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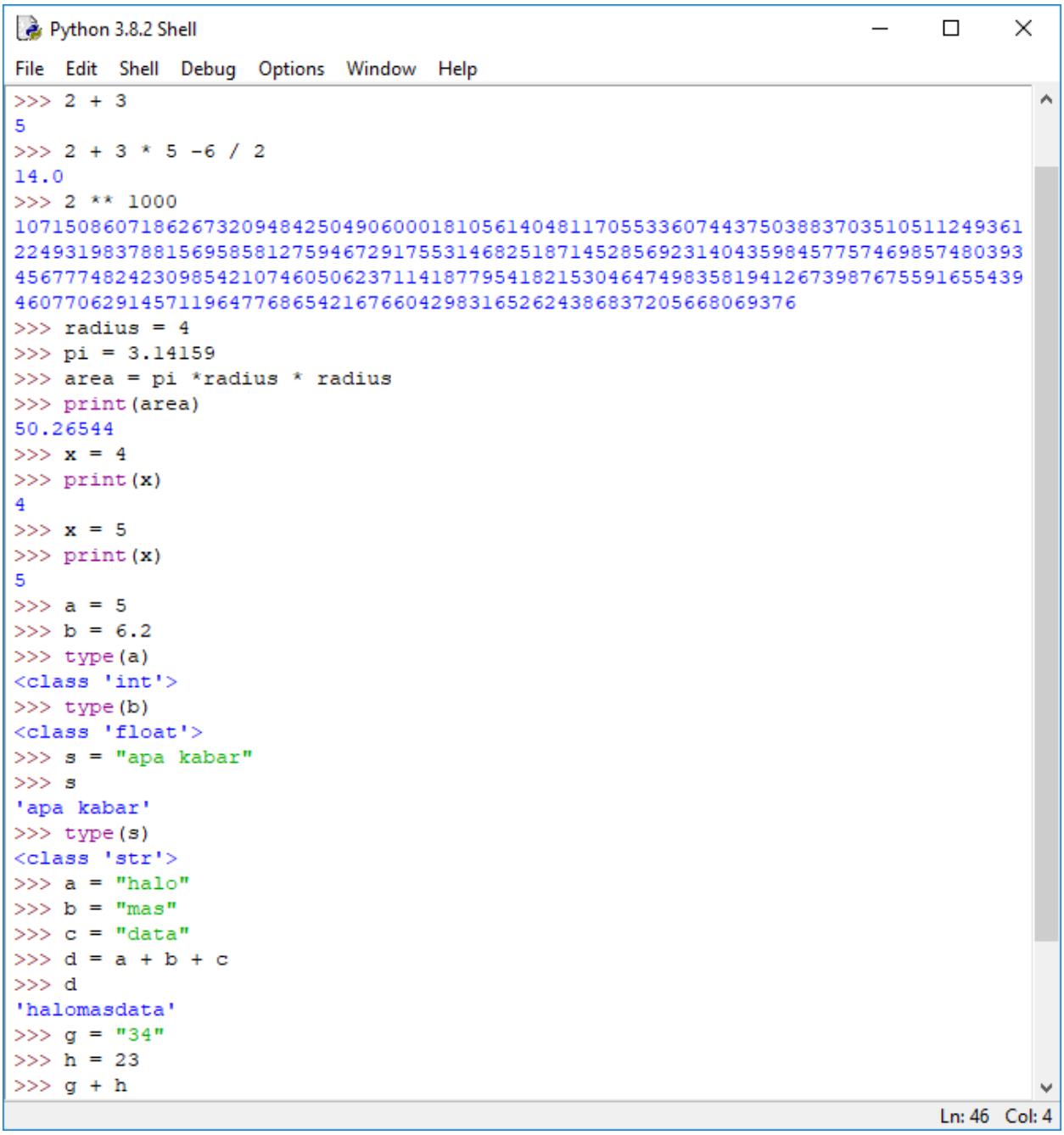
Kelas : A

