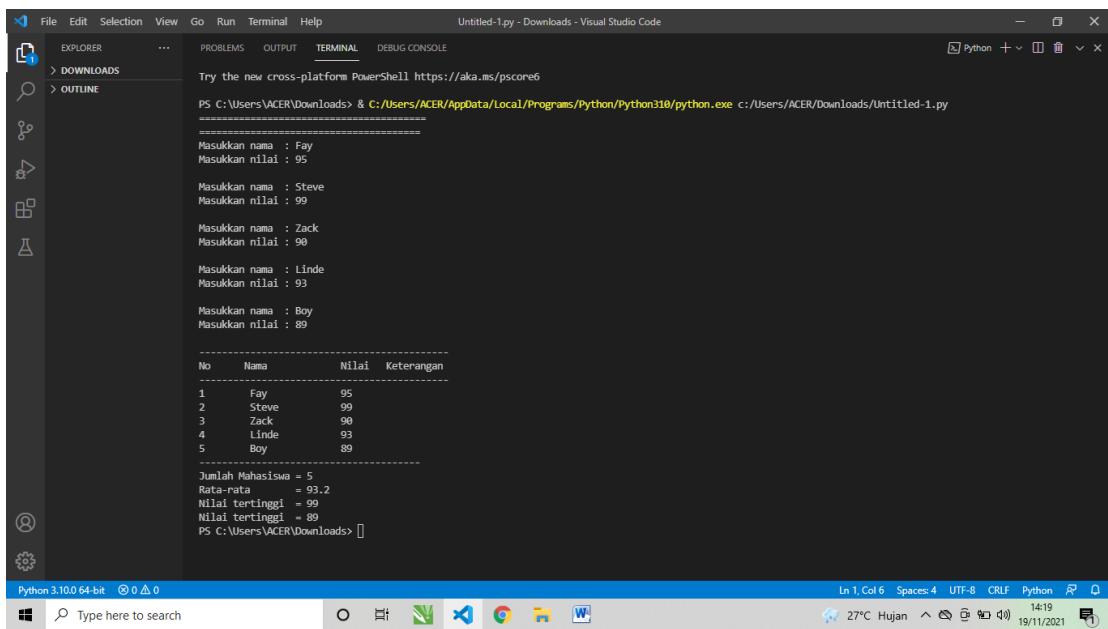
```
File Edit Selection View Go Run Terminal Help Untitled-1.py - Downloads - Visual Studio Code

EXPLORER > DOWNLOADS > OUTLINE
... Get Started Untitled-1.py < Infaq.py Untitled-1.py X

1 #list
2 import math
3 list_no = 0
4 list_nama = []
5 list_nilai = []
6 total = 0
7
8 #input nama dan nilai
9 print("*"*40)
10 print("*"*39)
11 batas = 5
12 for n in range(batas):
13     list_nama.append(input("Masukkan nama : "))
14     list_nilai.append(int(input("Masukkan nilai : ")))
15     print()
16     jml = n + 1
17     total += list_nilai[n]
18     rata = total / jml
19
20 #output
21 print("-----")
22 print("No Nama Nilai Keterangan")
23 print("-----")
24 for i in range(batas):
25     list_no += 1
26     print(list_no,".",list_nama[i],"\t",list_nilai[i],"")
27 print("-----")
28 print("Jumlah Mahasiswa =",jml)
29 print("Rata-rata =",rata)
30 print("Nilai tertinggi =",max(list_nilai))
31 print("Nilai terendah =",min(list_nilai))

Python 3.10.0 64-bit 0 0 0 Type here to search 27°C Hujan 14:16 19/11/2021 Ln 31, Col 44 Spaces: 4 UTF-8 CRLF Python R Q
```

Outputnya:



```
File Edit Selection View Go Run Terminal Help Untitled-1.py - Downloads - Visual Studio Code
TERMINAL DEBUG CONSOLE
PROBLEMS OUTPUT PS C:\Users\ACER\Downloads & C:/Users/ACER/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ACER/Downloads/Untitled-1.py
=====
Masukkan nama : Fay
Masukkan nilai : 95
Masukkan nama : Steve
Masukkan nilai : 99
Masukkan nama : Zack
Masukkan nilai : 90
Masukkan nama : Linde
Masukkan nilai : 93
Masukkan nama : Boy
Masukkan nilai : 89
-----
No Nama Nilai Keterangan
1 Fay 95
2 Steve 99
3 Zack 90
4 Linde 93
5 Boy 89
-----
Jumlah Mahasiswa = 5
Rata-rata = 93.2
Nilai tertinggi = 99
Nilai terendah = 89
PS C:\Users\ACER\Downloads>
```

3.

