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LATIHAN MODUL 1

TINJAUAN ULANG PYTHON

1.1 memulai ulang python

```
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
>>> 2 + 3
5
>>> 2 + 3 * 5 - 6 / 2
14.0
>>> 2 ** 1000
10715086071862673209484250490600018105614048117055336074437503883703510511249361
22493198378815695858127594672917553146825187145285692314043598457757469857480393
45677748242309854210746050623711418779541821530464749835819412673987675591655439
46077062914571196477686542167660429831652624386837205668069376
>>> radius = 4
>>> pi = 3.14159
>>> area = pi * radius * radius
>>> print(area)
50.26544
>>> x = 4
>>> print(x)
4
>>> x = 5
>>> print(x)
5
>>> a = 5
>>> b = 6.2
>>> type(a)
<class 'int'>
>>> type(b)
<class 'float'>
>>> s = "apa kabar"
>>> s
'apa kabar'
>>> type(s)
<class 'str'>
>>> a = "halo"
>>> b = "mas"
>>> c = "data"
>>> d = a + b + c
>>> d
'halomasdata'
>>> g = "34"
>>> h = 23
>>> g + h
```

Ln: 46 Col: 4

```
>>> g + h
Traceback (most recent call last):
  File "<pyshell#25>", line 1, in <module>
    g + h
TypeError: can only concatenate str (not "int") to str
>>> int(g) + h
57
>>> |
```

Ln: 46 Col: 4

1.2 list dan tuple (dan string lagi)

```
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
>>> f = 2.5
>>> g = 7
>>> d = [f, g, 3.9, 8, "apa kabar"]
>>> type(d)
<class 'list'>
>>> d[0] = 55
>>> d
[55, 7, 3.9, 8, 'apa kabar']
>>> for i in d:
    print(i)

55
7
3.9
8
apa kabar
>>> a = "wacana keilmuan dan keislaman"
>>> b = [43,44,45,46,47,48,49,50]
>>> a[0:6]
'wacana'
>>> a[7:15]
'keilmuan'
>>> a[: -1]
'wacana keilmuan dan keislama'
>>> a[-7:-2]
'islam'
>>> a[-7:100]
'islaman'
>>> len(a)
29
>>> a[0:29]
'wacana keilmuan dan keislaman'
>>> a[0:100]
'wacana keilmuan dan keislaman'
>>> a[0:29:2]
'wcn elundnkilmn'
>>> a[0:200:2]
'wcn elundnkilmn'
>>> |
```

Ln: 85 Col: 4

1.3 dictionary

```
>>> dd = {"nama": "joko", "umur": 21, "asal": "surakarta"}
>>> dd["nama"]
'joko'
>>> |
```

1.4 set



```
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> keranjang = {"apel", "jeruk", "apel", "manggis", "jeruk", "pisang"}
>>> print(keranjang)
{'jeruk', 'pisang', 'manggis', 'apel'}
>>> "jeruk" in keranjang
True
>>> "rumpun" in keranjang
False
>>> a = set("surakarta")
>>> b = set("yogyakarta")
>>> a
{'s', 't', 'r', 'a', 'k', 'u'}
>>> b
{'g', 't', 'a', 'r', 'k', 'y', 'o'}
>>> a - b
{'s', 'u'}
>>> a | b
{'s', 'g', 't', 'r', 'a', 'k', 'u', 'y', 'o'}
>>> a & b
{'t', 'r', 'k', 'a'}
>>> a - b
{'s', 'u'}
>>> a ^ b
{'s', 'g', 'u', 'y', 'o'}
>>> |
```

Ln: 26 Col: 4

1.5 operator relasional dan tipe data Boolean

```
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
>>> p = 3
>>> q = 7
>>> p > q
False
>>> p < q
True
>>> p == q
False
>>> 4 < 8
True
>>> 4 > 8
False
>>> 4 == 4
True
>>> 4 < 4
False
>>> 4 <= 4
True
>>> "UMS" > "UGM"
True
>>> "UMS" > "ITB"
True
>>> "emas" < "sayur"
True
>>> "a" > "b"
False
>>> "a" < "z"
True
>>> "A" > "a"
False
>>> v = 5 < 7
>>> ff = "UMS" > "UGM"
>>> type(ff)
<class 'bool'>
>>> g = 3 == 3
>>> g
True
>>> |
```

