

Nama : Ari wibowo

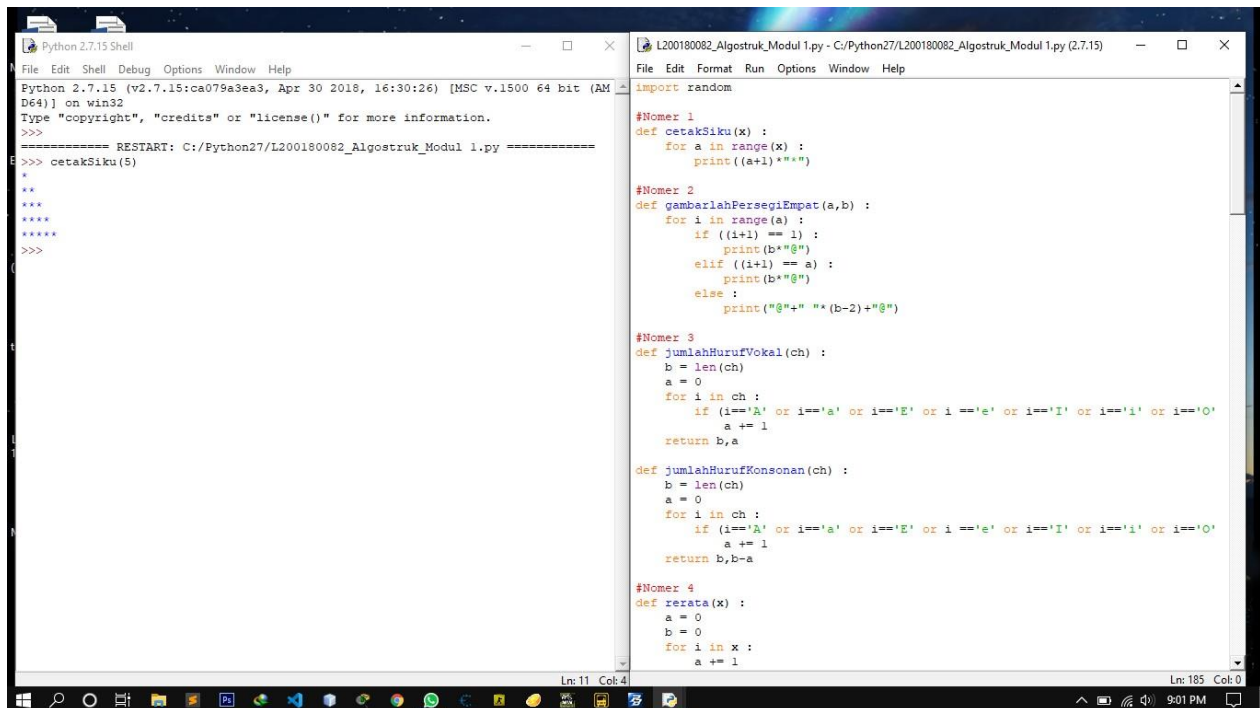
NIM :L200180056

Kelas :C

## Tugas Modul

1

1.



The image shows a screenshot of a Windows desktop with two windows open. The left window is a Python 2.7.15 Shell, and the right window is a Python script editor for a file named L200180082\_Algostruk\_Modul 1.py.

The Python Shell window shows the following text:

```
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Python27/L200180082_Algostruk_Modul 1.py =====
>>> cetakSiku(5)
*
**
***
****
*****
>>>
```

The Python script editor window shows the following code:

```
import random

#Nomer 1
def cetakSiku(x) :
    for a in range(x) :
        print ((a+1)*" *")

#Nomer 2
def gambarlahPersegiEmpat(a,b) :
    for i in range(a) :
        if ((i+1) == 1) :
            print (b*" @")
        elif ((i+1) == a) :
            print (b*" @")
        else :
            print (" @ "+" "*(b-2)+" @")

#Nomer 3
def jumlahHurufVokal(ch) :
    b = len(ch)
    a = 0
    for i in ch :
        if (i=='A' or i=='a' or i=='E' or i=='e' or i=='I' or i=='i' or i=='O' or i=='o') :
            a += 1
    return b,a

def jumlahHurufKonsonan(ch) :
    b = len(ch)
    a = 0
    for i in ch :
        if (i=='A' or i=='a' or i=='E' or i=='e' or i=='I' or i=='i' or i=='O' or i=='o') :
            a += 1
    return b,b-a

#Nomer 4
def rerata(x) :
    a = 0
    b = 0
    for i in x :
        a += 1
```

