Praktikum Algostruk

Modul 1

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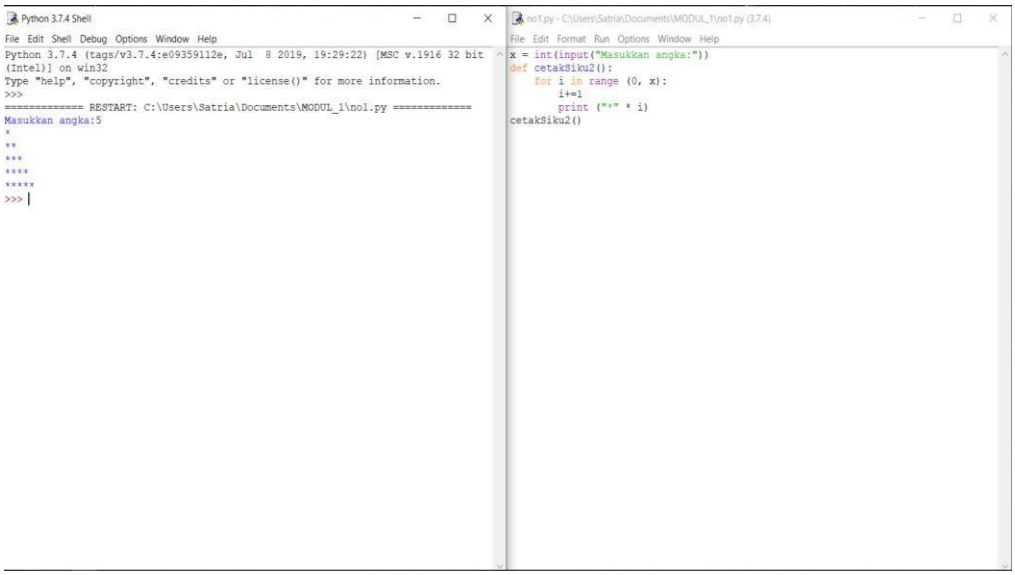
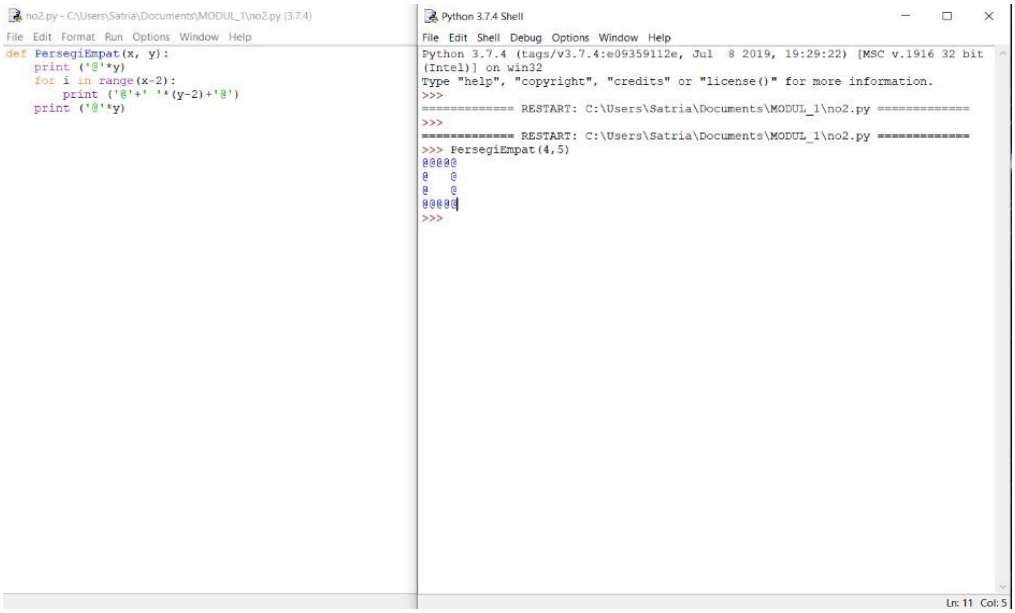
Nim : L200180002

Kelas : A

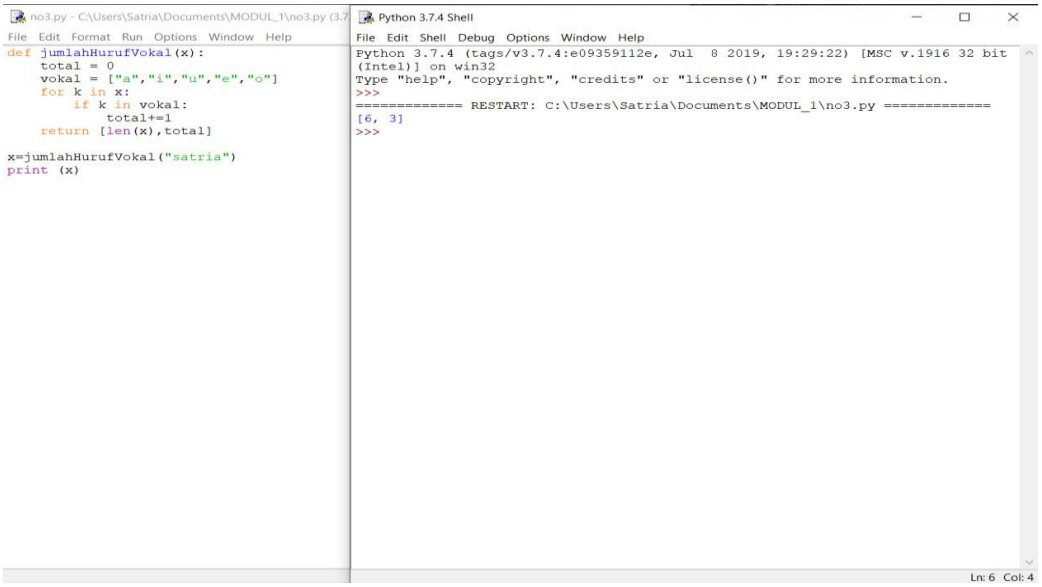
1.