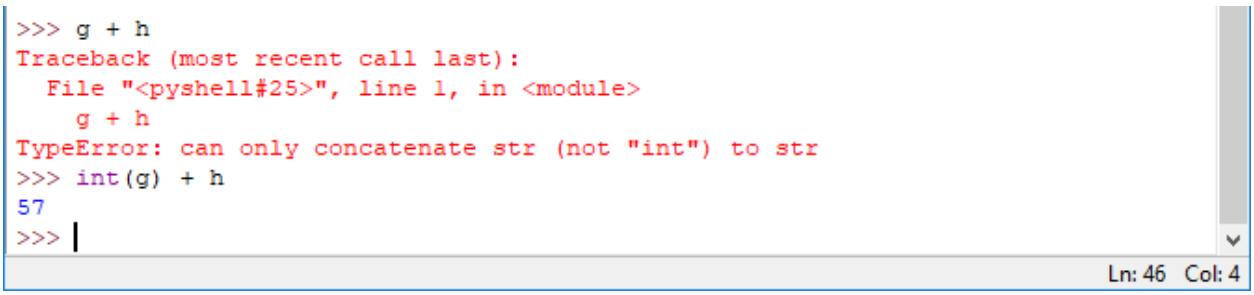
Matkul : Praktikum Algoritma Dan Struktur Data

LATIHAN MODUL 1

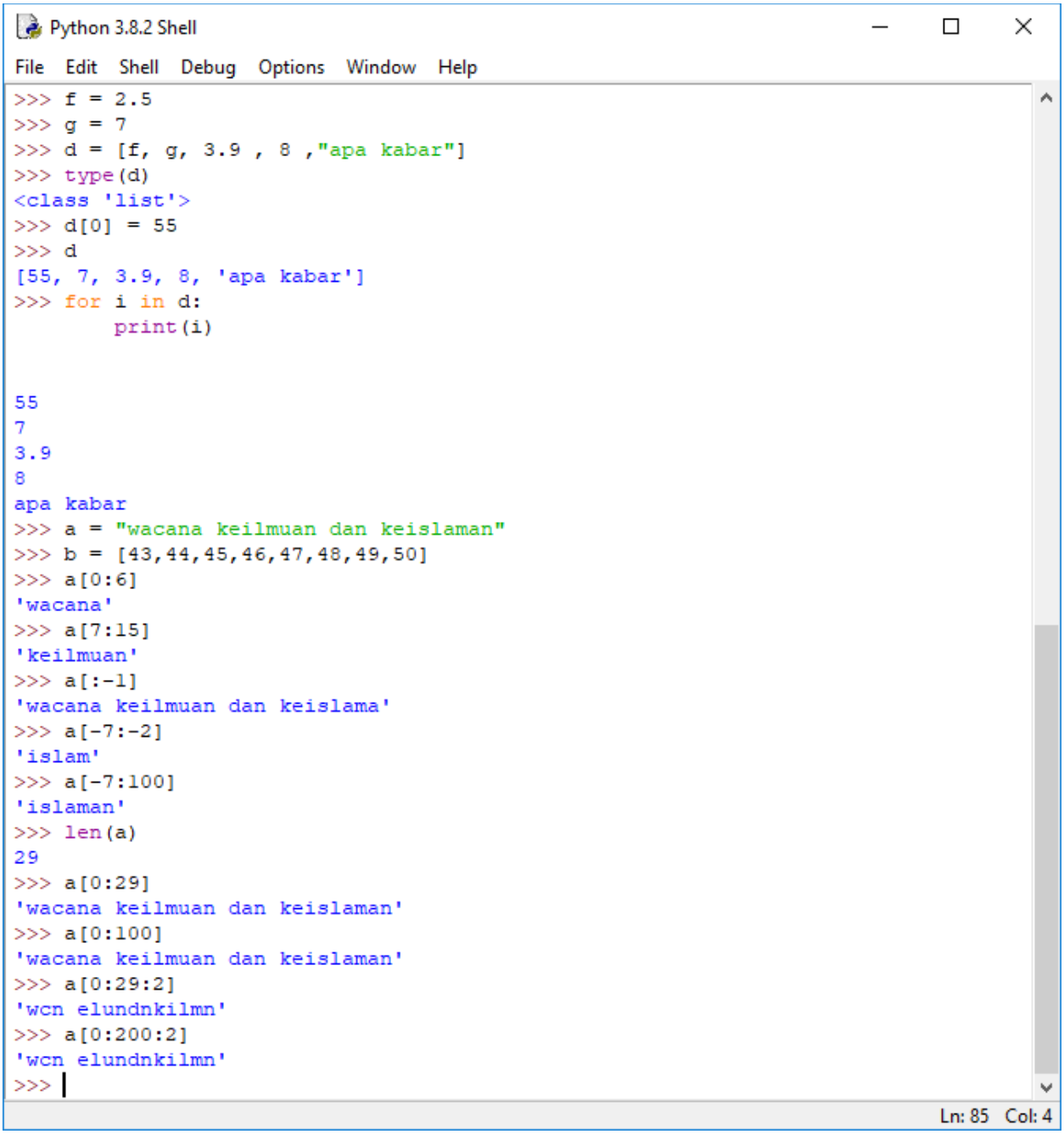
TINJAUAN ULANG PYTHON

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)



