

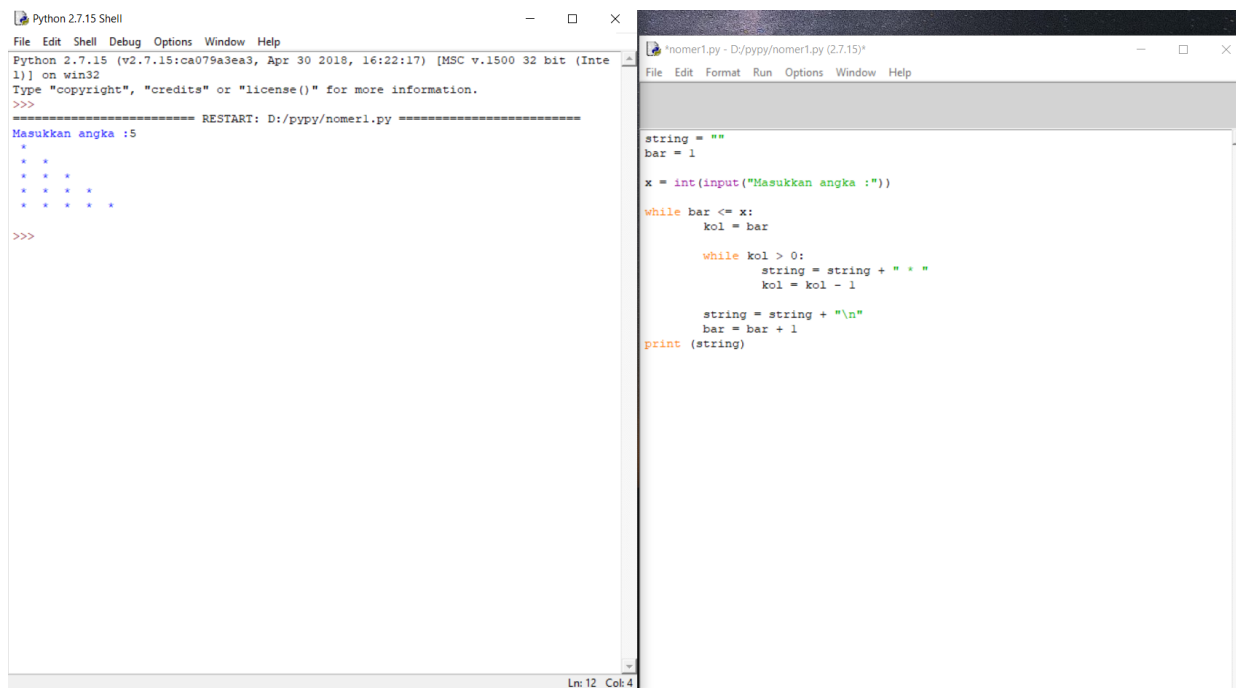
Nama : Bagus Zizou Satiaji

NIM : L200180212

Kelas : Praktikum Algoritma dan Struktur Data H

Modul 1

Nomer 1



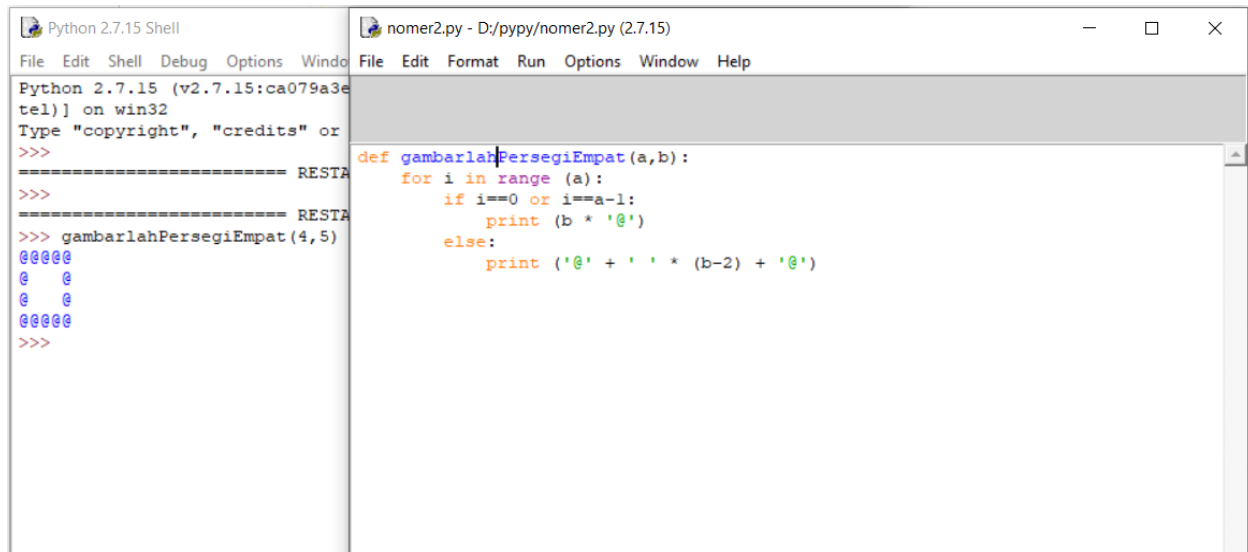
The image displays two side-by-side screenshots of a Python environment. The left screenshot shows a Python 2.7.15 Shell window with the following text:

```
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/nomer1.py =====
Masukkan angka :5
*
* *
* * *
* * * *
* * * * *
>>>
```