Ln: 63 Col: 4

1.6 file.py

Latihan 1.1

```
LatReview1.py - E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview1.py (3.8.2)
File Edit Format Run Options Window Help
a = 4
b = 5
c = a + b
print("nilai a = ",a)
print("nilai b = ",b)
print("sekarang, c = a + b" , a, "+" ,b,"=" ,c)
print('')
print("sudah selesai")
|

===== RESTART: E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview1.py =====
nilai a = 4
nilai b = 5
sekarang, c = a + b 4 + 5 = 9

sudah selesai
>>> |
```

Latihan 1.2

```
LatReview2.py - E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview2.py (3.8.2)
File Edit Format Run Options Window Help
print("kita perlu bicara sebentar...")
nm = input("siapa namamu ?")
print("selamat belajar",nm)
angkastr = input("masukkan sebuah angka antara 1 sampai 100")
a = int(angkastr)
kuadratnya = a * a
print(nm + ", tahukah kamu bahwa ", a , "kuadrat adalah", kuadratnya,"?")
|

===== RESTART: E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview2.py =====
kita perlu bicara sebentar...
siapa namamu ?Ismi Dzikrina
selamat belajar Ismi Dzikrina
masukkan sebuah angka antara 1 sampai 10025
Ismi Dzikrina, tahukah kamu bahwa 25 kuadrat adalah 625 ?
>>> |
```

1.7 fungsi

Latihan 1.3

```
LatReview3.py - E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview3.py (3.8.2)
File Edit Format Run Options Window Help

def ucapkansalam():
    print("assalamu'alaikum")

def sapa(nama):
    ucapkansalam()
    print("halo")
    print("selamat belajar")

def kuadratkan(b):
    h = b*b
    return h
```

Ln: 9 Col: 0

```
>>> ucapkansalam()
assalamu'alaikum
>>> sapa("mas wowok")
assalamu'alaikum
halo
selamat belajar
>>> b = kuadratkan(5)
>>> b
25
>>> k = 9
>>> print("bilangannya",k, "kalau dipangkatkan dua jadinya",kuadratkan(k))
bilangannya 9 kalau dipangkatkan dua jadinya 81
>>> |
```

Latihan 1.4

```
LatReview4.py - E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview4.py (3.8.2)
File Edit Format Run Options Window Help

from math import sqrt as akar
def selesaikanABC(a,b,c):
    a = float(a)
    b = float(b)
    c = float(c)
    D = b ** 2 - 4 * a * c
    x1 = (-b + akar(D)/(2*a))
    x2 = (-b - akar(D)/(2*a))
    hasil = (x1,x2)
    return hasil
```

Ln: 1 Col: 0

```
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: E:\KULIAH\SEMESTER 4\prak algostruk\MODUL 1\LatReview4.py =====
>>> k = selesaikanABC(1,-5,6)
>>> k
(5.5, 4.5)
>>> k[0]
5.5
>>> k[1]
4.5
>>> |
```

Ln: 12 Col: 4

1.8 pengambilan keputusan

Latihan 1.5

```
LatReview5.py - E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview5.py (3.8.2)
File Edit Format Run Options Window Help
def apakahgenap(x):
    if (x % 2 == 0):
        return True
    else:
        return False

===== RESTART: E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview5.py =====
>>> apakahgenap(48)
True
>>> apakahgenap(37)
False
>>> |
```


Latihan 1.6

```
LatReview6.py - E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview6.py (3.8.2)
File Edit Format Run Options Window Help

def tigaataulima(x):
    if (x % 3 == 0 and x % 5 == 0):
        print("bilangan itu adalah kelipatan tiga atau lima")
    elif (x % 3 == 0):
        print("bilangan itu adalah kelipatan tiga")
    elif (x % 5 == 0):
        print("bilangan itu adalah kelipatan lima")
    else:
        print("bilangan itu bukan kelipatan tiga maupun lima")

Ln: 6 Col: 6
```

```
===== RESTART: E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview6.py
>>> tigaataulima(9)
bilangan itu adalah kelipatan tiga
>>> tigaataulima(10)
bilangan itu adalah kelipatan lima
>>> tigaataulima(15)
bilangan itu adalah kelipatan tiga atau lima
>>> tigaataulima(17)
bilangan itu bukan kelipatan tiga maupun lima
>>> |
```

