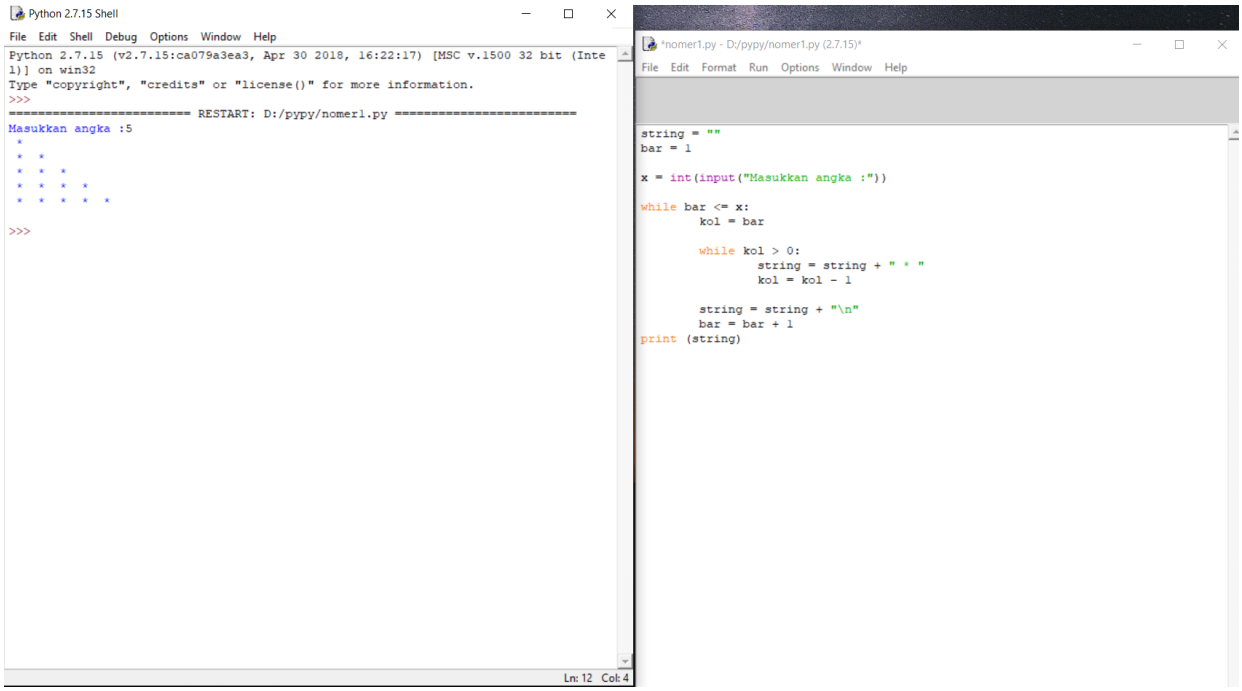
Nama : Bagus Zizou Satiaji

NIM : L200180212

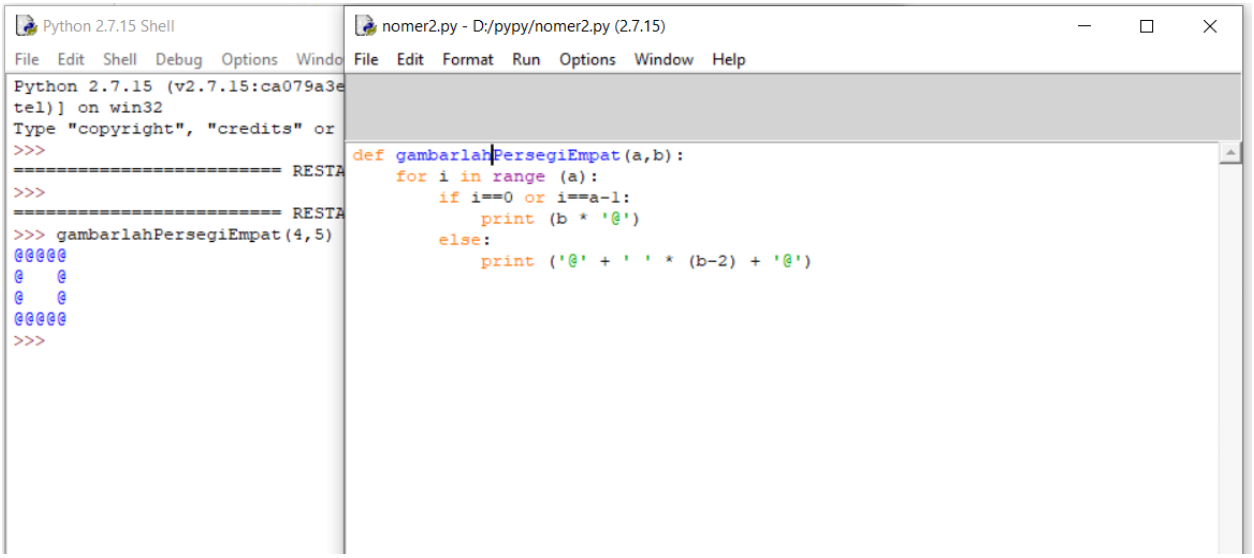
Kelas : Praktikum Algoritma dan Struktur Data H