The right screenshot shows a Python IDE window titled "nomer1.py - D:/pypy/nomer1.py (2.7.15)" with the following code:

```
string = ""
bar = 1
x = int(input("Masukkan angka :"))
while bar <= x:
    kol = bar
    while kol > 0:
        string = string + " * "
        kol = kol - 1
    string = string + "\n"
    bar = bar + 1
print (string)
```

Nomer 2



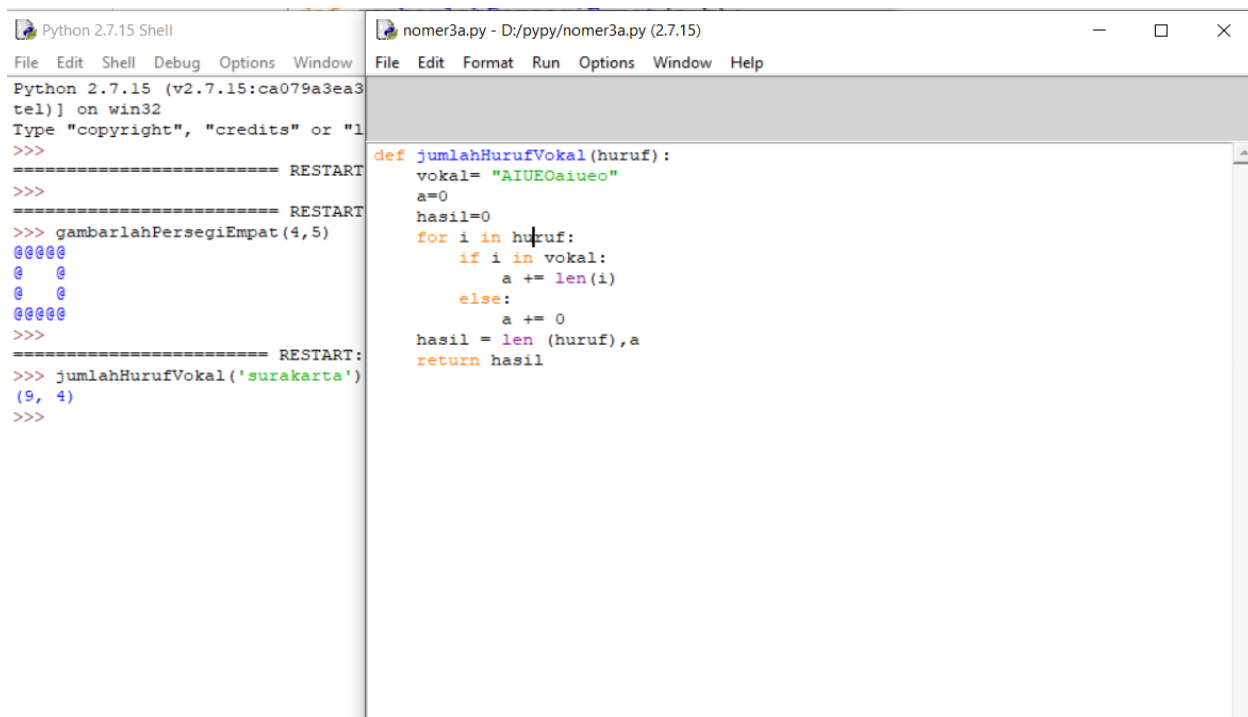
The image shows two windows from a Python 2.7.15 environment. The left window is a shell with the following code and output:

```
Python 2.7.15 (v2.7.15:ca079a3e3tel) on win32
Type "copyright", "credits" or "1"
>>>
===== RESTART:
>>>
===== RESTART:
>>> gambarlahPersegiEmpat(4,5)
@@@@@
@  @
@  @
@@@@@
>>>
```