Latihan 1.7

```
LatReview7.py - E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview7.py (3.8.2)
File Edit Format Run Options Window Help

staff = {"santi": "santi@ums.ac.id", \
        "jokowi": "jokowi@solokab.go.id", \
        "endang": "endang@yahoo.com", \
        "sulastri": "sulastri3@gmail.com"}
yangdicari = "santi"
if yangdicari in staff:
    print("emailnya", yangdicari, "adalah", staff[yangdicari])
else:
    print("tidak ada yang namanya", yangdicari)

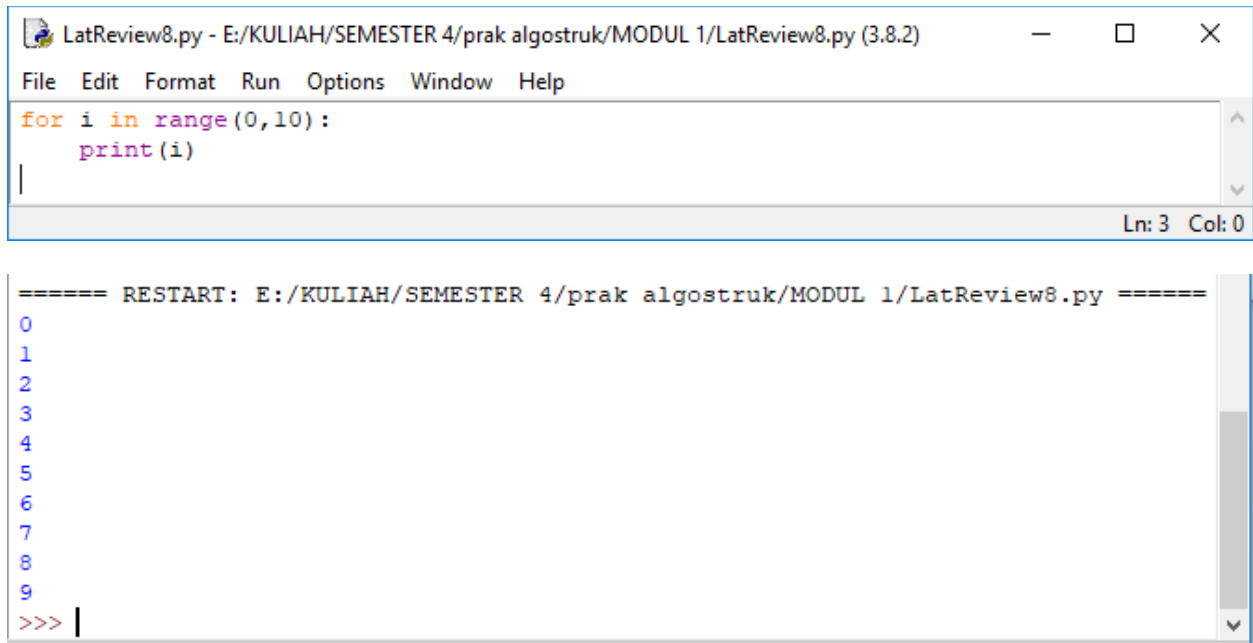
Ln: 7 Col: 8
```

```
===== RESTART: E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview7.py =====
emailnya santi adalah santi@ums.ac.id
>>> |

Ln: 21
```