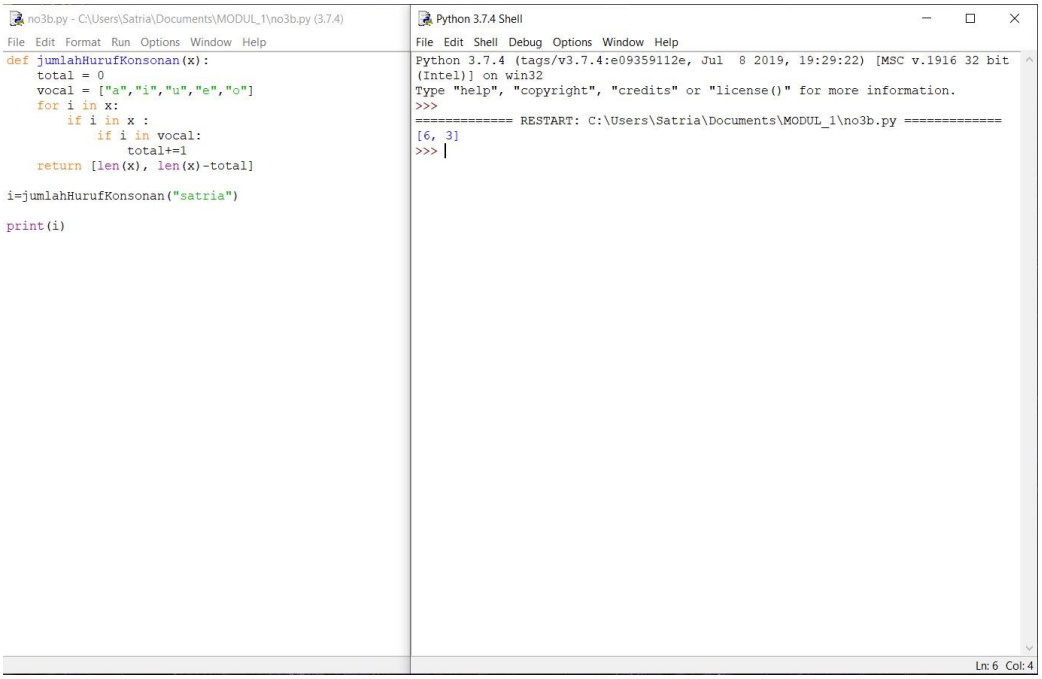
2.



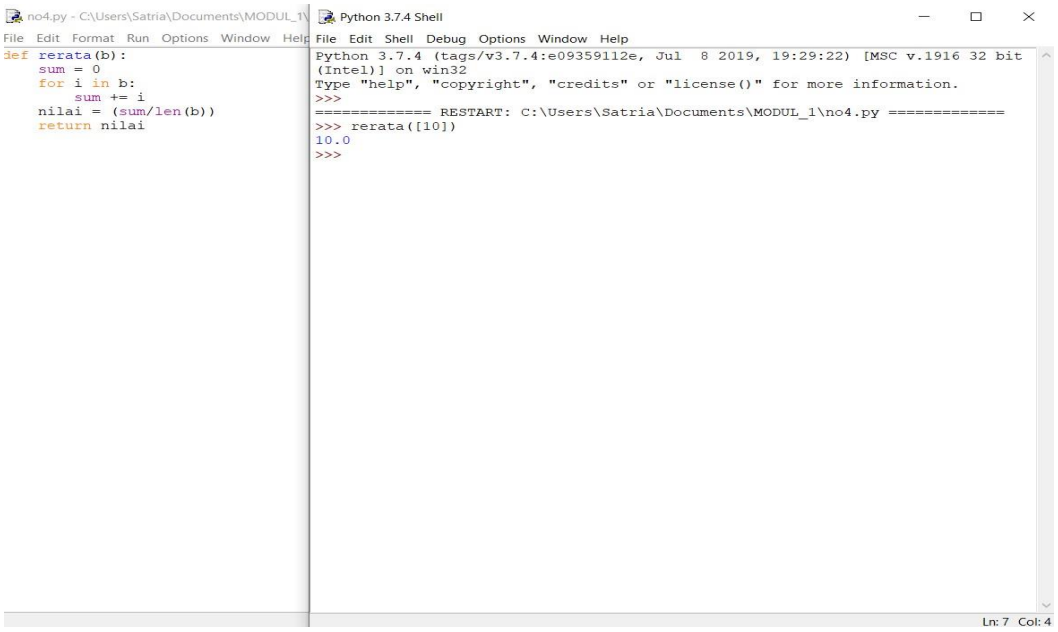
3.


no3.py - C:\Users\Satria\Documents\MODUL_1\no3.py (3.7
File Edit Format Run Options Window Help
def jumlahHurufVokal(x):
total = 0
vokal = ["a","i","u","e","o"]
for k in x:
if k in vokal:
total+=1
return [len(x),total]
x=jumlahHurufVokal("satria")
print (x)
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\Satria\Documents\MODUL_1\no3.py ==========
[6, 3]
>>>
Ln: 6 Col: 4