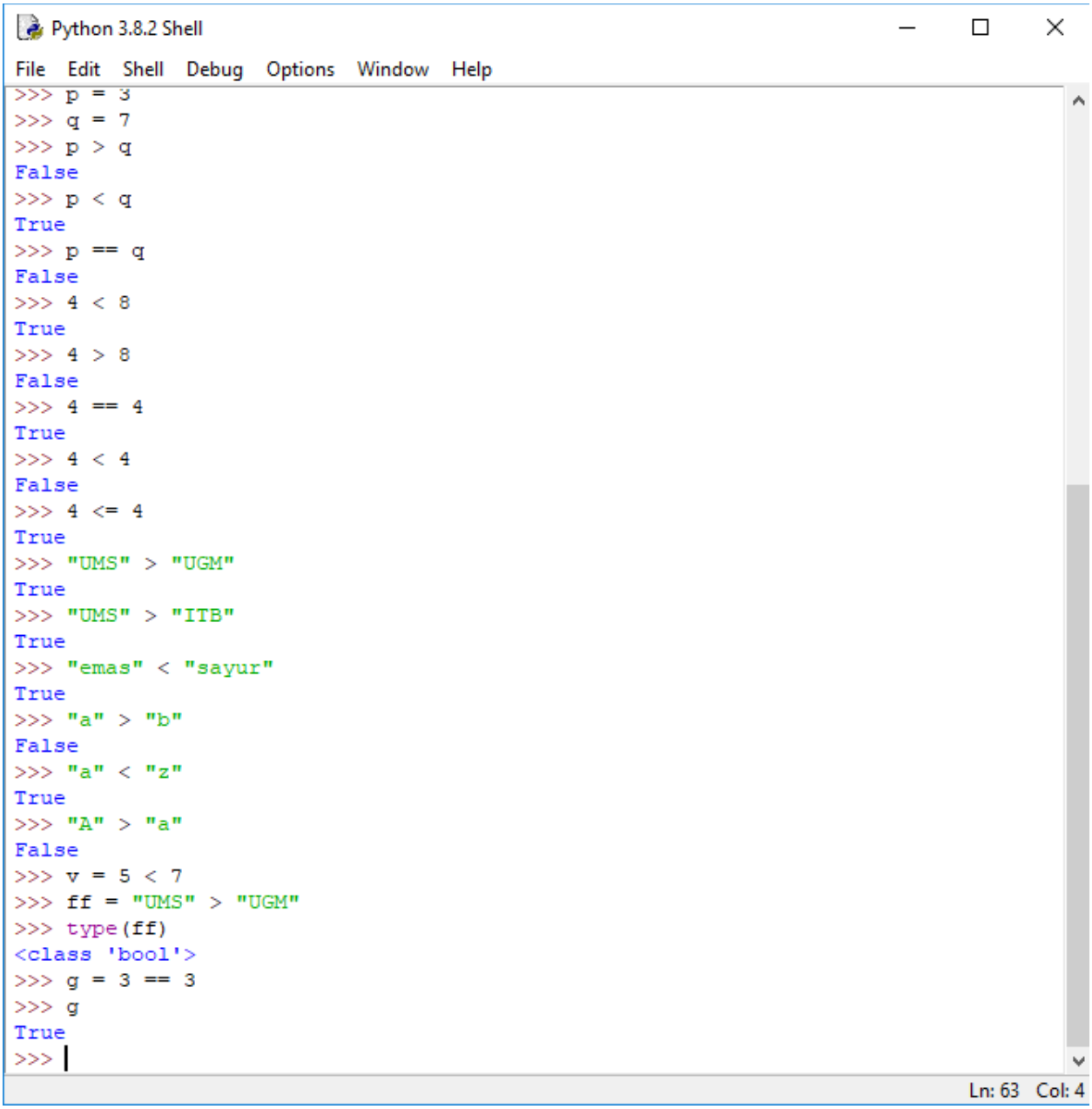
1.3 dictionary

```
>>> 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
>>> "rumput" 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



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
>>>
```