Modul 1

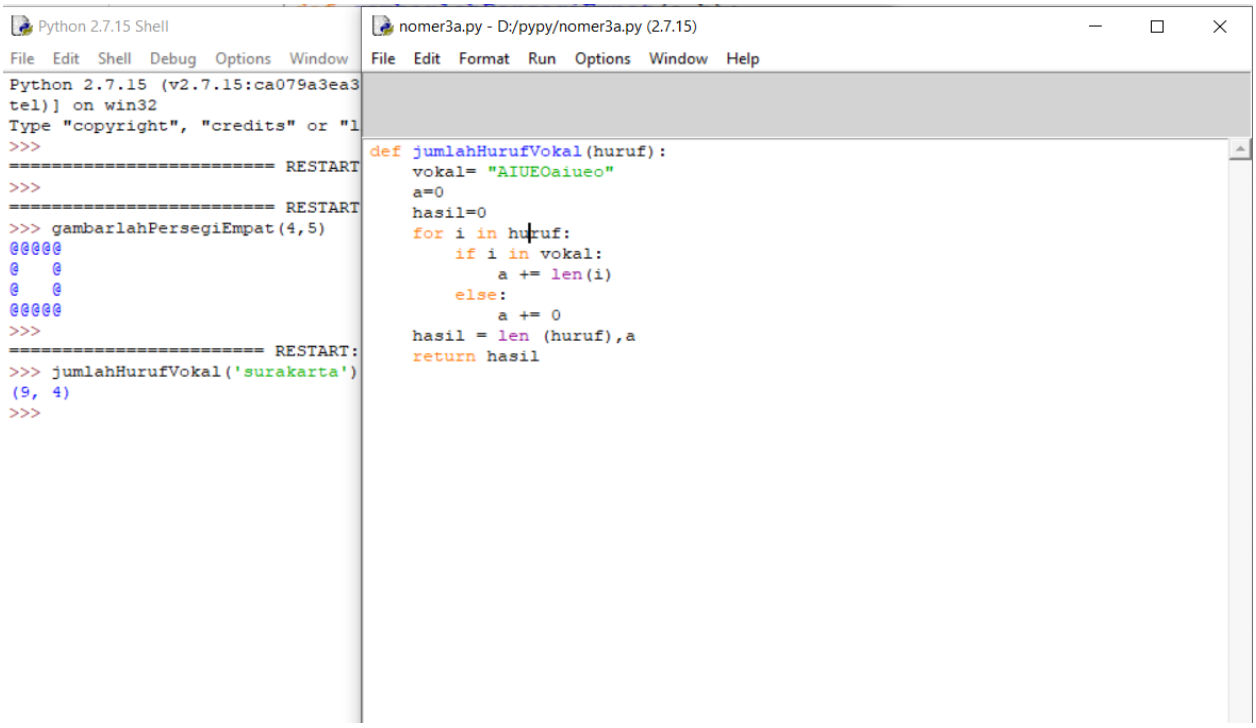
Nomer 1



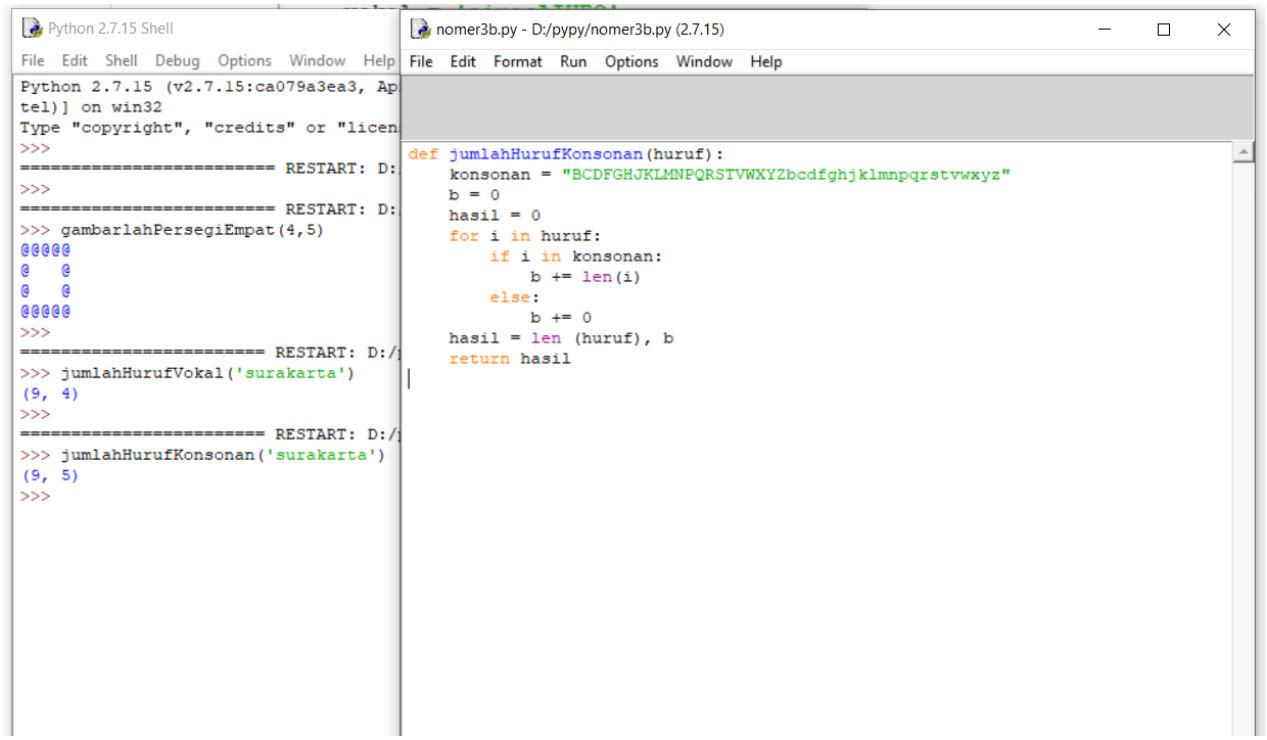
Nomer 2



Nomer 3A



Nomer 3B



Python 2.7.15 Shell

File Edit Shell Debug Options Window Help

```
Python 2.7.15 (v2.7.15:ca079a3ea3, Ap
tel)] on win32
Type "copyright", "credits" or "licen
>>>
========== RESTART: D:
>>>
========== RESTART: D:
>>> gambarlahPersegiEmpat(4,5)
@@@@@
@   @
@   @
@@@@@
>>>
========== RESTART: D:/
>>> jumlahHurufVokal('surakarta')
(9, 4)