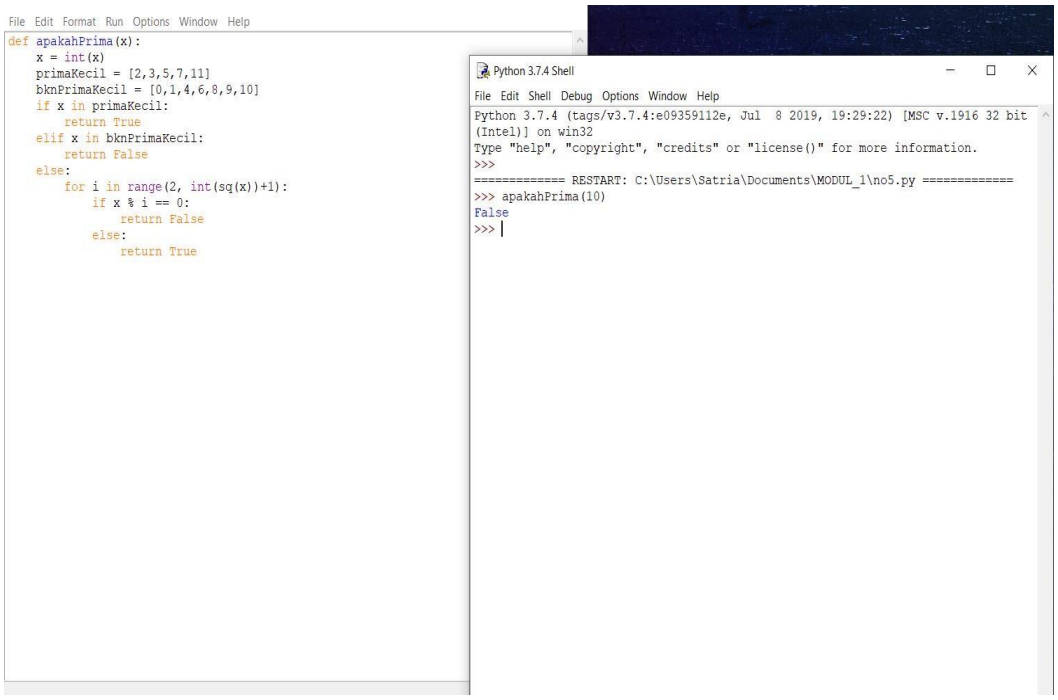
3.b


no3b.py - C:\Users\Satria\Documents\MODUL_1\no3b.py (3.7.4)
File Edit Format Run Options Window Help
def jumlahHurufKonsonan(x):
total = 0
vocal = ["a","i","u","e","o"]
for i in x:
if i in x :
if i in vocal:
total+=1
return [len(x), len(x)-total]
i=jumlahHurufKonsonan("satria")
print(i)
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\Satria\Documents\MODUL_1\no3b.py ==========
[6, 3]
>>>
Ln: 6 Col: 4

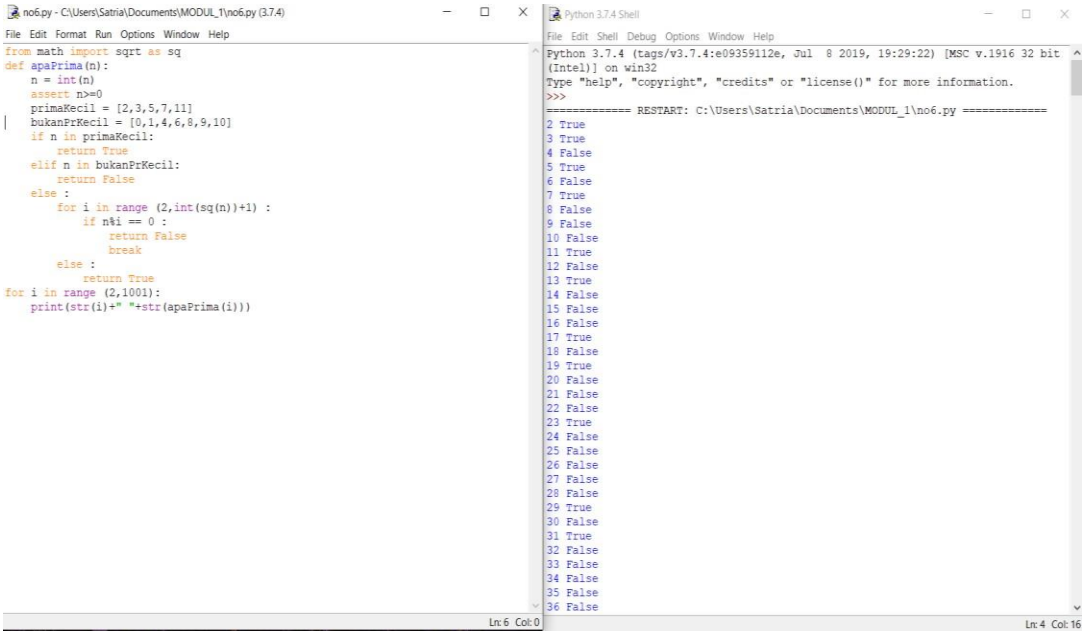
4.


no4.py - C:\Users\Satria\Documents\MODUL_1\
File Edit Format Run Options Window Help
def rerata(b):
sum = 0
for i in b:
sum += i
nilai = (sum/len(b))
return nilai
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\Satria\Documents\MODUL_1\no4.py ==========
>>> rerata([10])
10.0
>>>
Ln: 7 Col: 4

5.


File Edit Format Run Options Window Help
def apakahPrima(x):
x = int(x)
primaKecil = [2,3,5,7,11]
bknPrimaKecil = [0,1,4,6,8,9,10]
if x in primaKecil:
return True
elif x in bknPrimaKecil:
return False
else:
for i in range(2, int(sq(x))+1):
if x % i == 0:
return False
else:
return True
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\Satria\Documents\MODUL_1\no5.py ==========
>>> apakahPrima(10)
False
>>>