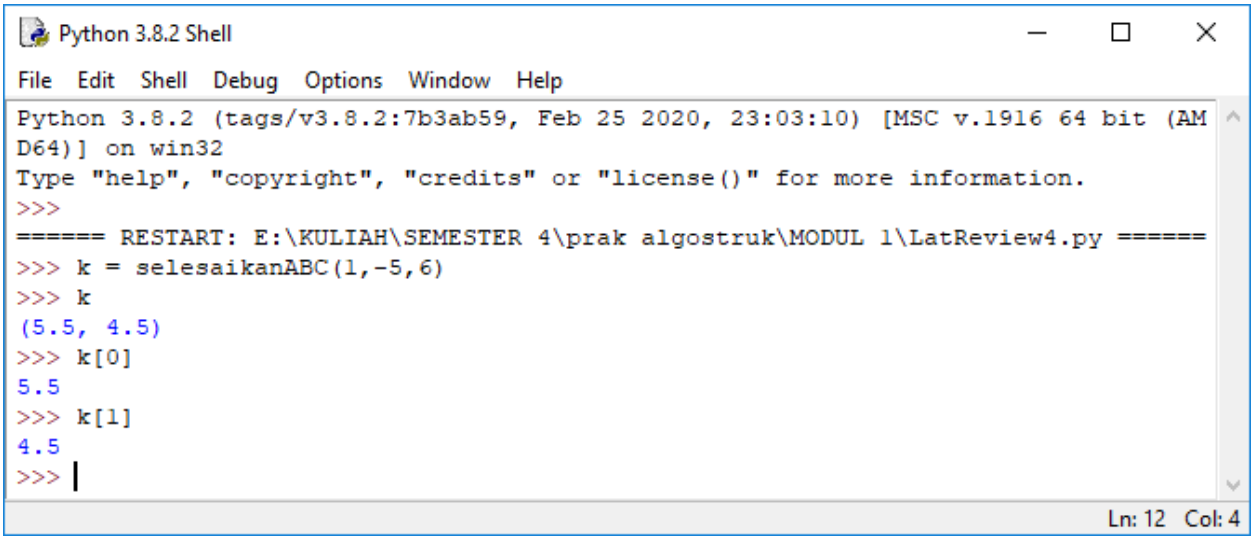
Latihan 1.4

LatReview4.py - E:\KULIAH\SEMESTER 4\prak algostruk\MODUL 1\LatReview4.py (3.8.2)

File Edit Format Run Options Window Help

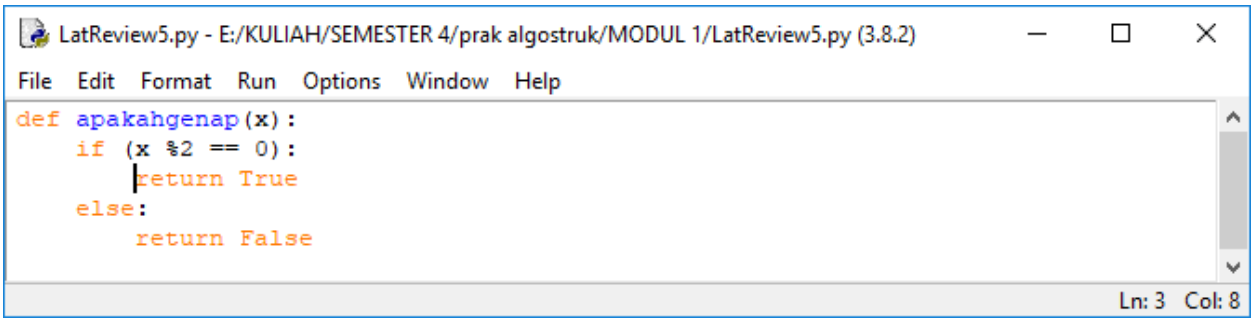
```
from math import sqrt as akar
def selesaikanABC(a,b,c):
    a = float(a)
    b = float(b)
    c = float(c)
    D = b ** 2 - 4 * a *c
    x1 = (-b + akar(D)/(2*a))
    x2 = (-b - akar(D)/(2*a))
    hasil = (x1,x2)
    return hasil
```