The screenshot shows the Visual Studio Code interface with a dark theme. The code editor displays a Python script named Untitled-1.py. The script prompts the user for the number of students (jml), then loops through each student to input their name and four grades (Tugas, UTS, UAS). It calculates a weighted average (30% Tugas, 30% UTS, 30% UAS) and prints each student's information along with their calculated grade. The code uses f-strings for output.

```
1  nama = []
2  tugas = []
3  uts = []
4  uas = []
5  total = 0
6
7  #input
8  jml = int(input("Jumlah Mahasiswa : "))
9  no = 0
10 print()
11 for n in range(jml):
12     nama.append(input("Nama Mahasiswa : "))
13     tugas.append(float(input("Nilai Tugas : ")))
14     uts.append(float(input("Nilai UTS : ")))
15     uas.append(float(input("Nilai UAS : ")))
16     print()
17     tugas
18
19 #output
20 print("-----")
21 print("No      Nama          Tugas   UTS   UAS   NA")
22 print("-----")
23 for i in range(jml):
24     no += 1
25     na = 30/100*tugas[i] + 30/100*uts[i] + 30/100*uas[i]
26     print(f'{no} {nama[i]} {tugas[i]} {uts[i]} {uas[i]} {na}')
27
28 print("-----")
```

Outputnya:

The screenshot shows the Visual Studio Code interface with a dark theme, focusing on the terminal tab. The terminal window displays the execution of the Python script. It first lists individual student data (name and four grades), then prints a header and a table of student names, their individual grades, and their calculated weighted averages (NA).

```
Nama Mahasiswa : Zayn
Nilai Tugas : 88
Nilai UTS : 99
Nilai UAS : 99

Nama Mahasiswa : Key
Nilai Tugas : 90
Nilai UTS : 99
Nilai UAS : 87

Nama Mahasiswa : Rara
Nilai Tugas : 78
Nilai UTS : 89
Nilai UAS : 90

Nama Mahasiswa : Tara
Nilai Tugas : 99
Nilai UTS : 89
Nilai UAS : 99

-----
```

No	Nama	Tugas	UTS	UAS	NA
1	Gita	88.0	99.0	99.0	91.4
2	Zayn	88.0	90.0	99.0	83.1
3	Key	90.0	98.0	87.0	89.1
4	Rara	78.0	89.0	90.0	77.1
5	Tara	99.0	89.0	90.0	83.4

4.

The screenshot shows the Visual Studio Code interface with a Python script named `Untitled-1.py` open in the editor. The code prompts the user for the number of elements in a list and then asks for each element. It stores the elements in a list and prints the list. Finally, it iterates through the list to print only the even numbers. The terminal below shows the execution of the script and its output.

```
PROGRAM MENCARI BILANGAN GENAP
-----
list = []
n = int(input("Banyak Data : "))

print()
for i in range(n):
    bil = int(input("Masukkan bilangan ke-{} : ".format(i + 1)))
    list.append(bil)

print()
print("List bilangan : ", list)
print("\nbilangan didalam list yang merupakan angka genap adalah :")
for x in list:
    if x % 2 == 0:
        print(x, end=" ")
```

Masukkan bilangan ke-2 : 4
Masukkan bilangan ke-3 : 3
Masukkan bilangan ke-4 : 2
Masukkan bilangan ke-5 : 1
Masukkan bilangan ke-6 : 8
Masukkan bilangan ke-7 : 9

List bilangan : [5, 4, 3, 2, 1, 8, 9]
Bilangan didalam list yang merupakan angka genap adalah :
4 2 8

Python 3.10.0 64-bit 0 0 ▲ 0 Type here to search 27°C Hujan sedang 19/11/2021

5.

The screenshot shows the Visual Studio Code interface with a Python script named `Untitled-1.py` open in the editor. The code defines a list of integers and then prints the maximum value using the `max()` function. The terminal below shows the execution of the script and its output.

```
data = [1,4,5,6,7,8,80,9]
print("bilangan terbesar =",max(data))
```

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell <https://aka.ms/pscore6>
PS C:\Users\ACER\Downloads> & C:/Users/ACER/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ACER/Downloads/Untitled-1.py
bilangan terbesar = 80

Python 3.10.0 64-bit 0 0 ▲ 0 Type here to search 27°C Hujan sedang 20:06 19/11/2021

6.

The screenshot shows the Visual Studio Code interface with the file 'Infaq.py' open. The code is a Python script that prompts the user for the number of data points, reads them into a list, and then prints various statistics about the data. The code includes conditional statements for even numbers, positive numbers, odd multiples of 3, and numbers not divisible by 3.

```
File Edit Selection View Go Run Terminal Help
Infaq.py - Downloads - Visual Studio Code
Get Started Infaq.py Untitled-1.py
EXPLORER > DOWNLOADS > OUTLINE
Python 3.10.0 64-bit 0 △ 0
Type here to search
Ln 31, Col 29 Spaces: 4 UTF-8 CRLF Python ⚙
Windows PowerShell Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS C:\Users\ACER\Downloads> & C:/Users/ACER/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ACER/Downloads/Infaq.py
PROGRAM PENGINPUTAN DATA
-----
Banyak Data : 5
Masukkan bilangan ke-1 : 7
Masukkan bilangan ke-2 : 8
Masukkan bilangan ke-3 : 9
Masukkan bilangan ke-4 : 5
Masukkan bilangan ke-5 : 4
List bilangan : [7, 8, 9, 5, 4]
a. Data berindeks genap :
8 4
b. Data bernilai positif :
7 8 9 5 4
c. Data bilangan ganjil berkelipatan 3 :
9
d. Data yang tidak habis dibagi 3 :
7 9 5
PS C:\Users\ACER\Downloads>
26°C Hujan ringan 20:43 19/11/2021
```