The right window shows the script `nomer2.py` with the following code:

```
def gambarlahPersegiEmpat(a,b):
    for i in range(a):
        if i==0 or i==a-1:
            print(b * '@')
        else:
            print('@' + ' ' * (b-2) + '@')
```

Nomer 3A



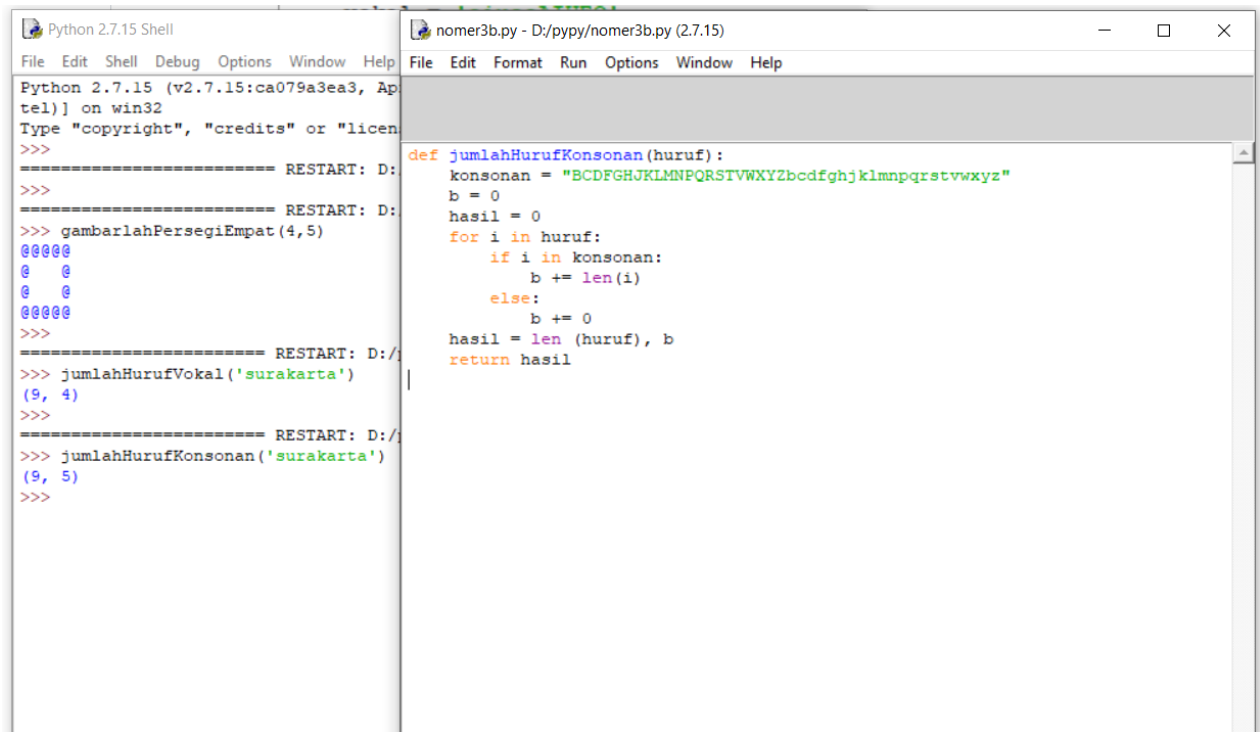
The image shows two windows from a Python 2.7.15 environment. The left window is a shell with the following code and output:

```
Python 2.7.15 (v2.7.15:ca079a3e3tel) on win32
Type "copyright", "credits" or "1"
>>>
===== RESTART:
>>>
===== RESTART:
>>> gambarlahPersegiEmpat(4,5)
@@@@@
@  @
@  @
@@@@@
>>>
===== RESTART:
>>> jumlahHurufVokal('surakarta')
(9, 4)
>>>
```