>>>
========== RESTART: D:/
>>> jumlahHurufKonsonan('surakarta')
(9, 5)
>>>
```

nomer3b.py - D:/pypy/nomer3b.py (2.7.15)

File Edit Format Run Options Window Help

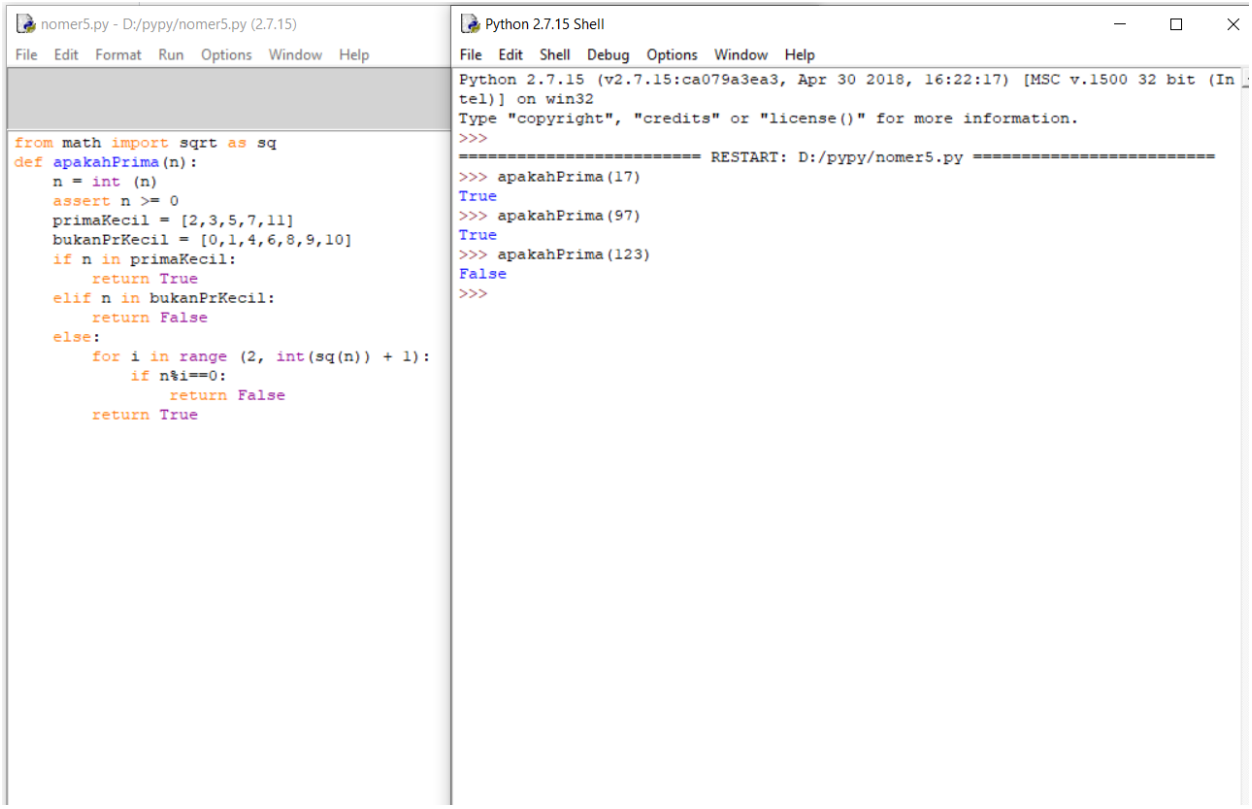
```
def jumlahHurufKonsonan(huruf):
    konsonan = "BCDFGHJKLMNPQRSTVWXYZbcdfghjklmnpqrstvwxyz"
    b = 0
    hasil = 0
    for i in huruf:
        if i in konsonan:
            b += len(i)
        else:
            b += 0
    hasil = len (huruf), b
    return hasil
```