Outputnya:

The screenshot shows the Visual Studio Code interface with the terminal tab active. It displays the command to run the script and the resulting output. The user inputs five integers, and the script prints them back along with their classification as even, positive, odd multiples of 3, or not divisible by 3.

```
File Edit Selection View Go Run Terminal Help
Infaq.py - Downloads - Visual Studio Code
PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
Windows PowerShell Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS C:\Users\ACER\Downloads> & C:/Users/ACER/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ACER/Downloads/Infaq.py
PROGRAM PENGINPUTAN DATA
-----
Banyak Data : 5
Masukkan bilangan ke-1 : 7
Masukkan bilangan ke-2 : 8
Masukkan bilangan ke-3 : 9
Masukkan bilangan ke-4 : 5
Masukkan bilangan ke-5 : 4
List bilangan : [7, 8, 9, 5, 4]
a. Data berindeks genap :
8 4
b. Data bernilai positif :
7 8 9 5 4
c. Data bilangan ganjil berkelipatan 3 :
9
d. Data yang tidak habis dibagi 3 :
7 9 5
PS C:\Users\ACER\Downloads>
```

7.

```
File Edit Selection View Go Run Terminal Help Untitled-1.py - Downloads - Visual Studio Code
EXPLORER > DOWNLOADS Get Started Untitled-1.py
> OUTLINE Untitled-1.py > ...
1 print("PROGRAM MENCARI BANYAK DATA BERKELIPATAN 5")
2 print("-----\n")
3
4 list_1 = []
5 list_2 = []
6 x = int(input("Banyak Data : "))
7
8 print()
9 for i in range(x):
10     bil = int(input("Masukan bilangan ke-{} : ".format(i + 1)))
11     list_1.append(bil)
12
13 print()
14 print("List bilangan : ", list_1)
15 print("\nBilangan di dalam list yang berkelipatan 5 adalah :")
16 for x in list_1:
17     if x % 5 == 0:
18         print(x, end=' ')
19         list_2.append(x)
20
21 print()
22 print("\nJadi, banyaknya bilangan yang berkelipatan 5 adalah :")
23 print(len(list_2))

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
Jadi, banyaknya bilangan yang berkelipatan 5 adalah :
1
PS C:\Users\ACER\Downloads>
Python 3.10.0 64-bit 0 0 0 Type here to search O PowerShell Python 25°C Hujan sedang 20:51 19/11/2021
```

Outputnya:

```
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> OUTLINE Windows PowerShell Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS C:\Users\ACER\Downloads> & C:/Users/ACER/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ACER/Downloads/Untitled-1.py
-----
```

```
Banyak Data : 4
Masukan bilangan ke-1 : 5
Masukan bilangan ke-2 : 6
Masukan bilangan ke-3 : 7
Masukan bilangan ke-4 : 8

List bilangan : [5, 6, 7, 8]
Bilangan di dalam list yang berkelipatan 5 adalah :
5

Jadi, banyaknya bilangan yang berkelipatan 5 adalah :
1
PS C:\Users\ACER\Downloads>
```

```
Python 3.10.0 64-bit 0 0 0 Type here to search O PowerShell Python 25°C Hujan sedang 20:52 19/11/2021
```

8.

9.

```
Infaq.py - Downloads - Visual Studio Code
File Edit Selection View Go Run Terminal Help
EXPLORER > DOWNLOADS ... Get Started Infraq.py Untitled-1.py
Infaq.py > ...
1 daftar = []
2 total = 0
3 x = int(input("Banyak Data : "))
4
5 print()
6 for i in range(x):
7     bil = int(input("Masukkan bilangan ke-{0} : ".format(i + 1)))
8     daftar.append(bil)
9
10 print("\nList bilangan :", daftar)
11 print()
12 a = int(input("Masukkan angka yang ingin dicari : "))
13 for item in daftar:
14     if item == a:
15         total += 1
16 print(f"Banyaknya bilangan {a} di dalam list adalah {total}")

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
PS C:\Users\ACER\Downloads> & C:/Users/ACER/AppData/Local/Programs/Python/Python310/python.exe c:/Users/ACER/Downloads/Infaq.py
Banyak Data : 4
Masukkan bilangan ke-1 : 5
Masukkan bilangan ke-2 : 6
Masukkan bilangan ke-3 : 7
Masukkan bilangan ke-4 : 8
List bilangan : [5, 6, 7, 8]
Masukkan angka yang ingin dicari : 8
Banyaknya bilangan 8 di dalam list adalah 1
PS C:\Users\ACER\Downloads>

Python 3.10.0 64-bit ① 0 △ 0
Type here to search
Ln 16, Col 62 Spaces: 4 UTF-8 CRLF Python ⚙️
25°C Hujan ringan 22:53 19/11/2021
```