The right window shows the script `nomer3a.py` with the following code:

```
def jumlahHurufVokal(huruf):
    vokal= "AIUEOaiueo"
    a=0
    hasil=0
    for i in huruf:
        if i in vokal:
            a += len(i)
        else:
            a += 0
    hasil = len(huruf),a
    return hasil
```

Nomer 3B



```
Python 2.7.15 Shell
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 10 2015) on win32
Type "copyright", "credits" or "license()" for more
>>>
===== RESTART: D:\Python27\Python27\Python Shell >>>
>>>
===== RESTART: D:\Python27\Python27\Python Shell >>>
>>> gambarlahPersegiEmpat(4,5)
00000
0 0
0 0
00000
>>>
===== RESTART: D:\Python27\Python27\Python Shell >>>
>>> jumlahHurufVokal('surakarta')
(9, 4)
>>>
===== RESTART: D:\Python27\Python27\Python Shell >>>
>>> jumlahHurufKonsonan('surakarta')
(9, 5)
>>>
```

```
nomer3b.py - D:\pypy\nomer3b.py (2.7.15)
File Edit Format Run Options Window Help
def jumlahHurufKonsonan(huruf):
    konsonan = "BCDFGHJKLMNPQRSTVWXYZbcd fghjklmnpqrstvwxyz"
    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)
```

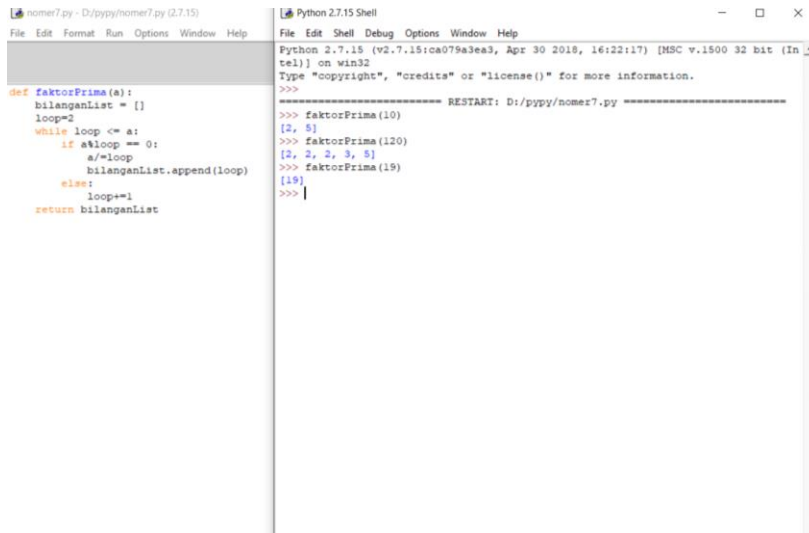
Nomer 5

<pre>nomer5.py - D:/pypy/nomer5.py (2.7.15) File Edit Format Run Options Window Help from math import sqrt as sq def apakahPrima(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 return True</pre>	<pre>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/nomer5.py ===== >>> apakahPrima(17) True >>> apakahPrima(97) True >>> apakahPrima(123) False >>></pre>
---	--