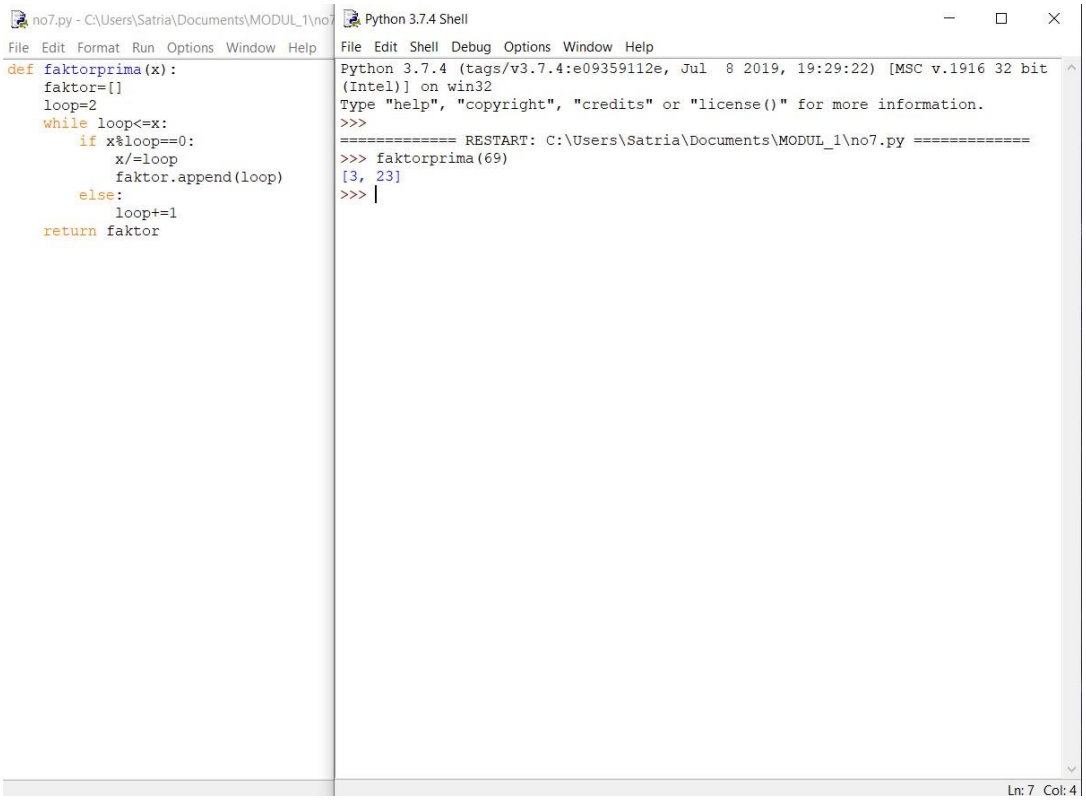
6.



```
no6.py - C:\Users\Satria\Documents\MODUL_1\no6.py (3.7.4)
File  Edit  Format  Run  Options  Window  Help
from math import sqrt as sq
def apaPrima(n):
    n = int(n)
    assert n>=0
    primaKecil = [2,3,5,7,11]
    bukanPrKecil = [0,1,4,6,8,9,10]
    if n in primaKecil:
        return True
    elif n in bukanPrKecil:
        return False
    else :
        for i in range (2,int(sq(n))+1) :
            if n%i == 0 :
                return False
                break
        else :
            return True
for i in range (2,1001):
    print(str(i)+" "+str(apaPrima(i)))
```

```
Python 3.7.4 Shell
File  Edit  Shell  Debug  Options  Window  Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============ RESTART: C:\Users\Satria\Documents\MODUL_1\no6.py ============
2 True
3 True
4 False
5 True
6 False
7 True
8 False
9 False
10 False
11 True
12 False
13 True
14 False
15 False
16 False
17 True
18 False
19 True
20 False
21 False
22 False
23 True
24 False
25 False
26 False
27 False
28 False
29 True
30 False
31 True
32 False
33 False
34 False
35 False
36 False
```

7.

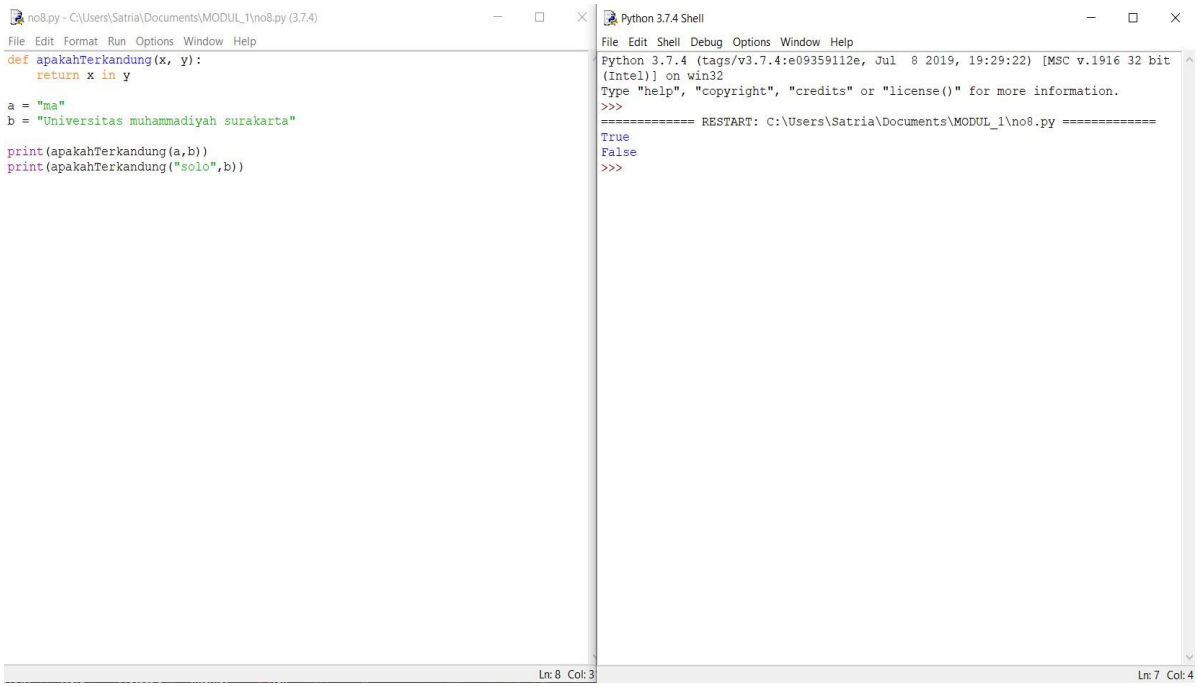


```
no7.py - C:\Users\Satria\Documents\MODUL_1\no7
File  Edit  Format  Run  Options  Window  Help
def faktorprima(x):
    faktor=[]
    loop=2
    while loop<=x:
        if x%loop==0:
            x/=loop
            faktor.append(loop)
        else:
            loop+=1
    return faktor
```

```
Python 3.7.4 Shell
File  Edit  Shell  Debug  Options  Window  Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============ RESTART: C:\Users\Satria\Documents\MODUL_1\no7.py ============
>>> faktorprima(69)
[3, 23]
>>>
```