Nomer 4

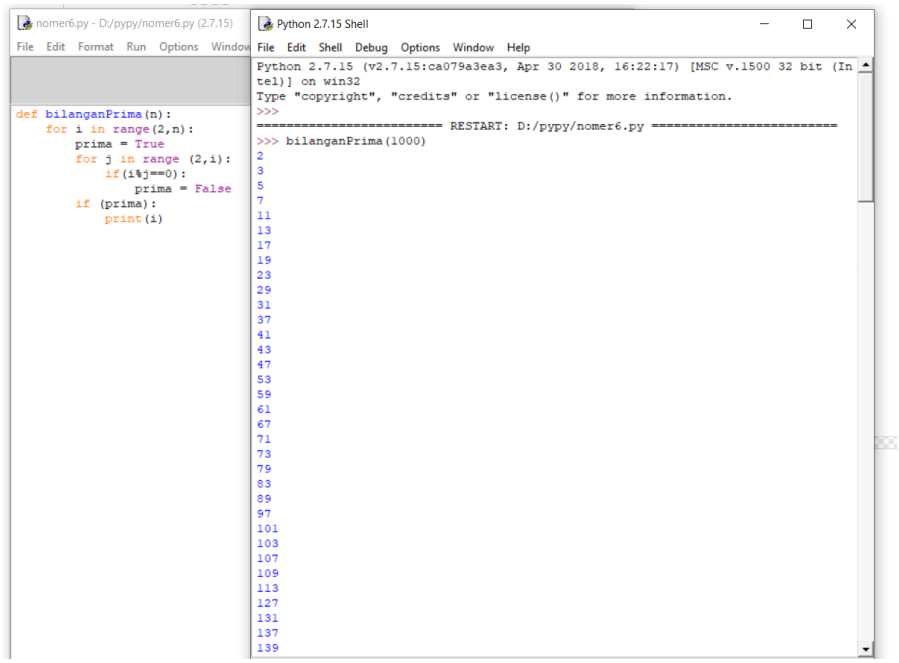
```
>>>
========== RESTART:
>>> rerata([1,2,3,4,5])
3
>>> g=[3,4,5,4,3,4,5,2,2,10,11,23]
>>> rerata(g)
6
>>>
```

```
def rerata(b):
    return sum(b)/len(b)
```

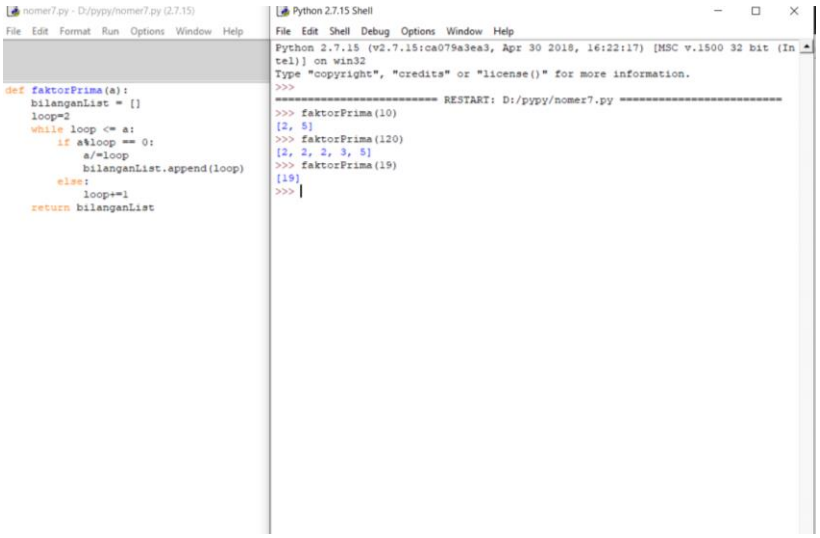
Nomer 5



Nomer 6



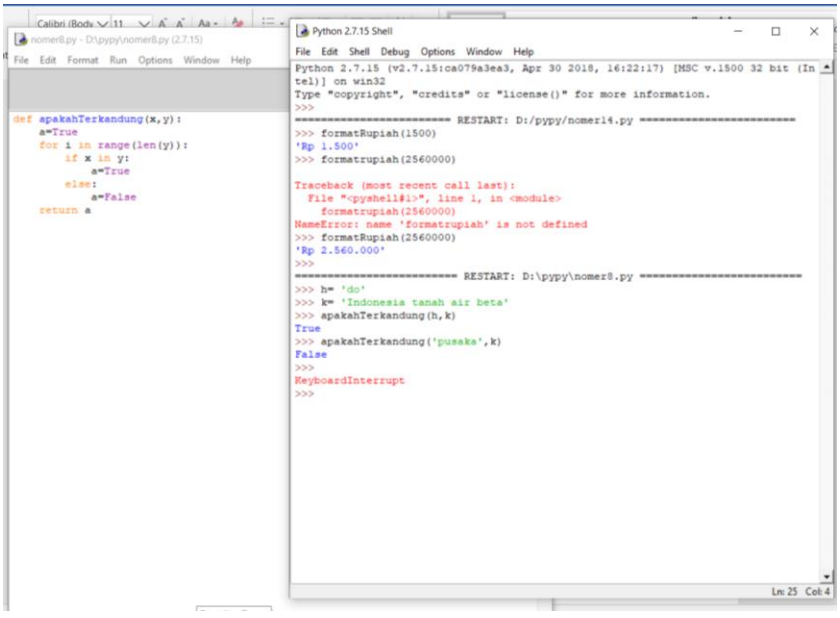
Nomer 7



```
def faktorPrima(a):
    bilanganList = []
    loop=2
    while loop <= a:
        if a%loop == 0:
            a/=loop
            bilanganList.append(loop)
        else:
            loop+=1
    return bilanganList
```

```
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:22:17) [MSC v.1500 32 bit (In
tel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:/pypy/nomer7.py ==========
>>> faktorPrima(10)
[2, 5]
>>> faktorPrima(120)
[2, 2, 2, 3, 5]
>>> faktorPrima(19)
[19]
>>>
```