Nomer 6

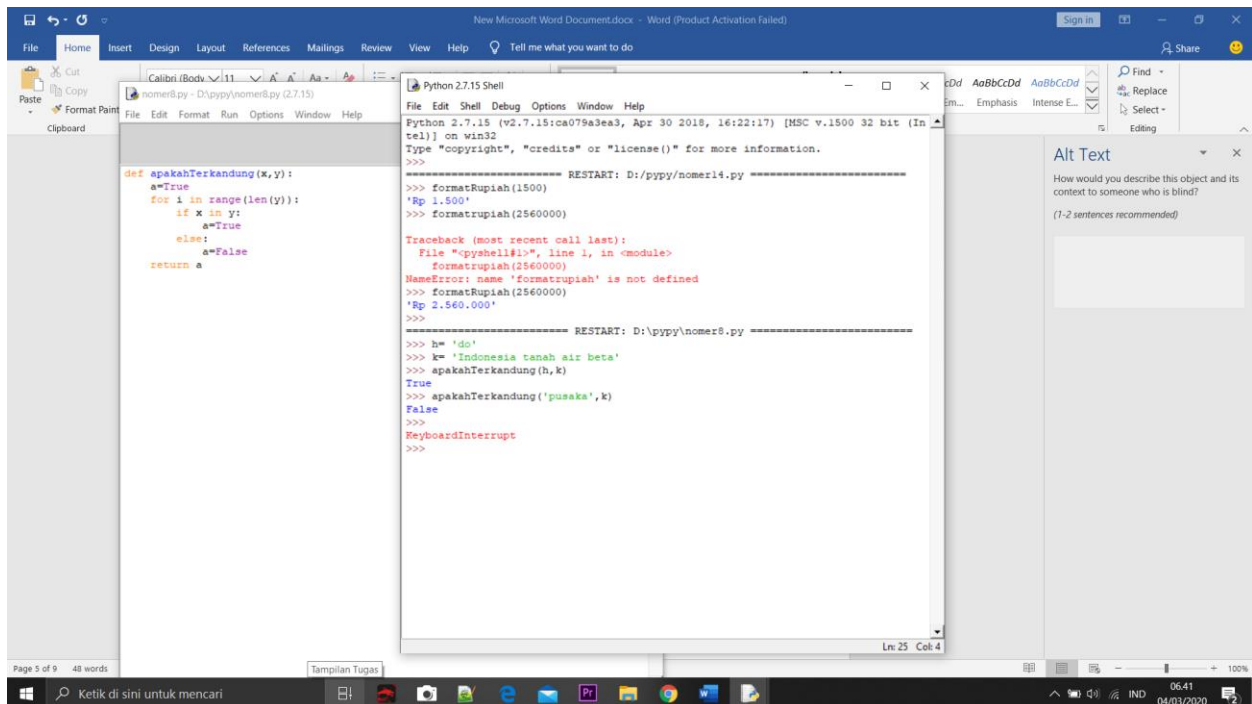
<pre>nomer6.py - D:/pypy/nomer6.py (2.7.15) File Edit Format Run Options Window Help def bilanganPrima(n): for i in range(2,n): prima = True for j in range(2,i): if (i%j==0): prima = False if (prima): print(i)</pre>	<pre>Python 2.7.15 Shell File Edit Shell Debug Options Window Help Python 2.7.15 (v2.7.15:ca079a3ea3, 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/nomer6.py ===== >>> bilanganPrima(1000) 2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97 101 103 107 109 113 127 131 137 139</pre>
--	---