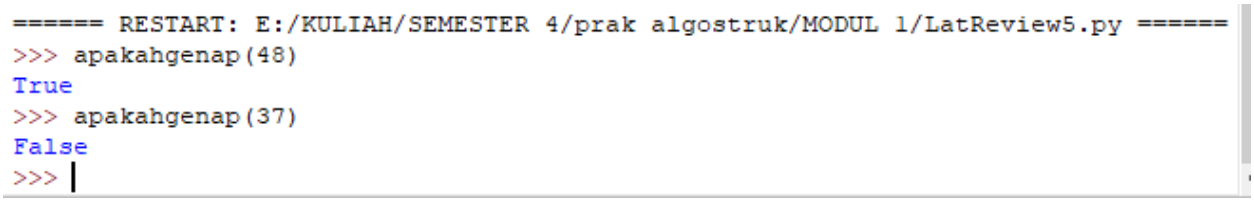
Ln: 1 Col: 0



1.8 pengambilan keputusan

Latihan 1.5





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.p
>>> 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("tidaka ada yang namanya", yangdicari)
```

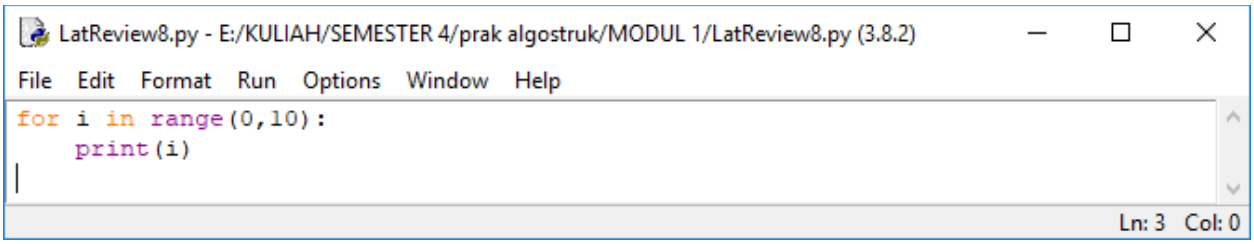
Ln: 7 Col: 8

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

Ln: 21

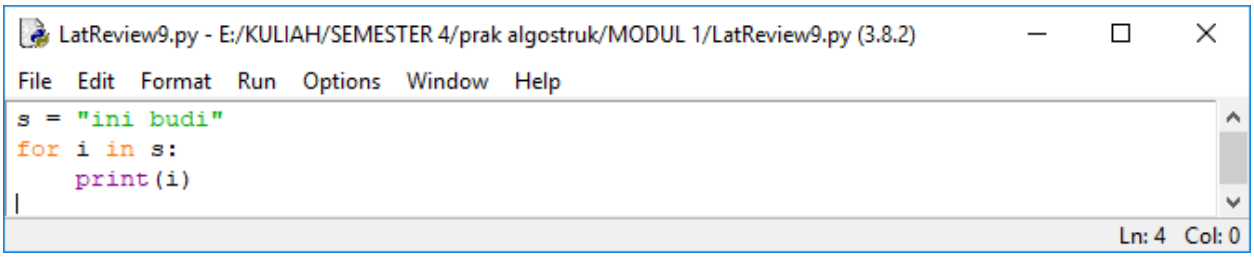
1.9 loop

Latihan 1.8

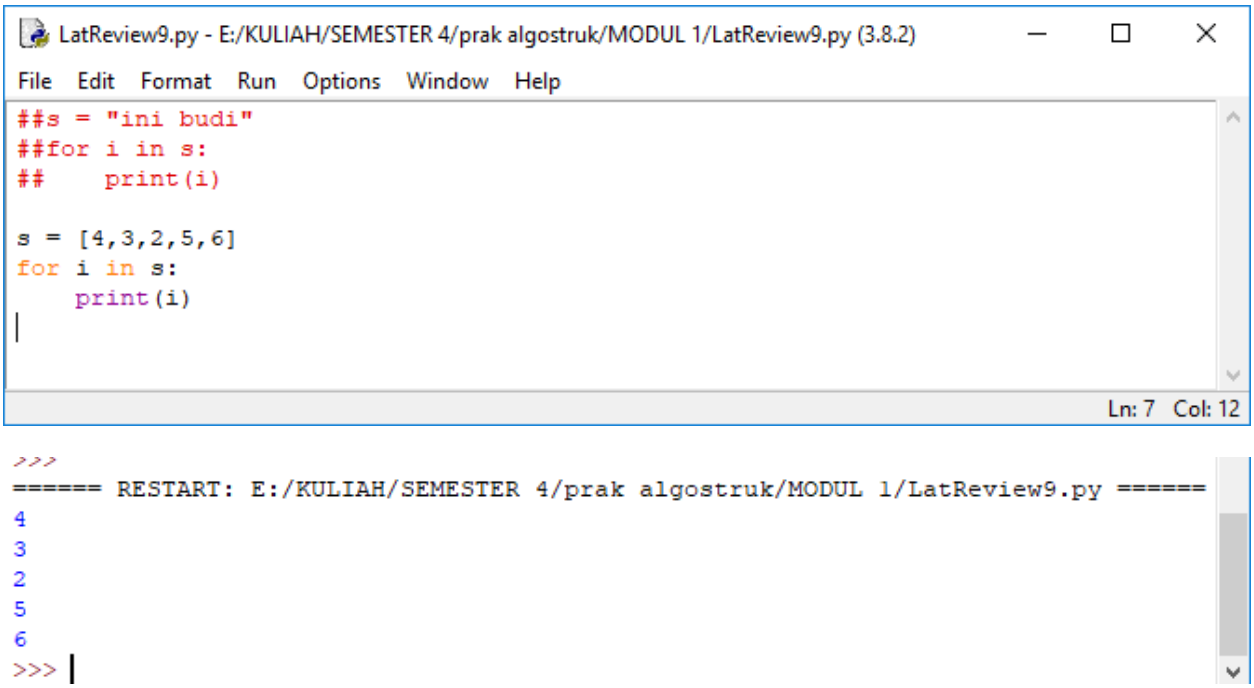