Nomer 8

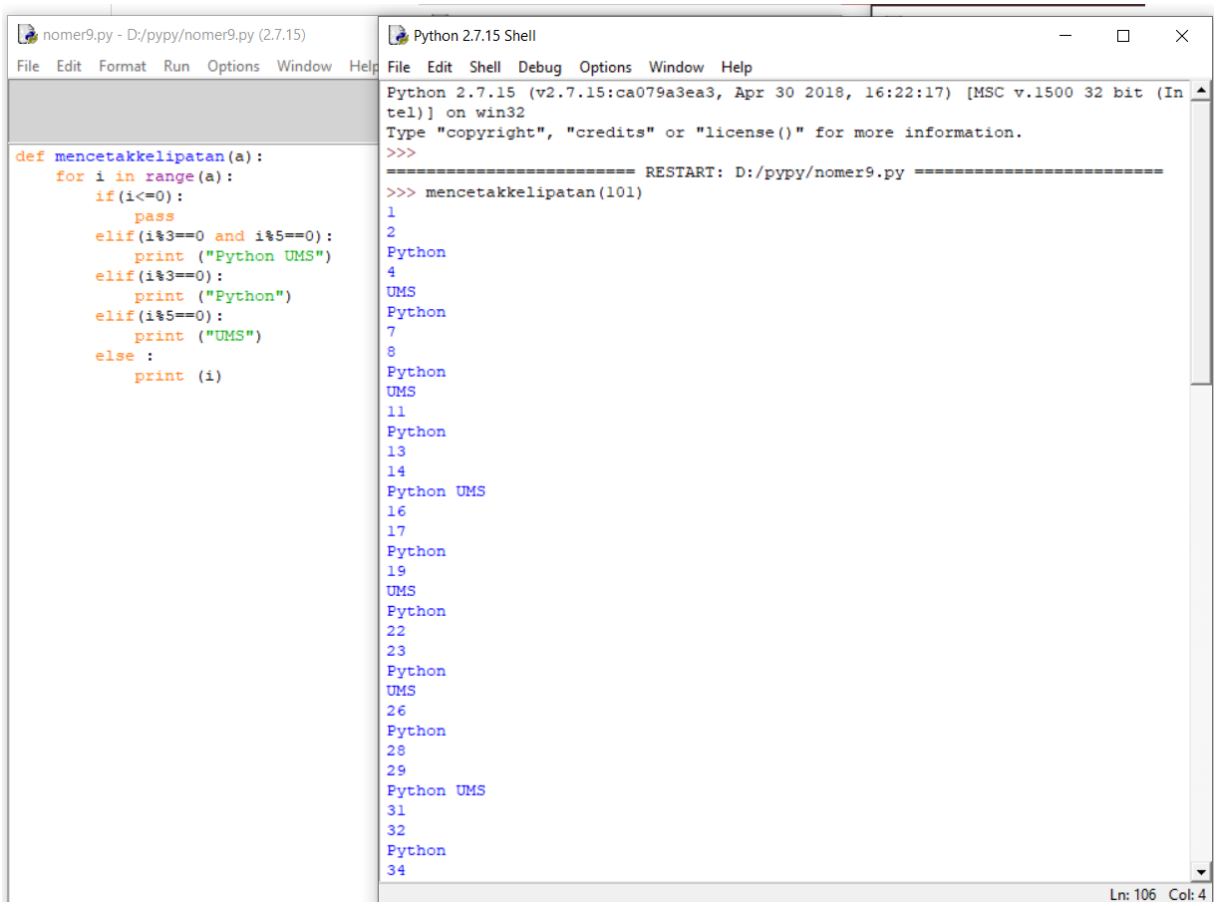


```
def apakahTerkandung(x,y):
    a=True
    for i in range(len(y)):
        if x in y:
            a=True
        else:
            a=False
    return a
```