Ln: 7 Col: 4

8.



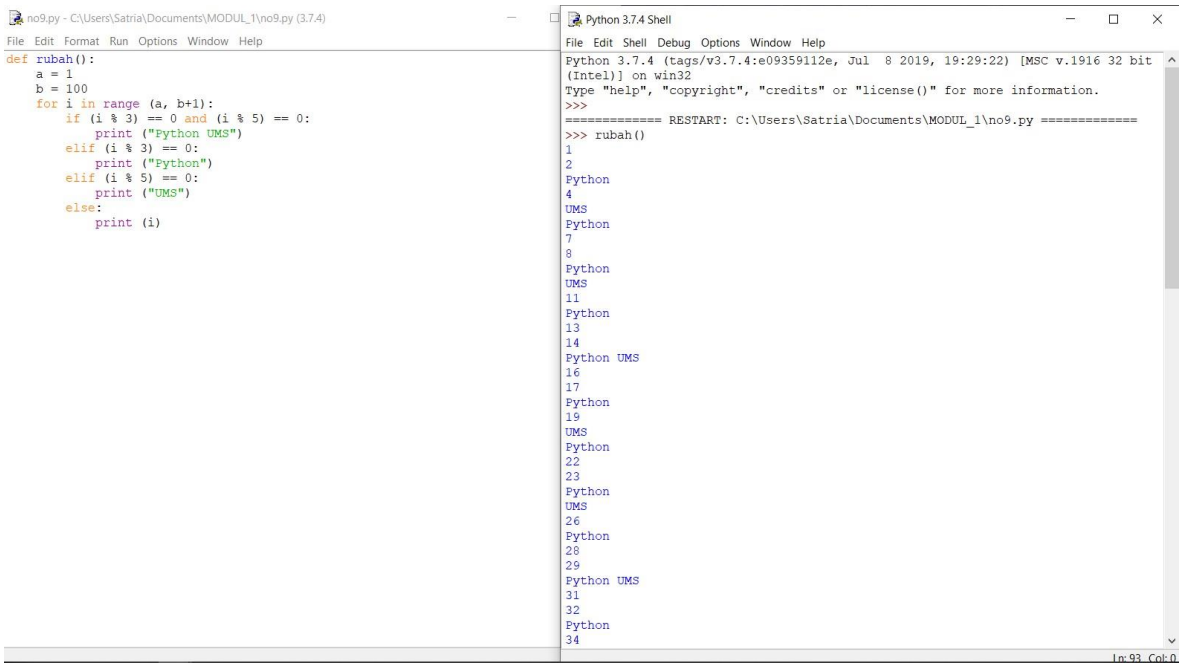
```
no8.py - C:\Users\Satria\Documents\MODUL_1\no8.py (3.7.4)
File  Edit  Format  Run  Options  Window  Help
def apakahTerkandung(x, y):
    return x in y

a = "ma"
b = "Universitas muhammadiyah surakarta"

print(apakahTerkandung(a,b))
print(apakahTerkandung("solo",b))
```

```
Python 3.7.4 Shell
File  Edit  Shell  Debug  Options  Window  Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============= RESTART: C:\Users\Satria\Documents\MODUL_1\no8.py =============
True
False
>>>
```