2.

```
Python 2.7.15 Shell
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Python27/L200180082_Algostruk_Modul 1.py =====
>>> gambarlahPersegiEmpat(4,5)
*****
*   *
*   *
*   *
*   *
*****
>>>

L200180082_Algostruk_Modul 1.py - C:/Python27/L200180082_Algostruk_Modul 1.py (2.7.15)
File Edit Format Run Options Window Help
import random

#Nomer 1
def cetakSiku(x) :
    for a in range(x) :
        print ((a+1)*"*")

#Nomer 2
def gambarlahPersegiEmpat(a,b) :
    for i in range(a) :
        if ((i+1) == 1) :
            print(b*"@")
        elif ((i+1) == a) :
            print(b*"@")
        else :
            print("@@"+" "*(b-2)+"@")

#Nomer 3
def jumlahHurufVokal(ch) :
    b = len(ch)
    a = 0
    for i in ch :
        if (i=='A' or i=='a' or i=='E' or i=='e' or i=='I' or i=='i' or i=='O' or i=='o') :
            a += 1
    return b,a

def jumlahHurufKonsonan(ch) :
    b = len(ch)
    a = 0
    for i in ch :
        if (i=='A' or i=='a' or i=='E' or i=='e' or i=='I' or i=='i' or i=='O' or i=='o') :
            a += 1
    return b,b-a

#Nomer 4
def rerata(x) :
    a = 0
    b = 0
    for i in x :
        a += 1

Ln: 185 Col: 0
```

3.

```
Python 2.7.15 Shell
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Python27/L200180082_Algostruk_Modul 1.py =====
>>> k = jumlahHurufVokal("Surakarta")
>>> k
(9, 4)
>>> k = jumlahHurufKonsonan("Surakarta")
>>> k
(9, 5)
>>> |

L200180082_Algostruk_Modul 1.py - C:/Python27/L200180082_Algostruk_Modul 1.py (2.7.15)
File Edit Format Run Options Window Help
#Nomer 3
def jumlahHurufVokal(ch) :
    b = len(ch)
    a = 0
    for i in ch :
        if (i=='A' or i=='a' or i=='E' or i=='e' or i=='I' or i=='i' or i=='O' or i=='o') :
            a += 1
    return b,a

def jumlahHurufKonsonan(ch) :
    b = len(ch)
    a = 0
    for i in ch :
        if (i=='A' or i=='a' or i=='E' or i=='e' or i=='I' or i=='i' or i=='O' or i=='o') :
            a += 1
    return b,b-a

#Nomer 4
def rerata(x) :
    a = 0
    b = 0
    for i in x :
        a += 1
        b = b + i
    a = float(a)
    b = float(b)
    return (b/a)

#Nomer 5
def apakahPrima(a) :
    x = 0
    for i in range(a) :
        if a % (i+1) == 0 :
            x += 1
    if x == 2 :
        print("YA")
    else :
        print("TIDAK")

Ln: 11 Col: 4
```

4.

```

Python 2.7.15 Shell
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Python27/L200180082_Algostruk_Modul 1.py =====
>>> rerata([1,2,3,4,5])
3.0
>>> g = [3,4,5,4,3,4,5,2,2,10,11,23]
>>> rerata(g)
6.333333333333333
>>>

L200180082_Algostruk_Modul 1.py - C:/Python27/L200180082_Algostruk_Modul 1.py (2.7.15)
File Edit Format Run Options Window Help

#Nomer 4
def rerata(x):
    a = 0
    b = 0
    for i in x:
        a += 1
        b = b + i
    a = float(a)
    b = float(b)
    return (b/a)

#Nomer 5
def apakahPrima(a):
    x = 0
    for i in range(a):
        if a % (i+1) == 0:
            x += 1
    if x == 2:
        print("YA")
    else:
        print("TIDAK")

#Nomer 6
def cekPrima():
    y = range(1001)
    for i in range(2,1001):
        x = 0
        for j in range(i):
            if i % (j+1) == 0:
                x += 1
        if x == 2:
            print(i)

#Nomer 7
def faktorPrima(x):
    listprima=[]
    prima=2
    while prima<=x:
        if x%prima==0:
            x/=prima
            listprima.append(prima)