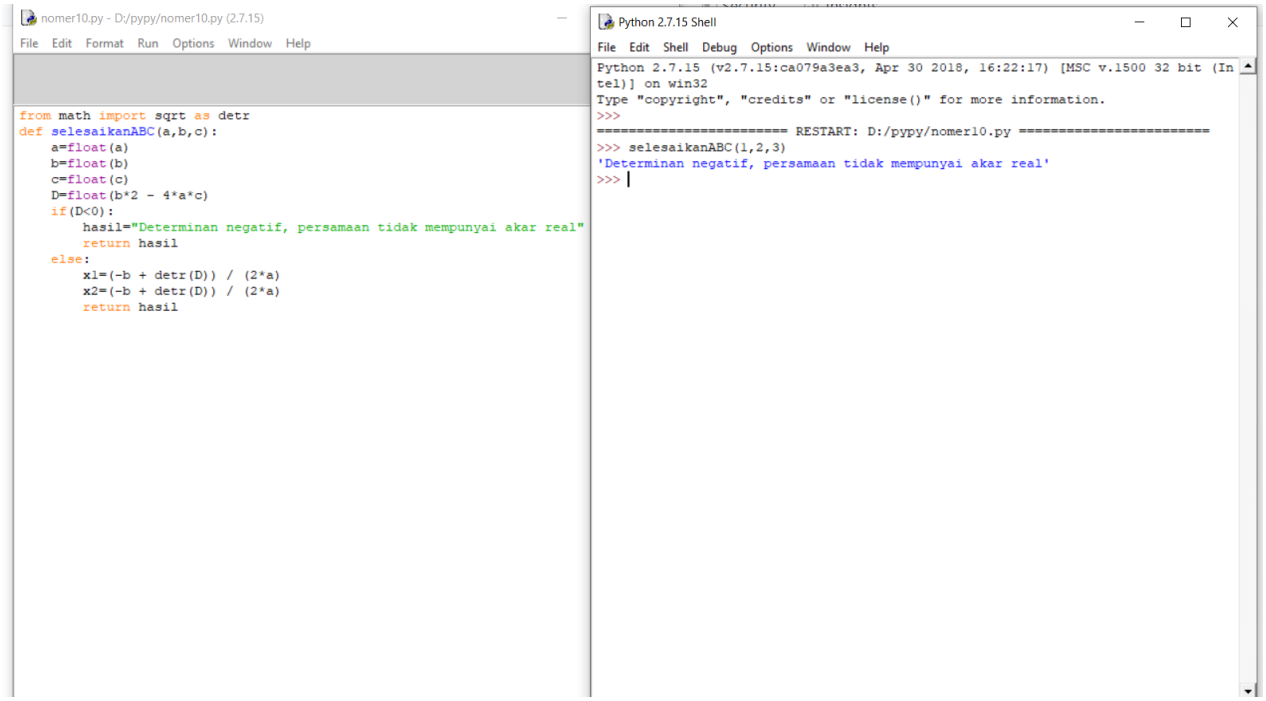
```
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:22:17) [MSC v.1500 32 bit (In
tel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:/pypy/nomer14.py ==========
>>> formatRupiah(1500)
'Rp 1.500'
>>> formatrupiah(2560000)

Traceback (most recent call last):
  File "<pyshell#1>", line 1, in <module>
    formatrupiah(2560000)
NameError: name 'formatrupiah' is not defined
>>> formatRupiah(2560000)
'Rp 2.560.000'
>>>
========== RESTART: D:\pypy\nomer8.py ==========
>>> h= 'do'
>>> k= 'Indonesia tanah air beta'
>>> apakahTerkandung(h,k)
True
>>> apakahTerkandung('pusaka',k)
False
>>>
KeyboardInterrupt
>>>
```

Nomer 9


nomer9.py - D:/pypy/nomer9.py (2.7.15)
File Edit Format Run Options Window Help
def mencetakkelipatan(a):
for i in range(a):
if(i<=0):
pass
elif(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 2.7.15 Shell
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:22:17) [MSC v.1500 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:/pypy/nomer9.py ==========
>>> mencetakkelipatan(101)
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
Ln: 106 Col: 4

Nomer 10


nomer10.py - D:/pypy/nomer10.py (2.7.15)
File Edit Format Run Options Window Help
from math import sqrt as detr
def selesaikanABC(a,b,c):
a=float(a)
b=float(b)
c=float(c)
D=float(b*2 - 4*a*c)
if(D<0):
hasil="Determinan negatif, persamaan tidak mempunyai akar real"
return hasil
else:
x1=(-b + detr(D)) / (2*a)
x2=(-b + detr(D)) / (2*a)
return hasil
Python 2.7.15 Shell
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:22:17) [MSC v.1500 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:/pypy/nomer10.py ==========
>>> selesaikanABC(1,2,3)
'Determinan negatif, persamaan tidak mempunyai akar real'
>>>

Nomer 11

14

nomer11.py - D:/pypy/nomer11.py (2.7.15)

File Edit Format Run Options Window Help

```
def tahunKabisat(tahun):
    hasil=False
    if(tahun%4==0 and tahun%100!=0 and tahun%400!=0):
        hasil=True
    elif(tahun%100==0 and tahun%400!=0):
        hasil=False
    elif(tahun%400==0):
        hasil=True
    else:
        hasil=False
    return hasil
```

Python 2.7.15 Shell

File Edit Shell Debug Options Window Help

```
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:22:17) [MSC v.1500 32 bit (In
tel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:/pypy/nomer11.py ==========
>>> tahunKabisat(1896)
True
>>> tahunKabisat(1897)
False
>>> tahunKabisat(1900)
False
>>> tahunKabisat(2000)
True
>>> tahunKabisat(2004-2096)
True
>>> tahunKabisat(2100)
False
>>> tahunKabisat(2400)
True
>>>
```

Nomer 12

nomer12.py - D:/pypy/nomer12.py (2.7.15)