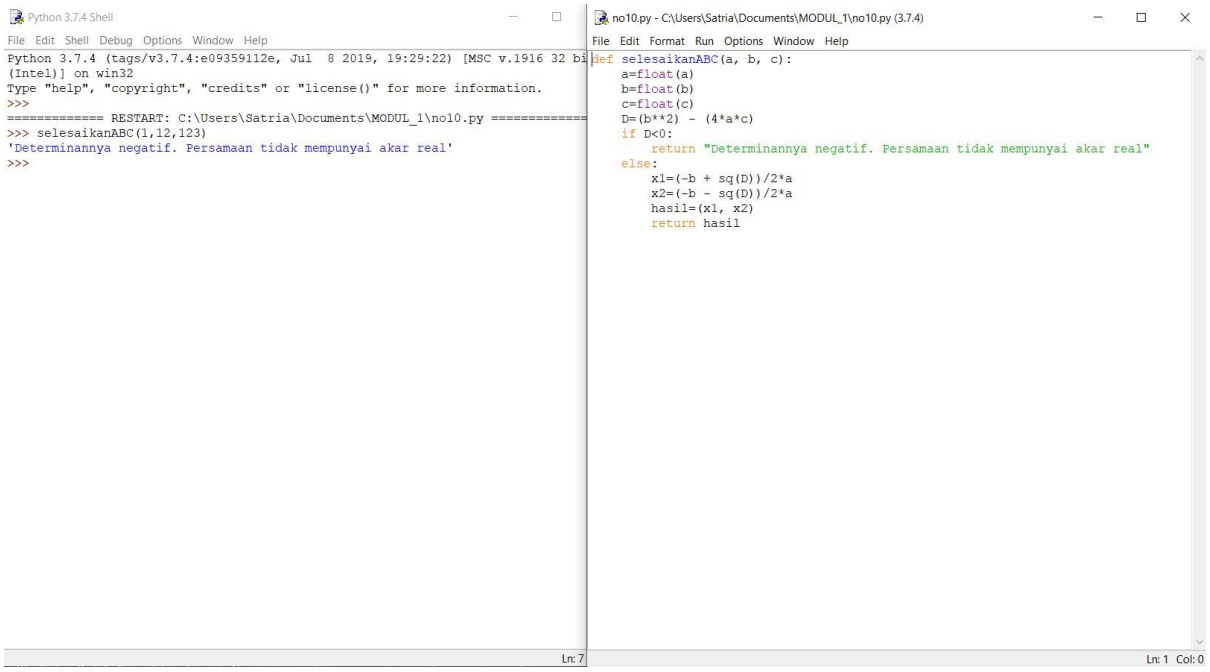
9.



```
no9.py - C:\Users\Satria\Documents\MODUL_1\no9.py (3.7.4)
File  Edit  Format  Run  Options  Window  Help
def rubah():
    a = 1
    b = 100
    for i in range (a, b+1):
        if (i % 3) == 0 and (i % 5) == 0:
            print ("Python UMS")
        elif (i % 3) == 0:
            print ("Python")
        elif (i % 5) == 0:
            print ("UMS")
        else:
            print (i)
```

```
Python 3.7.4 Shell
File  Edit  Shell  Debug  Options  Window  Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============= RESTART: C:\Users\Satria\Documents\MODUL_1\no9.py =============
>>> rubah()
1
2
Python
4
UMS
Python
7
8
Python
UMS
11
Python
13
14
Python UMS
16
17
Python
19
UMS
Python
22
23
Python
UMS
26
Python
28
29
Python UMS
31
32
Python
34
```

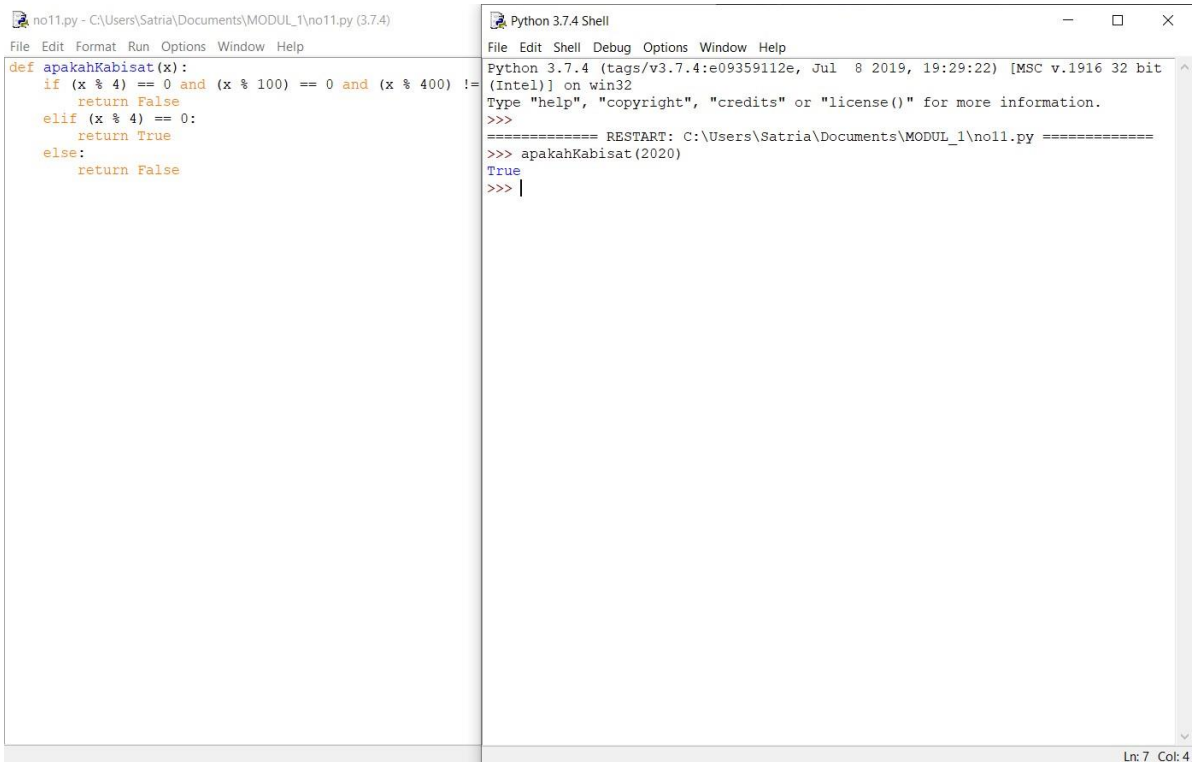
10.



```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\Satria\Documents\MODUL_1\no10.py ==========
>>> selesaikanABC(1,12,123)
'Determinannya negatif. Persamaan tidak mempunyai akar real'
>>>
```

```
no10.py - C:\Users\Satria\Documents\MODUL_1\no10.py (3.7.4)
File Edit Format Run Options Window Help
def selesaikanABC(a, b, c):
    a=float(a)
    b=float(b)
    c=float(c)
    D=(b**2) - (4*a*c)
    if D<0:
        return "Determinannya negatif. Persamaan tidak mempunyai akar real"
    else:
        x1=(-b + sq(D))/2*a
        x2=(-b - sq(D))/2*a
        hasil=(x1, x2)
        return hasil
```