```

5.

```

Python 2.7.15 Shell
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Python27/L200180082_Algostruk_Modul 1.py =====
>>> apakahPrima(17)
YA
>>> apakahPrima(97)
YA
>>> apakahPrima(123)
TIDAK
>>>

L200180082_Algostruk_Modul 1.py - C:/Python27/L200180082_Algostruk_Modul 1.py (2.7.15)
File Edit Format Run Options Window Help

##Nomer 5
def apakahPrima(n):
    n = int(n)
    assert n >= 0
    primaKecil = [2,3,5,7,11]
    bknPrKecil = [0,1,4,6,8,9,10]
    if n in primaKecil:
        return True
    elif n in bknPrKecil:
        return False
    else:
        x = 0
        for i in range(n):
            if n % (i+1) == 0:
                x += 1
        if x == 2:
            print("YA")
        else:
            print("TIDAK")

#Nomer 6
def cekPrima():
    y = range(1001)
    for i in range(2,1001):
        x = 0
        for j in range(i):
            if i % (j+1) == 0:
                x += 1
        if x == 2:
            print(i)

#Nomer 7
def faktorPrima(x):
    listprima=[]
    prima=2
    while prima<=x:
        if x%prima==0:
            x/=prima
            listprima.append(prima)
        else:

```

6.

The image shows two windows from a Windows desktop. The left window is a 'Python 2.7.15 Shell' with a menu bar (File, Edit, Shell, Debug, Options, Window, Help). It displays the command prompt for Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)] on win32. The user has entered 'Type "copyright", "credits" or "license()" for more information.' and '>>>'. The right window is a Python script editor titled 'L200180082\_Algostruk\_Modul 1.py - C:/Python27/L200180082\_Algostruk\_Modul 1.py (2.7.15)'. It contains the following code:

```
#Nomer 6
def cekPrima():
    y = range(1001)
    for i in range(2,1001):
        x = 0
        for j in range(i):
            if i % (j+1) == 0:
                x += 1
        if x == 2:
            print(i)

#Nomer 7
def faktorPrima(x):
    listprima=[]
    prima=2
    while prima<=x:
        if x%prima==0:
            x/=prima
            listprima.append(prima)
        else:
            prima+=1
    return listprima

#Nomer 8
def apakahTerkandung(a,b):
    if a in b:
        return True
    else:
        return False

#Nomer 9
def ums():
    for i in range(101):
        if (i+1) % 15 == 0:
            print("Python UMS")
        elif (i+1) % 3 == 0:
            print("Python")
        elif (i+1) % 5 == 0:
            print("UMS")
        else:
            pass
```

7.

The image shows two windows from a Windows desktop. The left window is a 'Python 2.7.15 Shell' with a menu bar (File, Edit, Shell, Debug, Options, Window, Help). It displays the command prompt for Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)] on win32. The user has entered 'Type "copyright", "credits" or "license()" for more information.' and '>>>'. The right window is a Python script editor titled 'L200180082\_Algostruk\_Modul 1.py - C:/Python27/L200180082\_Algostruk\_Modul 1.py (2.7.15)'. It contains the following code:

```
#Nomer 7
def faktorPrima(x):
    listprima=[]
    prima=2
    while prima<=x:
        if x%prima==0:
            x/=prima
            listprima.append(prima)
        else:
            prima+=1
    return listprima

#Nomer 8
def apakahTerkandung(a,b):
    if a in b:
        return True
    else:
        return False

#Nomer 9
def ums():
    for i in range(101):
        if (i+1) % 15 == 0:
            print("Python UMS")
        elif (i+1) % 3 == 0:
            print("Python")
        elif (i+1) % 5 == 0:
            print("UMS")
        else:
            print(i+1)

#Nomer 10
def selesaikanABC(a,b,c):
    res = 0
    res = (b**2) - (4*a*c)

    if res == 0:
        print("Determinannya nol. Persamaan mempunyai satu akar kembar.")
    elif res > 0:
        print("Determinannya positif. Persamaan mempunyai akar real dan berlaina")
```

