

VIRLIANA AR

L20180017

A

MODUL 1

LATIHAN

1.1 memulai ulang python

```
>>> 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
```

```

>>> 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'
>>> |

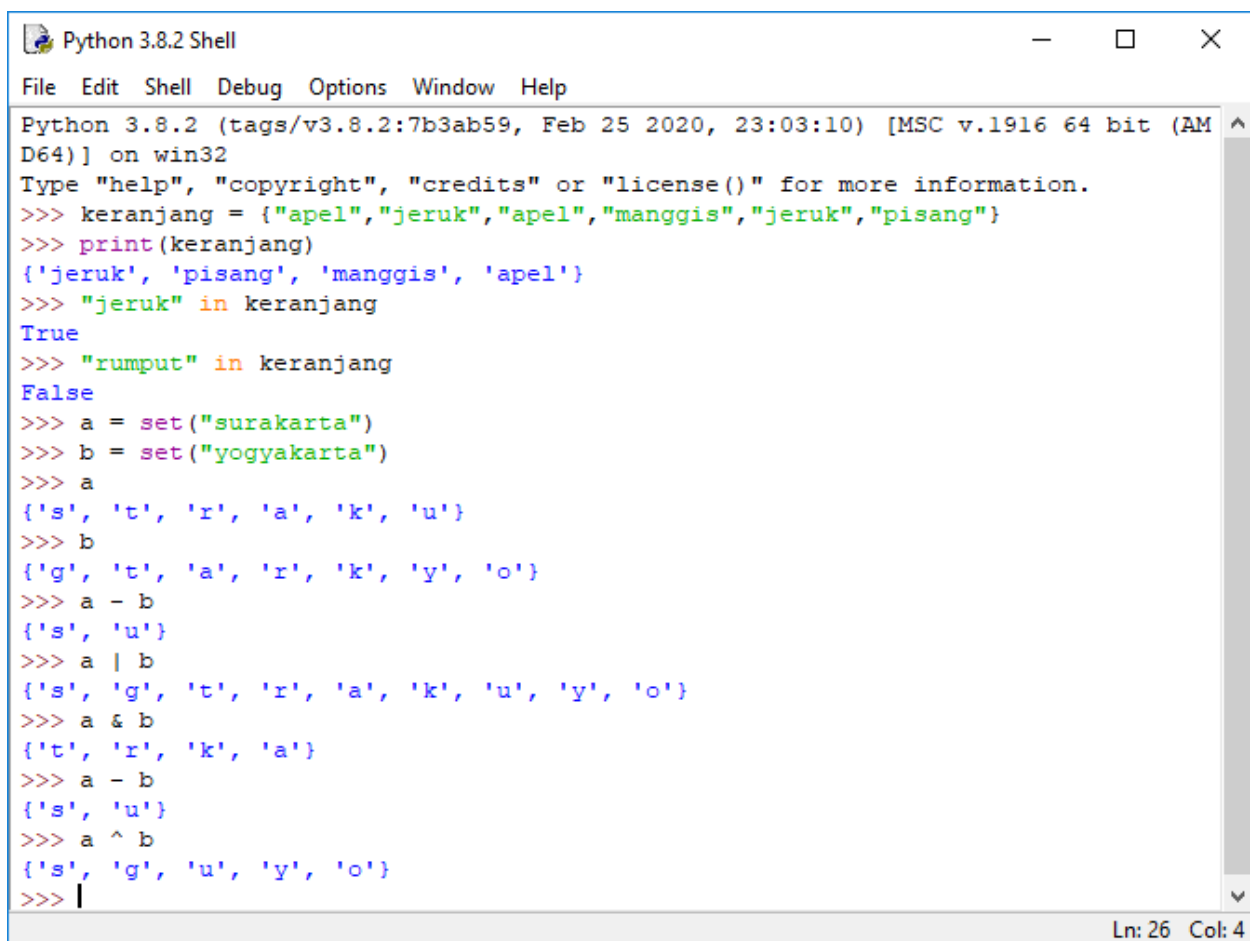
```

Ln: 85 Col: 4

1.3 Dictionary

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

1.4 set

A screenshot of a Python 3.8.2 Shell window. The window title is "Python 3.8.2 Shell". The menu bar includes "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The main text area shows the following code and output:

```
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'}
>>> |
```

The status bar at the bottom right indicates "Ln: 26 Col: 4".