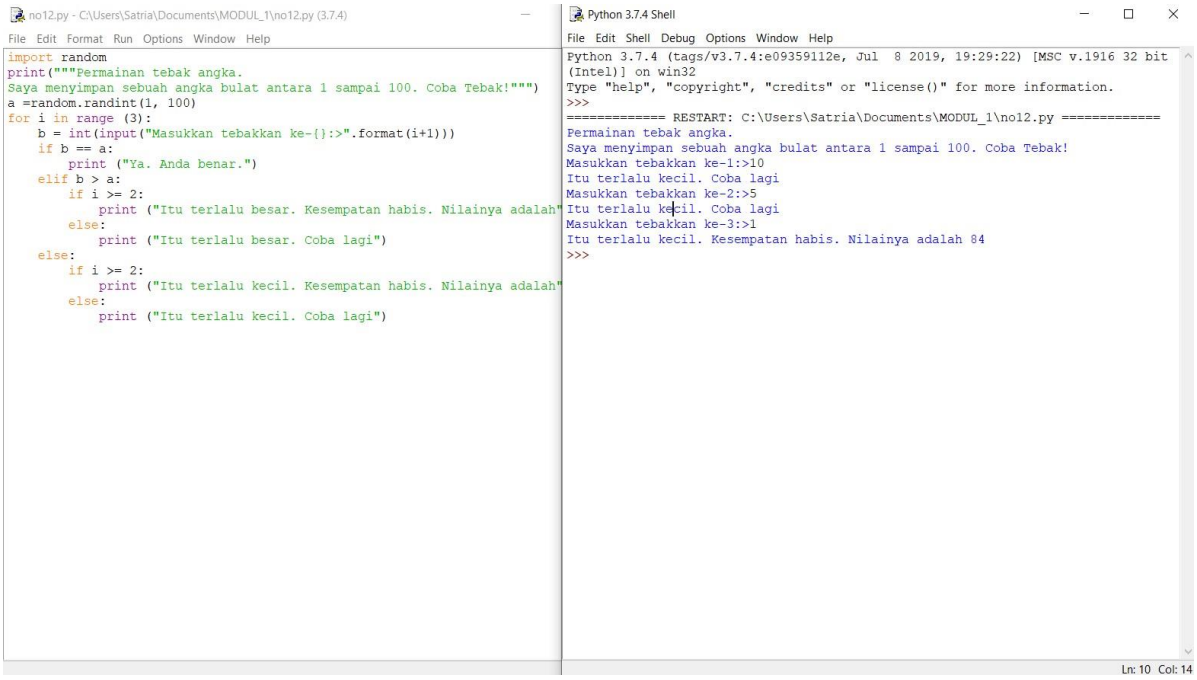
11.



```
no11.py - C:\Users\Satria\Documents\MODUL_1\no11.py (3.7.4)
File Edit Format Run Options Window Help
def apakahKabisat(x):
    if (x % 4) == 0 and (x % 100) == 0 and (x % 400) !=
        return False
    elif (x % 4) == 0:
        return True
    else:
        return False
```

```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\Satria\Documents\MODUL_1\no11.py ==========
>>> apakahKabisat(2020)
True
>>>
```

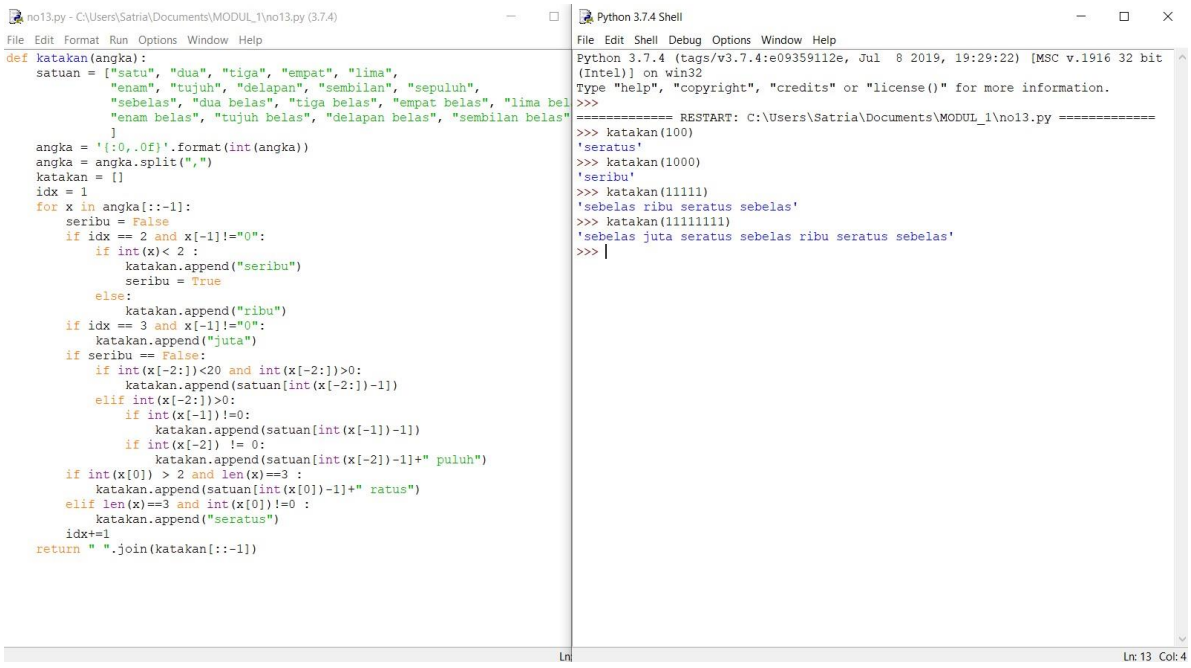
12.



```
import random
print("""Permainan tebak angka.
Saya menyimpan sebuah angka bulat antara 1 sampai 100. Coba Tebak!""")
a =random.randint(1, 100)
for i in range (3):
    b = int(input("Masukkan tebakkan ke-{}:>".format(i+1)))
    if b == a:
        print ("Ya. Anda benar.")
    elif b > a:
        if i >= 2:
            print ("Itu terlalu besar. Kesempatan habis. Nilainya adalah"
        else:
            print ("Itu terlalu besar. Coba lagi")
    else:
        if i >= 2:
            print ("Itu terlalu kecil. Kesempatan habis. Nilainya adalah"
        else:
            print ("Itu terlalu kecil. Coba lagi")
```

```
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============ RESTART: C:\Users\Satria\Documents\MODUL_1\no12.py ============
Permainan tebak angka.
Saya menyimpan sebuah angka bulat antara 1 sampai 100. Coba Tebak!
Masukkan tebakkan ke-1:>10
Itu terlalu kecil. Coba lagi
Masukkan tebakkan ke-2:>5
Itu terlalu kecil. Coba lagi
Masukkan tebakkan ke-3:>1
Itu terlalu kecil. Kesempatan habis. Nilainya adalah 84
>>>
```