```
====== RESTART: E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview8.py ======
0
1
2
3
4
5
6
7
8
9
>>>
```

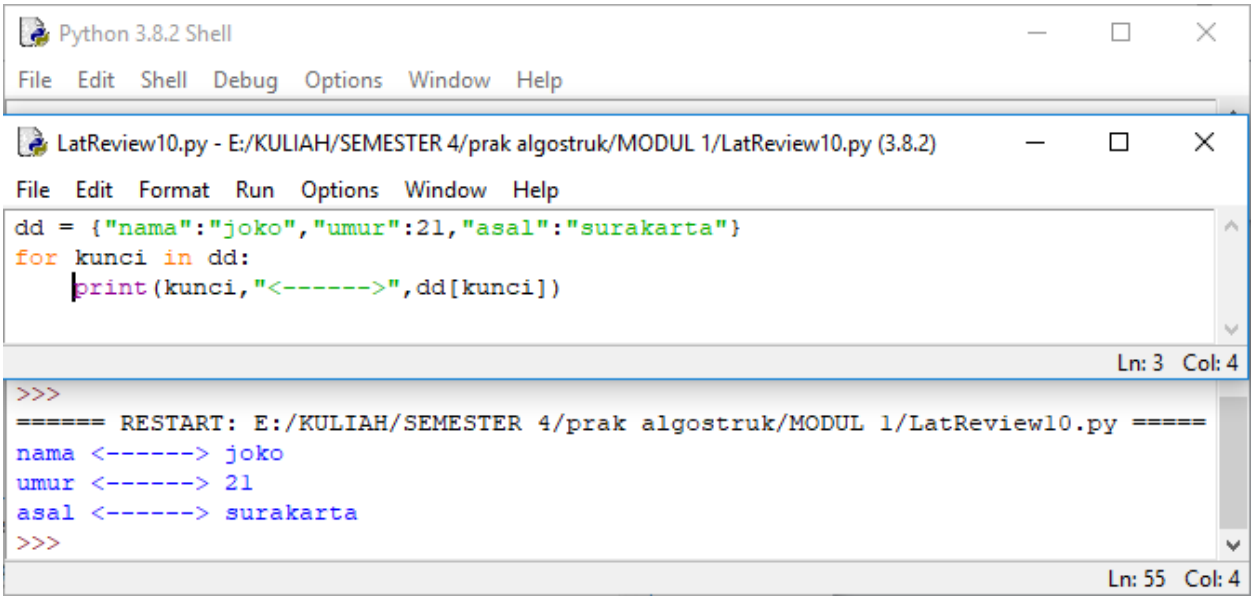
Latihan 1.9



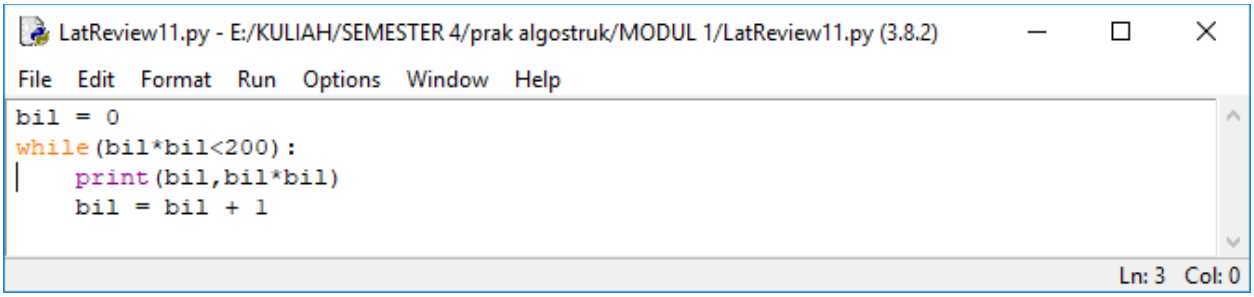