8.





```
Python 2.7.15 Shell
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Python27/L200180082_Algostruk_Modul 1.py =====
>>> selesaikanABC(1,2,3)
Determinannya negatif. Persamaan tidak mempunyai akar real.
>>>

L200180082_Algostruk_Modul 1.py - C:/Python27/L200180082_Algostruk_Modul 1.py (2.7.15)
File Edit Format Run Options Window Help

#Nomer 10
def selesaikanABC(a,b,c) :
    res = 0
    res = (b**2) - (4*a*c)

    if res == 0 :
        print("Determinannya nol. Persamaan mempunyai satu akar kembar.")
    elif res > 0 :
        print("Determinannya positif. Persamaan mempunyai akar real dan berlaina")
    elif res < 0 :
        print("Determinannya negatif. Persamaan tidak mempunyai akar real.")

#Nomer 11
def apakahKabisat() :
    thn = int(input("Masukkan Tahun : "))
    if thn % 4 == 0 :
        if thn % 100 == 0 :
            if thn % 400 == 0 :
                print True
            else :
                print False
        else :
            print True
    else :
        print False

#Nomer 12
def tebak() :
    a = random.randrange(1,101)
    b = -1
    n = 0
    print("Permainan tebak angkat.")
    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. Coba lagi")
        elif b > a :
            print("Itu terlalu besar. Coba lagi")

Ln: 7 Col: 4
Ln: 76 Col: 20
9:45 PM
```

11.

```
Python 2.7.15 Shell
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Python27/L200180082_Algostruk_Modul 1.py =====
>>> apakahKabisat()
Masukkan Tahun : 1896
True
>>> apakahKabisat()
Masukkan Tahun : 1897
False
>>> apakahKabisat()
Masukkan Tahun : 1900
False
>>> apakahKabisat()
Masukkan Tahun : 2000
True
>>> apakahKabisat()
Masukkan Tahun : 2004
True
>>> apakahKabisat()
Masukkan Tahun : 2100
False
>>> apakahKabisat()
Masukkan Tahun : 2400
True
>>>

L200180082_Algostruk_Modul 1.py - C:/Python27/L200180082_Algostruk_Modul 1.py (2.7.15)
File Edit Format Run Options Window Help

#Nomer 11
def apakahKabisat() :
    thn = int(input("Masukkan Tahun : "))
    if thn % 4 == 0 :
        if thn % 100 == 0 :
            if thn % 400 == 0 :
                print True
            else :
                print False
        else :
            print True
    else :
        print False

#Nomer 12
def tebak() :
    a = random.randrange(1,101)
    b = -1
    n = 0
    print("Permainan tebak angkat.")
    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. Coba lagi")
        elif b > a :
            print("Itu terlalu besar. Coba lagi")
        else :
            print("Ya. Anda benar.")
            break

#Nomer 13
def katakan(x):
    satuan = [' ', 'satu', 'dua', 'tiga', 'empat', 'lima', 'enam', 'tujuh', 'del
    hasil = ""
    if x <= 0 :
        hasil += "Bilangan Haruslah Positif ndan Bilangan Asli"
    elif x < 12 :
        hasil += satuan[x]

Ln: 26 Col: 4
Ln: 76 Col: 20
9:47 PM
```