1.9 loop

Latihan 1.8

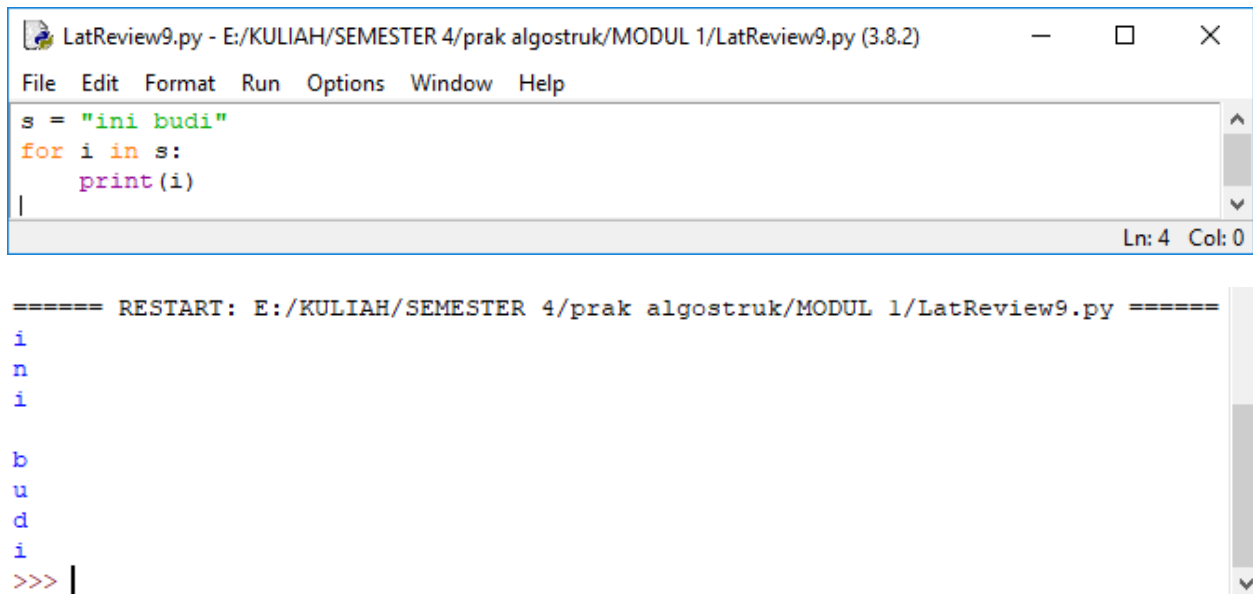


The screenshot shows a Python IDE window titled "LatReview8.py - E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview8.py (3.8.2)". The menu bar includes File, Edit, Format, Run, Options, Window, and Help. The code editor contains a for loop that prints numbers from 0 to 9. The output window shows the results of the loop, with each number on a new line. The status bar at the bottom right indicates "Ln: 3 Col: 0".

```
File Edit Format Run Options Window Help
for i in range(0,10):
    print(i)
|

===== RESTART: E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview8.py =====
0
1
2
3
4
5
6
7
8
9
>>> |
```

Latihan 1.9



The screenshot shows a Python IDE window titled "LatReview9.py - E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview9.py (3.8.2)". The menu bar includes File, Edit, Format, Run, Options, Window, and Help. The code editor contains a for loop that iterates over the string "ini budi" and prints each character. The output window shows the characters of the string, with each character on a new line. The status bar at the bottom right indicates "Ln: 4 Col: 0".

```
File Edit Format Run Options Window Help
s = "ini budi"
for i in s:
    print(i)
|

===== RESTART: E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview9.py =====
i
n
i

b
u
d
i
>>> |
```

```
LatReview9.py - E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview9.py (3.8.2)
File Edit Format Run Options Window Help

##s = "ini budi"
##for i in s:
##    print(i)

s = [4,3,2,5,6]
for i in s:
    print(i)
|

Ln: 7 Col: 12

>>>
===== RESTART: E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview9.py =====
4
3
2
5
6
>>> |
```

Latihan 1.10

```
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help

LatReview10.py - E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview10.py (3.8.2)
File Edit Format Run Options Window Help

dd = {"nama": "joko", "umur": 21, "asal": "surakarta"}
for kunci in dd:
    print(kunci, "<----->", dd[kunci])

Ln: 3 Col: 4

>>>
===== RESTART: E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview10.py =====
nama <-----> joko
umur <-----> 21
asal <-----> surakarta
>>>

Ln: 55 Col: 4
```

Latihan 1.11

```
LatReview11.py - E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview11.py (3.8.2)
File Edit Format Run Options Window Help
bil = 0
while(bil*bil<200):
|   print(bil,bil*bil)
    bil = bil + 1
Ln: 3 Col: 0
```

```
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
===== RESTART: E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview11.py =====
0 0
1 1
2 4
3 9
4 16
5 25
6 36
7 49
8 64
9 81
10 100
11 121
12 144
13 169
14 196
>>>
>>>
Ln: 52 Col: 18
```

1.10 kata-kata kunci di python

```
>>> import keyword
>>> keyword.kwlist
['False', 'None', 'True', 'and', 'as', 'assert', 'async', 'await', 'break', 'cla
ss', 'continue', 'def', 'del', 'elif', 'else', 'except', 'finally', 'for', 'from
', 'global', 'if', 'import', 'in', 'is', 'lambda', 'nonlocal', 'not', 'or', 'pas
s', 'raise', 'return', 'try', 'while', 'with', 'yield']
>>> |
Ln: 76 Col: 4
```