File Edit Format Run Options Window Help

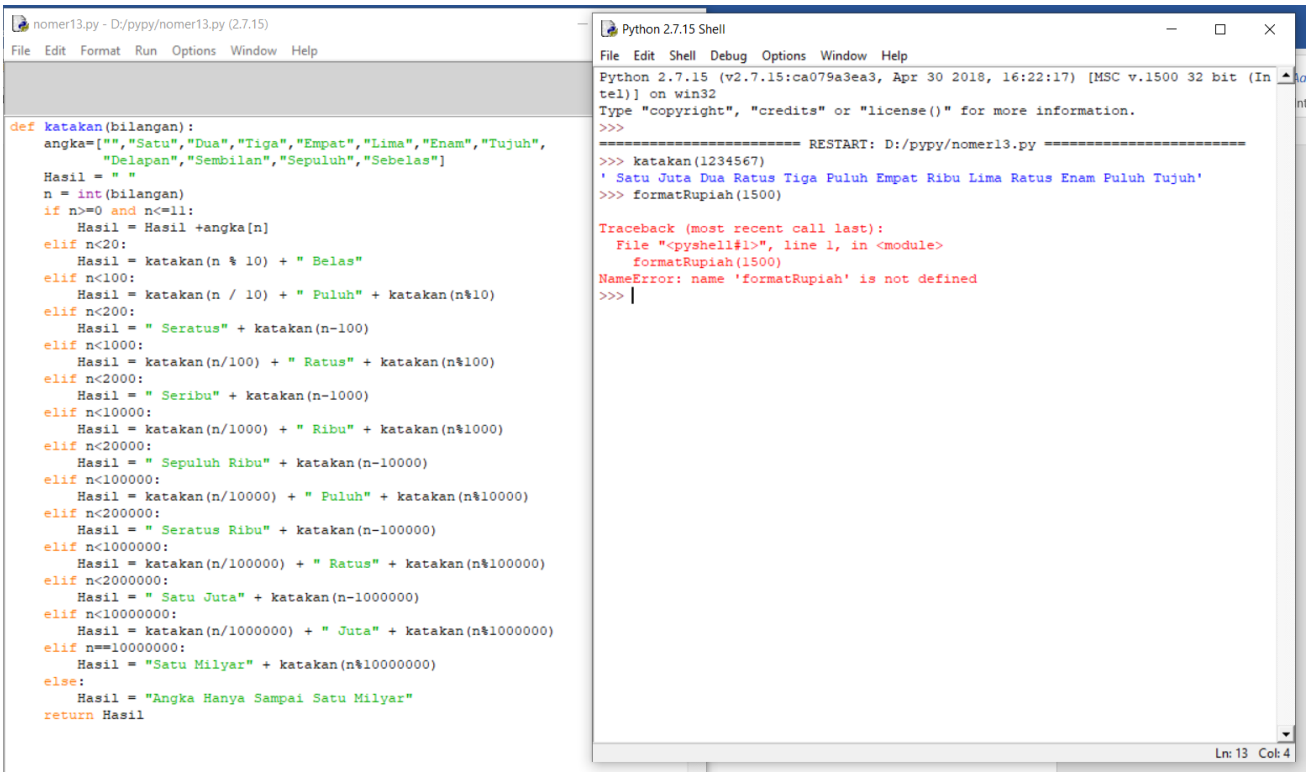
```
import random
def tebakAngka():
    a = random.randrange(1,101,1)
    b = -1
    n = 0
    print ("Permainan Tebak Angka")
    print ("Saya Menyimpan sebuah Angka Bulat antara 1 sampai 100. Coba Tebak.")
    while a != b :
        n = n + 1
        b = int (input ("Masukkan Tebakan ke- " + str(n) + ":> "))
        if b < a:
            print ("Itu Terlalu Kecil")
        elif b > a :
            print ("Itu Terlalu Besar")
        else :
            print("Ya. Anda Benar.")
            break
```

Python 2.7.15 Shell

File Edit Shell Debug Options Window Help

```
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:22:17) [MSC v.1500 32 bit (In
tel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:/pypy/nomer12.py ==========
>>> tebakAngka()
Permainan Tebak Angka
Saya Menyimpan sebuah Angka Bulat antara 1 sampai 100. Coba Tebak.
Masukkan Tebakan ke- 1:> 10
Itu Terlalu Besar
Masukkan Tebakan ke- 2:> 40
Itu Terlalu Besar
Masukkan Tebakan ke- 3:> 2
Itu Terlalu Kecil
Masukkan Tebakan ke- 4:> 3
Itu Terlalu Kecil
Masukkan Tebakan ke- 5:> 4
Itu Terlalu Kecil
Masukkan Tebakan ke- 6:> 5
Ya. Anda Benar.
>>>
```

Nomer 13



nomer13.py - D:/pypy/nomer13.py (2.7.15)

File Edit Format Run Options Window Help

```
def katakan(bilangan):
    angka=["","Satu","Dua","Tiga","Empat","Lima","Enam","Tujuh",
           "Delapan","Sembilan","Sepuluh","Sebelas"]
    Hasil = " "
    n = int(bilangan)
    if n>=0 and n<=11:
        Hasil = Hasil +angka[n]
    elif n<20:
        Hasil = katakan(n % 10) + " Belas"
    elif n<100:
        Hasil = katakan(n / 10) + " Puluh" + katakan(n%10)
    elif n<200:
        Hasil = " Seratus" + katakan(n-100)
    elif n<1000:
        Hasil = katakan(n/100) + " Ratus" + katakan(n%100)
    elif n<2000:
        Hasil = " Seribu" + katakan(n-1000)
    elif n<10000:
        Hasil = katakan(n/1000) + " Ribu" + katakan(n%1000)
    elif n<20000:
        Hasil = " Sepuluh Ribu" + katakan(n-10000)
    elif n<100000:
        Hasil = katakan(n/10000) + " Puluh" + katakan(n%10000)
    elif n<200000:
        Hasil = " Seratus Ribu" + katakan(n-100000)
    elif n<1000000:
        Hasil = katakan(n/100000) + " Ratus" + katakan(n%100000)
    elif n<2000000:
        Hasil = " Satu Juta" + katakan(n-1000000)
    elif n<10000000:
        Hasil = katakan(n/1000000) + " Juta" + katakan(n%1000000)
    elif n==10000000:
        Hasil = "Satu Milyar" + katakan(n%10000000)
    else:
        Hasil = "Angka Hanya Sampai Satu Milyar"
    return Hasil
```