Nomer 7



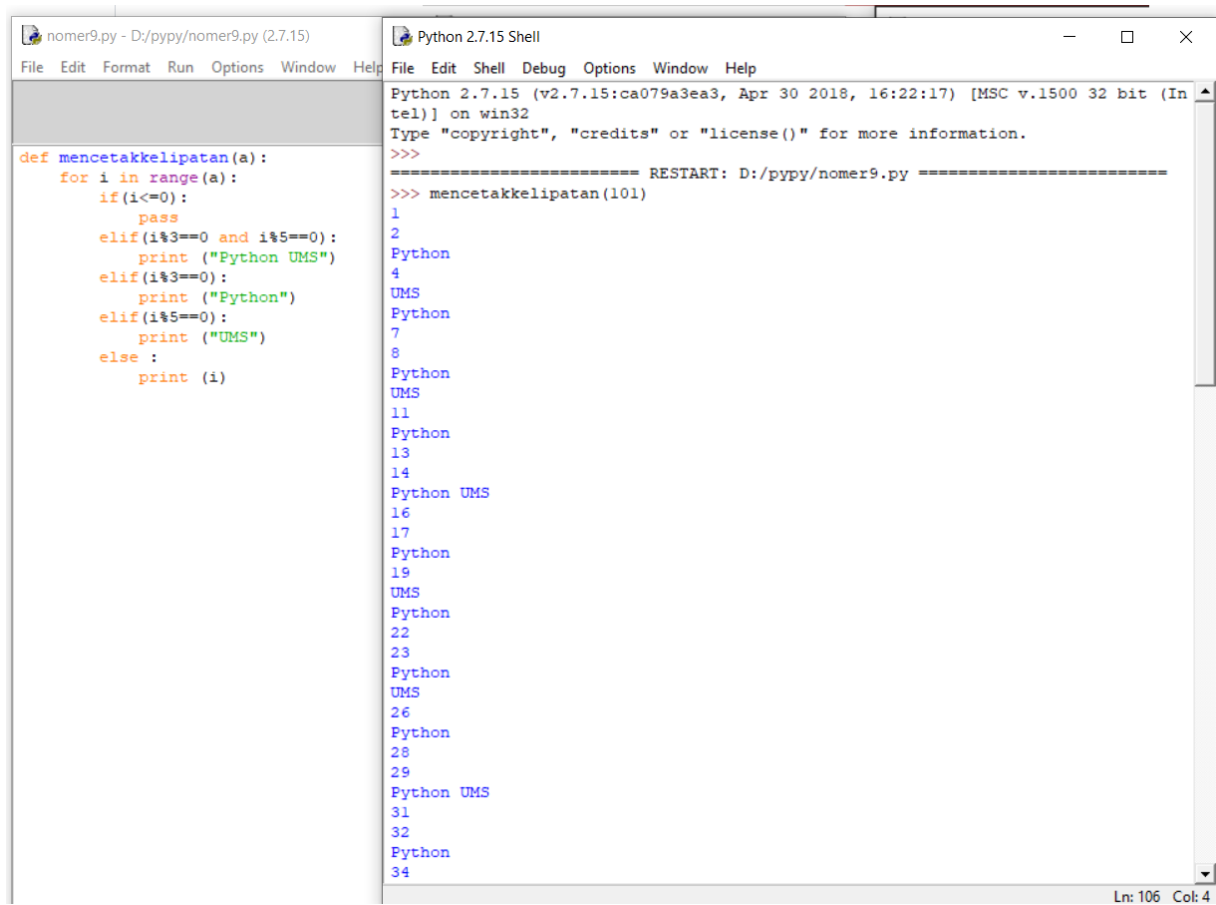
```
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:22:17) [MSC v.1500 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:\pypy\nomer7.py =====
>>> faktorPrima(10)
[2, 5]
>>> faktorPrima(120)
[2,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

Nomer 8



```
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\nomer14.py =====
>>> formatRupiah(1500)
'Rp 1.500'
>>> formatRupiah(2560000)
Traceback (most recent call last):
  File "<pyshe11>", 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'
>>> apakahTerkadang(h,k)
True
>>> apakahTerkadang('pusaka', k)
False
>>>
KeyboardInterrupt
>>>
```

Nomer 9



The image shows a screenshot of a Python IDE with two windows. The left window, titled 'nomer9.py - D:/pypy/nomer9.py (2.7.15)', contains the following Python code:

```