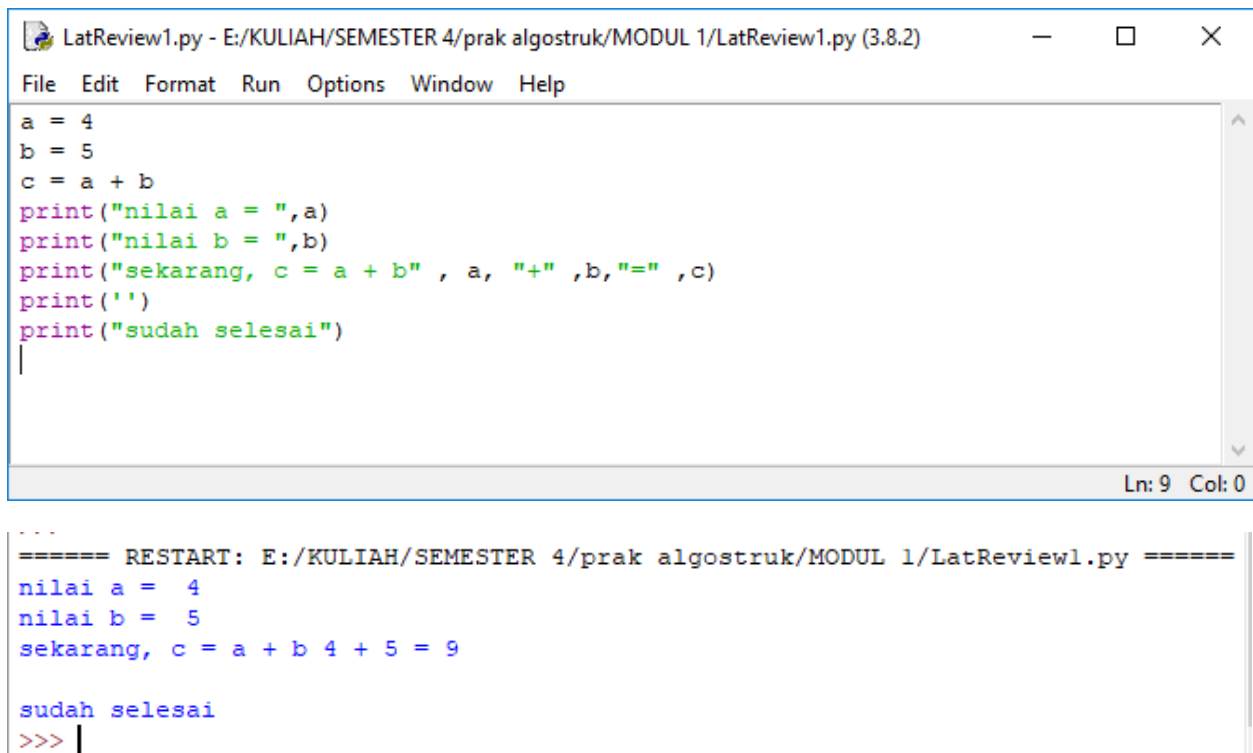
1.5 operator relasional dan tipe data Boolean

```
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

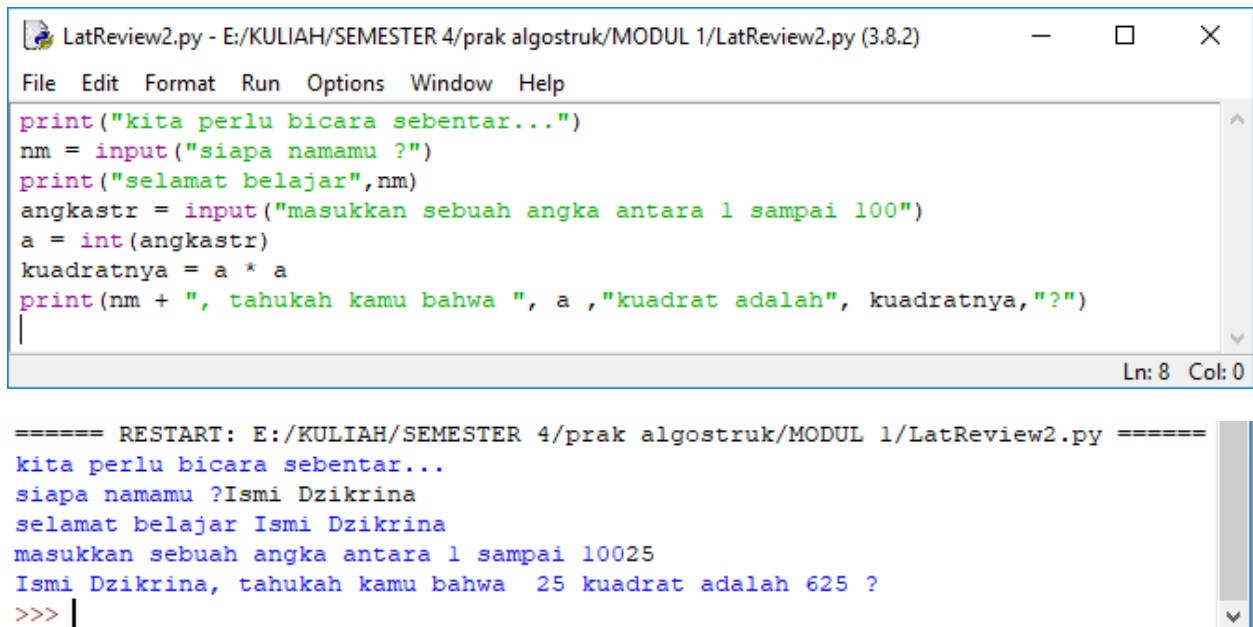
a = 4
b = 5
c = a + b
print("nilai a = ",a)
print("nilai b = ",b)
print("sekarang, c = a + b" , a, "+" ,b,"=" ,c)
print('')
print("sudah selesai")

Ln: 9 Col: 0

===== 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,"?")

Ln: 8 Col: 0

===== 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)