Python 2.7.15 Shell

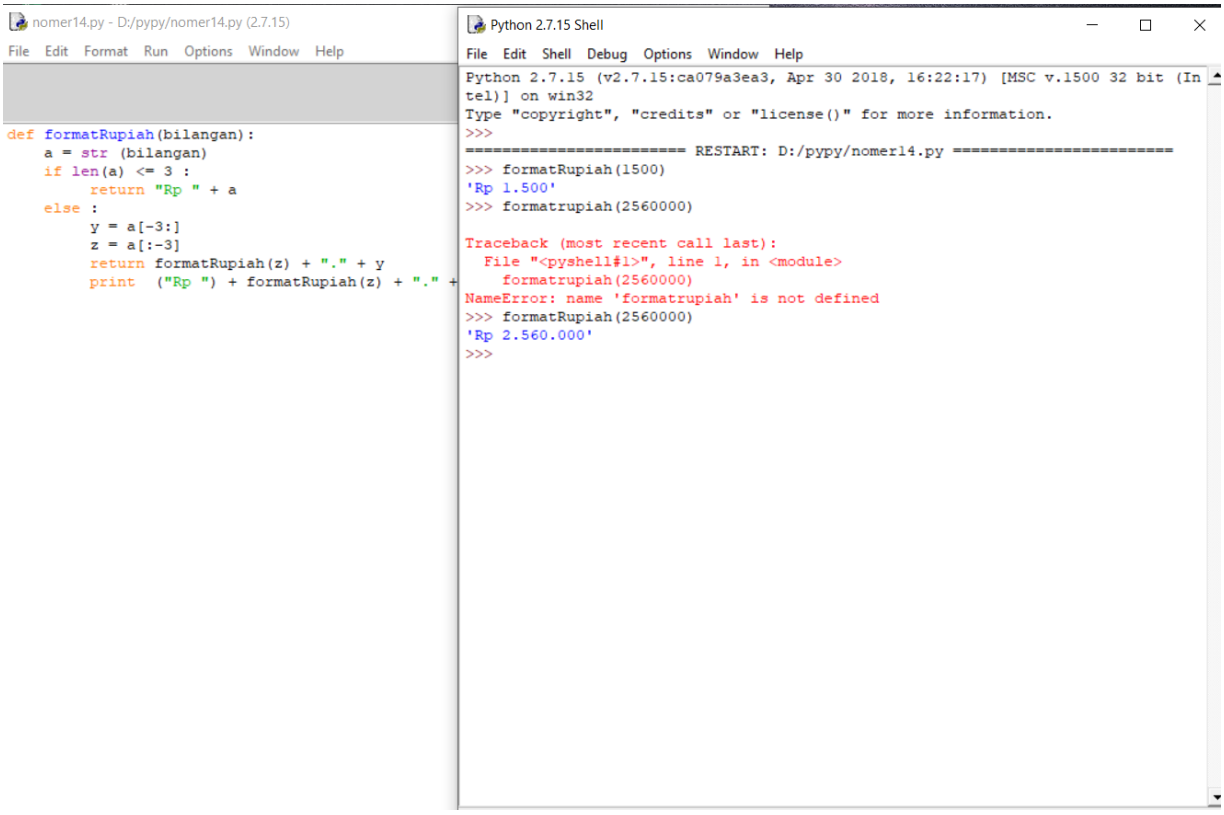
File Edit Shell Debug Options Window Help

```
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:22:17) [MSC v.1500 32 bit (In
tel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:/pypy/nomer13.py ==========
>>> katakan(1234567)
' Satu Juta Dua Ratus Tiga Puluh Empat Ribu Lima Ratus Enam Puluh Tujuh'
>>> formatRupiah(1500)

Traceback (most recent call last):
  File "<pyshell#1>", line 1, in <module>
    formatRupiah(1500)
NameError: name 'formatRupiah' is not defined
>>>
```

Ln: 13 Col: 4

Nomer 14


nomer14.py - D:/pypy/nomer14.py (2.7.15)
File Edit Format Run Options Window Help
def formatRupiah(bilangan):
a = str (bilangan)
if len(a) <= 3 :
return "Rp " + a
else :
y = a[-3:]
z = a[:-3]
return formatRupiah(z) + "." + y
print ("Rp ") + formatRupiah(z) + "." +
Python 2.7.15 Shell
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:22:17) [MSC v.1500 32 bit (In
tel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:/pypy/nomer14.py ==========
>>> formatRupiah(1500)
'Rp 1.500'
>>> formatrupiah(2560000)
Traceback (most recent call last):
File "<pyshell#1>", line 1, in <module>
formatrupiah(2560000)
NameError: name 'formatrupiah' is not defined
>>> formatRupiah(2560000)
'Rp 2.560.000'
>>>