12

```
Python 2.7.15 Shell
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Python27/L200180082_Algostruk_Modul 1.py =====
>>> tebak()
Permainan tebak angkat.
Saya menyimpan sebuah angka bulat antara 1 sampai 100. Coba tebak
Masukkan tebakan ke-1:> 50
Itu terlalu kecil. Coba lagi
Masukkan tebakan ke-2:> 75
Itu terlalu kecil. Coba lagi
Masukkan tebakan ke-3:> 58
Itu terlalu kecil. Coba lagi
Masukkan tebakan ke-4:> 70
Itu terlalu kecil. Coba lagi
Masukkan tebakan ke-5:> 90
Itu terlalu besar. Coba lagi
Masukkan tebakan ke-6:> 87
Itu terlalu besar. Coba lagi
Masukkan tebakan ke-7:> 84
Itu terlalu kecil. Coba lagi
Masukkan tebakan ke-8:> 85
Ya. Anda benar.
>>>

L200180082_Algostruk_Modul 1.py - C:/Python27/L200180082_Algostruk_Modul 1.py (2.7.15)
File Edit Format Run Options Window Help
def tebak():
    a = random.randrange(1,101)
    b = -1
    n = 0
    print("Permainan tebak angkat.")
    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. Coba lagi")
        elif b > a:
            print("Itu terlalu besar. Coba lagi")
        else:
            print("Ya. Anda benar.")
            break

#Nomor 13
def katakan(x):
    satuan = [' ', 'satu', 'dua', 'tiga', 'empat', 'lima', 'enam', 'tujuh', 'delapan', 'sembilan', 'sepuluh', 'sebelas']
    hasil = ""
    if x <= 0:
        hasil += "Bilangan Haruslah Positif,ndan Bilangan Asli"
    elif x < 12:
        hasil += satuan[x]
    elif x < 20:
        hasil += katakan(x-10) + " belas "
    elif x < 100:
        hasil += katakan(int(x/10)) + " puluh " + katakan(x%10)
    elif x < 200:
        hasil += "seratus " + katakan(x-100)
    elif x < 1000:
        hasil += katakan(int(x/100)) + " ratus " + katakan(x%100)
    elif x < 2000:
        hasil += "seribu " + katakan(x-1000)
    elif x < 1000000:
        hasil += katakan(int(x/1000)) + " ribu " + katakan(x%1000)
    elif x < 1000000000:
        hasil += katakan(int(x/1000000)) + " juta " + katakan(x%1000000)
    elif x >= 1000000000:
        hasil += "milyar " + katakan(x/1000000000)

Ln: 24 Col: 4
Ln: 76 Col: 2
```

13.

```
Python 2.7.15 Shell
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Python27/L200180082_Algostruk_Modul 1.py =====
>>> katakan(3125750)
'tiga juta seratus dua puluh lima ribu tujuh ratus lima puluh'
>>>

L200180082_Algostruk_Modul 1.py - C:/Python27/L200180082_Algostruk_Modul 1.py (2.7.15)
File Edit Format Run Options Window Help
#Nomor 13
def katakan(angka):
    satuan = ["satu", "dua", "tiga", "empat", "lima", "enam", "tujuh", "delapan", "sembilan", "sepuluh", "sebelas", "dua belas", "tiga belas", "empat belas", "lima belas", "enam belas", "tujuh belas", "delapan belas", "sembilan belas"]
    angka = '%(0,.0f)' % float(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])

#Nomor 14
def formatRupiah(a):
    a = list(str(a))
    b = len(a)

Ln: 7 Col: 4
Ln: 163 Col: 0
```

14

```
Python 2.7.15 Shell
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Python27/L200180082_Algostruk_Modul 1.py =====
>>> formatRupiah(1500)
Rp 1.500
>>> formatRupiah(2560000)
Rp 2.560.000
>>>

L200180082_Algostruk_Modul 1.py - C:/Python27/L200180082_Algostruk_Modul 1.py (2.7.15)
File Edit Format Run Options Window Help

    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])

#Nomer 14
def formatRupiah(a) :
    a = list(str(a))
    b = len(a)
    if b % 3 == 0 :
        b = int(b/3) - 1
    else :
        b = int(b/3)
    n = 0
    for i in range(b) :
        x = -3*(i+1)
        a.insert(int(x)+n, ".")
        n = n - 1
    a = "".join(a)
    print("Rp "+a)

Ln: 9 Col: 4
Ln: 163 Col: 0
```