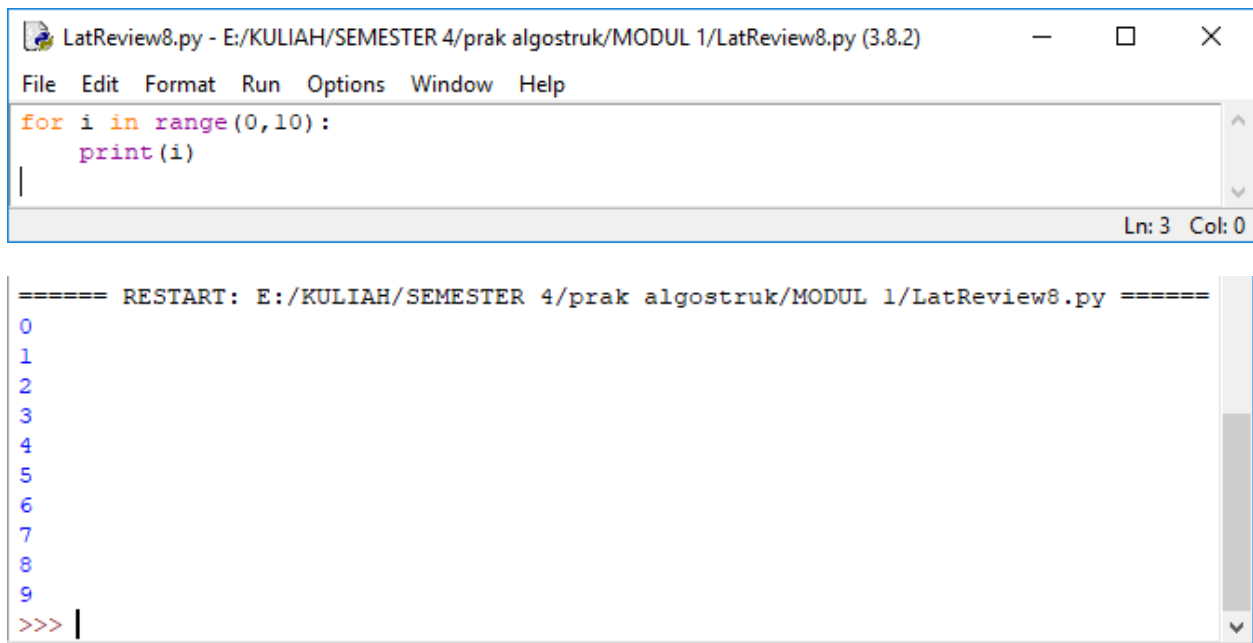
Ln: 7 Col: 8
```

```
===== 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

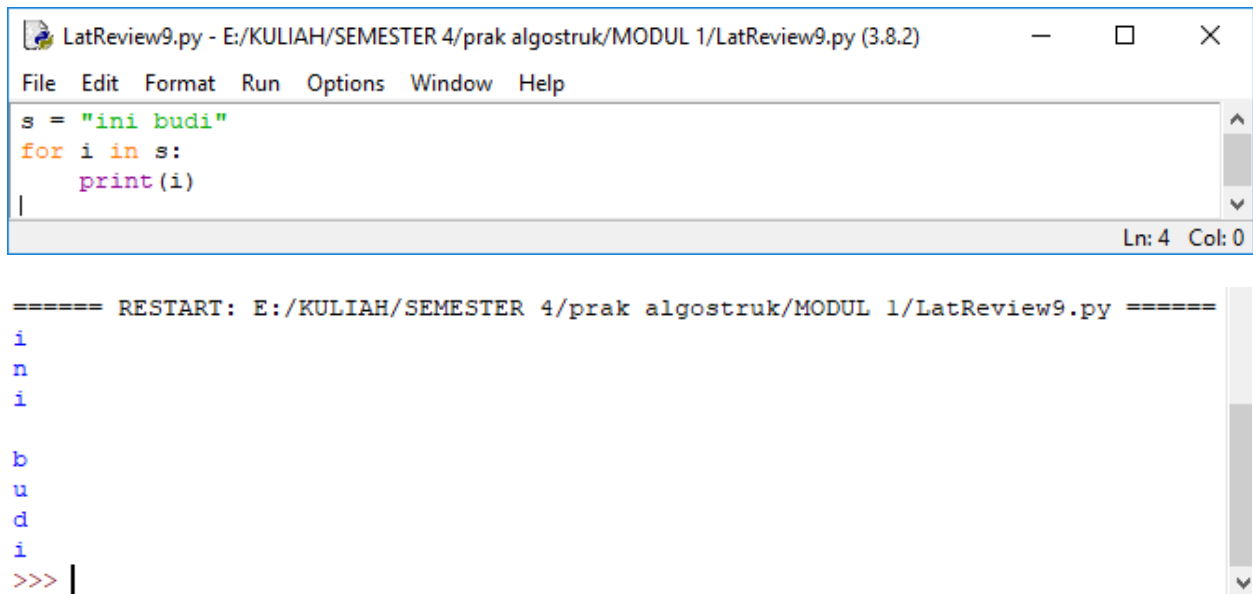


The screenshot shows a Python IDE window titled "LatReview8.py - E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview8.py (3.8.2)". The menu bar includes File, Edit, Format, Run, Options, Window, and Help. The code editor contains a for loop that prints numbers from 0 to 9. The output window shows the 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 loop that iterates over the string "ini budi" and prints each character. The output window shows the characters of the string, one per 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', 'class', 'continue', 'def', 'del', 'elif', 'else', 'except', 'finally', 'for', 'from', 'global', 'if', 'import', 'in', 'is', 'lambda', 'nonlocal', 'not', 'or', 'pass', 'raise', 'return', 'try', 'while', 'with', 'yield']
>>> |
Ln: 76 Col: 4
```