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)
```

The right window, titled 'Python 2.7.15 Shell', shows the execution of the script. It displays the Python version and architecture, followed by a restart message and the output of the function 'mencetakkelipatan(101)'. The output consists of a sequence of numbers and strings, alternating between 'Python' and 'UMS' based on the logic in the script.

```
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
```

The status bar at the bottom right indicates '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 detrr
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 + detrr(D)) / (2*a)
        x2=(-b + detrr(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

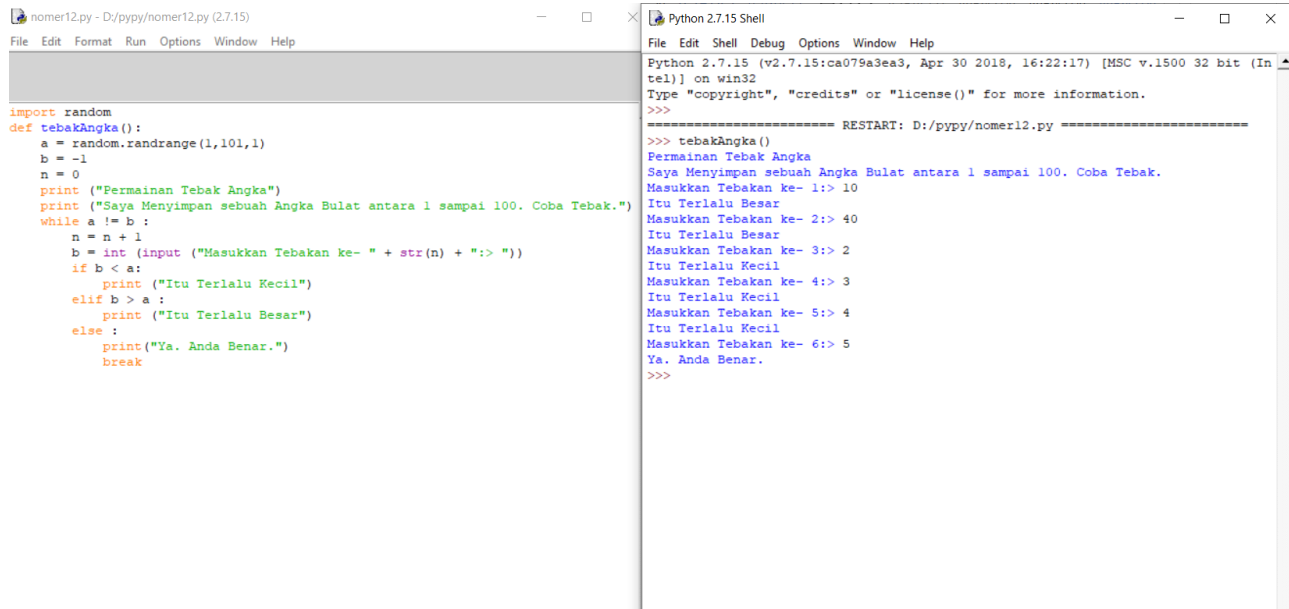
nomer11.py - D:/pypy/nomer11.py (2.7.15)
File Edit Format Run Options Window Help