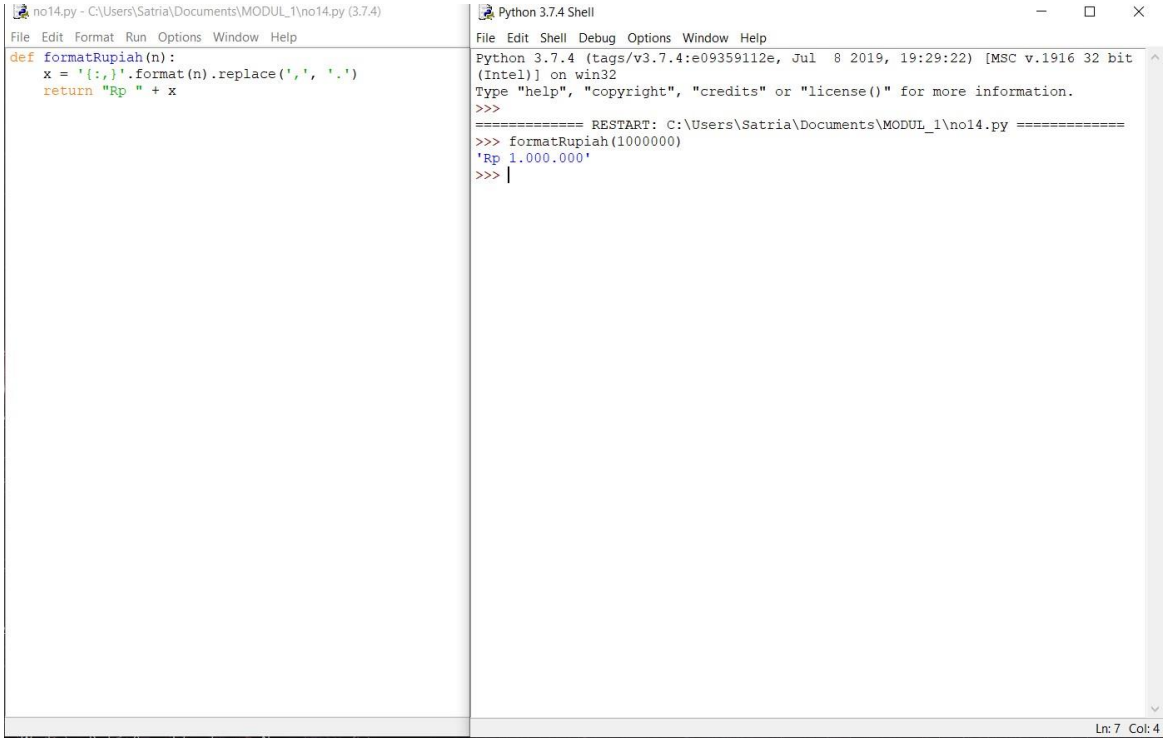
13.



```
def katakan(angka):
    satuan = ["satu", "dua", "tiga", "empat", "lima",
              "enam", "tujuh", "delapan", "sembilan", "sepuluh",
              "sebelas", "dua belas", "tiga belas", "empat belas", "lima bel
              "enam belas", "tujuh belas", "delapan belas", "sembilan belas"
              ]
    angka = '{:0,.0f}'.format(int(angka))
    angka = angka.split(",")
    katakan = []
    idx = 1
    for x in angka[::-1]:
        seribu = False
        if idx == 2 and x[-1]!="0":
            if int(x)< 2 :
                katakan.append("seribu")
                seribu = True
            else:
                katakan.append("ribu")
        if idx == 3 and x[-1]!="0":
            katakan.append("juta")
        if seribu == False:
            if int(x[-2:])<20 and int(x[-2:])>0:
                katakan.append(satuan[int(x[-2:])-1])
            elif int(x[-2:])>0:
                if int(x[-1])!=0:
                    katakan.append(satuan[int(x[-1])-1])
                if int(x[-2]) != 0:
                    katakan.append(satuan[int(x[-2])-1]+" puluh")
        if int(x[0]) > 2 and len(x)==3 :
            katakan.append(satuan[int(x[0])-1]+" ratus")
        elif len(x)==3 and int(x[0])!=0 :
            katakan.append("seratus")
        idx+=1
    return " ".join(katakan[::-1])
```

```
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============ RESTART: C:\Users\Satria\Documents\MODUL_1\no13.py ============
>>> katakan(100)
'seratus'
>>> katakan(1000)
'seribu'
>>> katakan(11111)
'sebelas ribu seratus sebelas'
>>> katakan(11111111)
'sebelas juta seratus sebelas ribu seratus sebelas'
>>>
```

14.


no14.py - C:\Users\Satria\Documents\MODUL_1\no14.py (3.7.4)
File Edit Format Run Options Window Help
def formatRupiah(n):
x = '{:,}'.format(n).replace(',', '.')
return "Rp " + x
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\Satria\Documents\MODUL_1\no14.py ==========
>>> formatRupiah(1000000)
'Rp 1.000.000'
>>>
Ln: 7 Col: 4