```
====== RESTART: E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview9.py ======
i
n
i

b
u
d
i
>>>
```

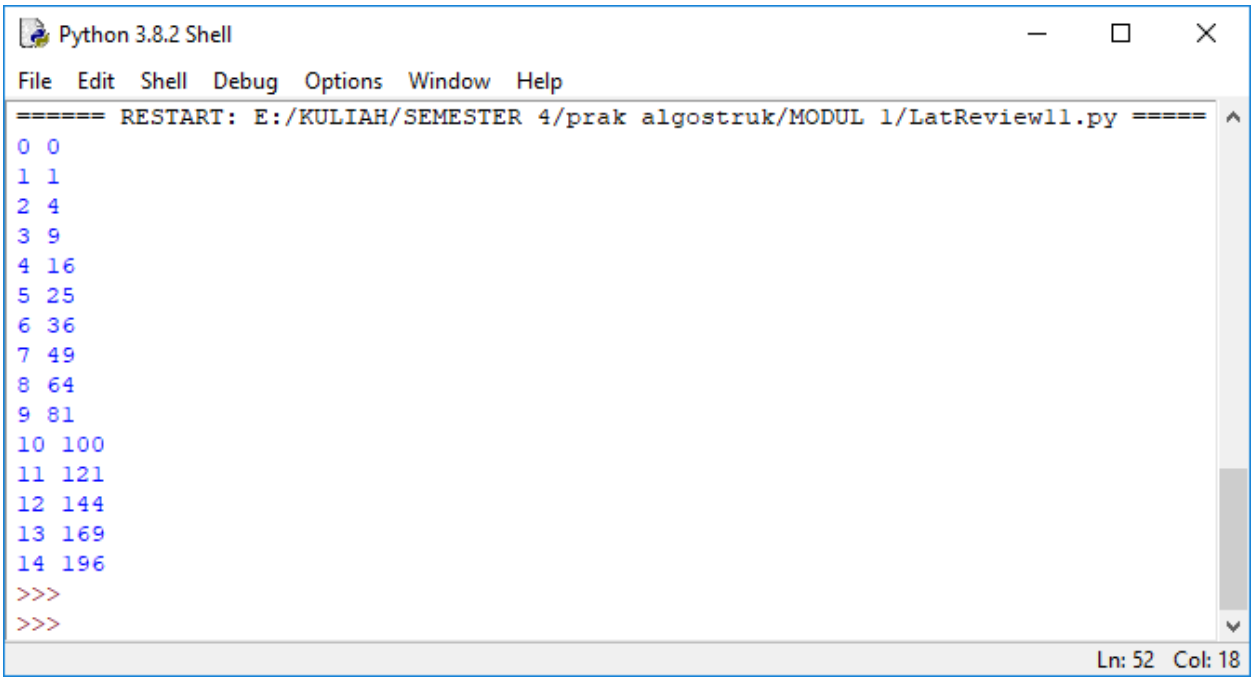

LatReview9.py - E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview9.py (3.8.2)
File Edit Format Run Options Window Help
##s = "ini budi"
##for i in s:
print(i)
s = [4,3,2,5,6]
for i in s:
    print(i)
Ln: 7 Col: 12
>>>
====== RESTART: E:/KULIAH/SEMESTER 4/prak algostruk/MODUL 1/LatReview9.py ======
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





1.10 kata-kata kunci di python