```
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 (Intel)] 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
>>> |

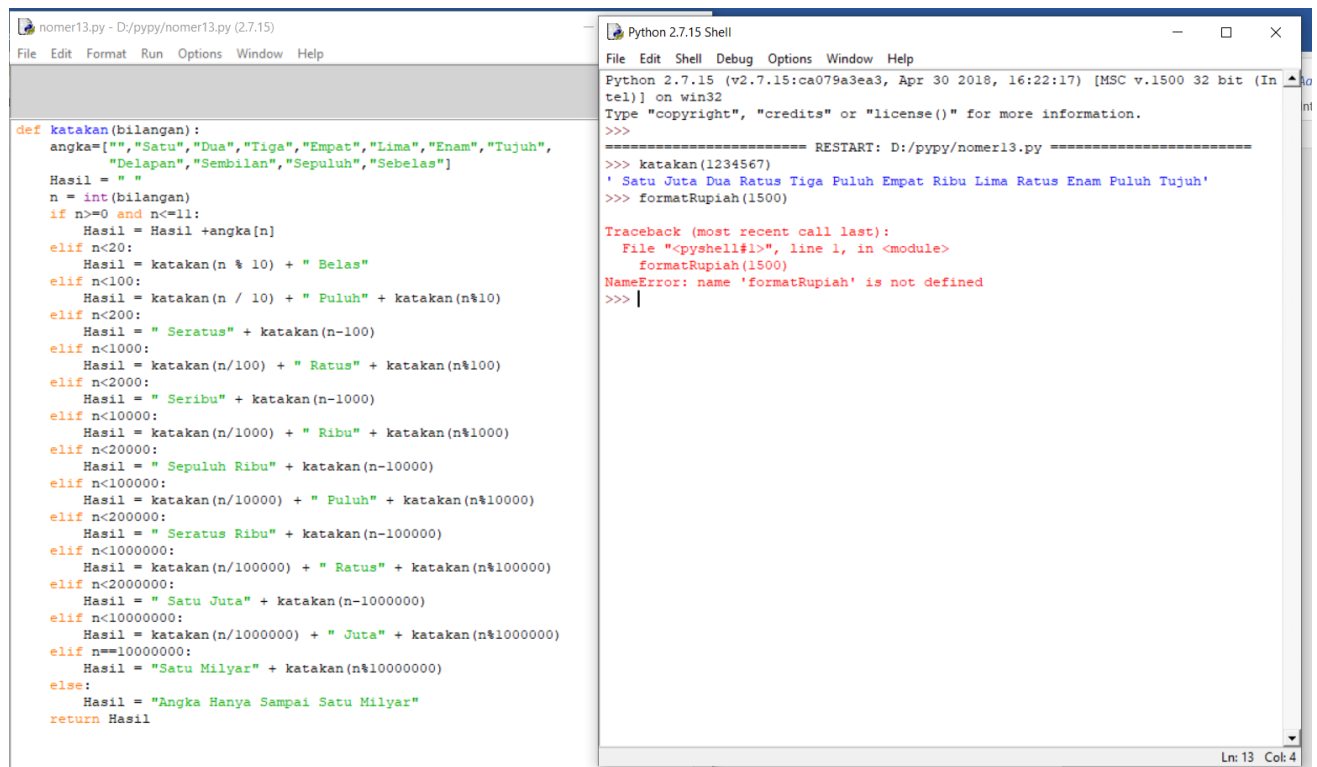
Nomer 12



```
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/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

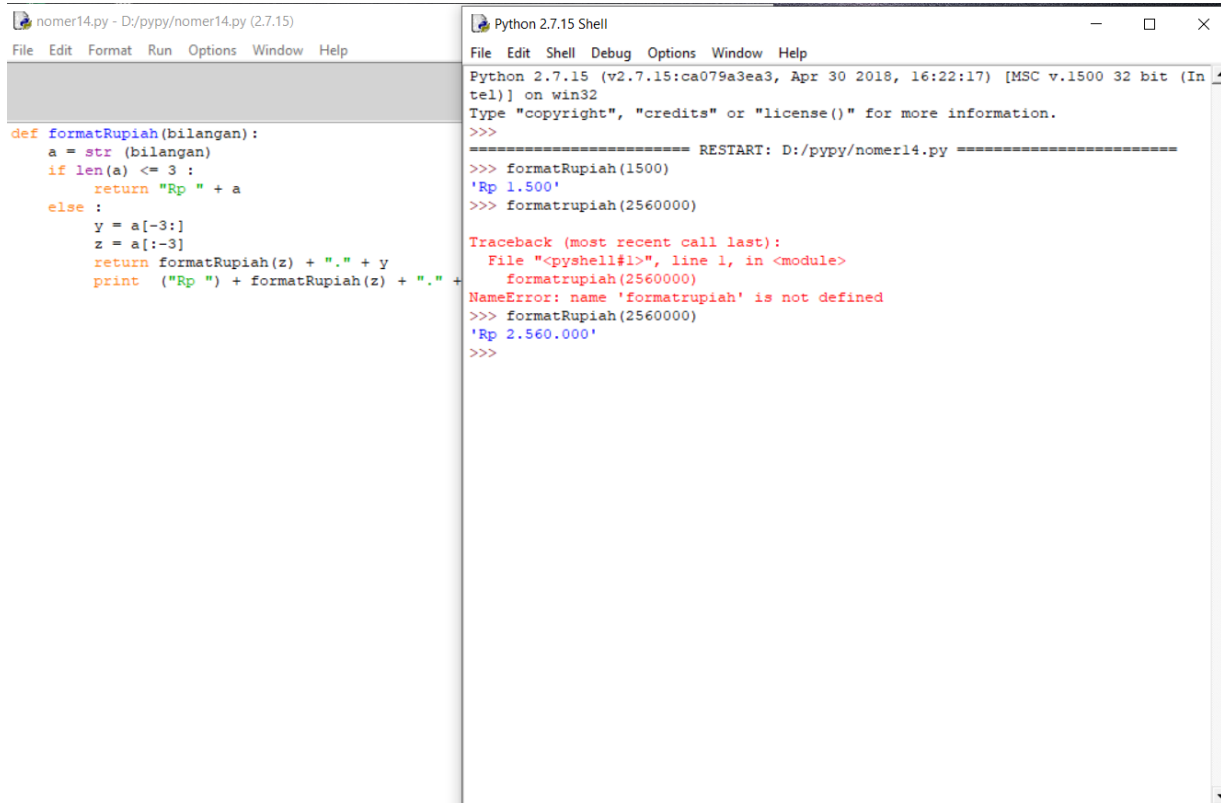


```
Python 2.7.15 Shell
File Edit Shell Debug Options Window Help

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/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
>>>
```


Nomer 14



The screenshot shows a Python 2.7.15 Shell window with two panes. The left pane displays a Python script named `nomer14.py` with the following code:

```
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) + "." +
```

The right pane shows the execution of the script. It starts with the Python version and architecture information, followed by a restart command. The script is then executed, and the output is displayed:

```
>>>  
===== 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'  
>>>
```

The error message indicates that the function `formatrupiah` is not defined, which is a typo for `formatRupiah`.