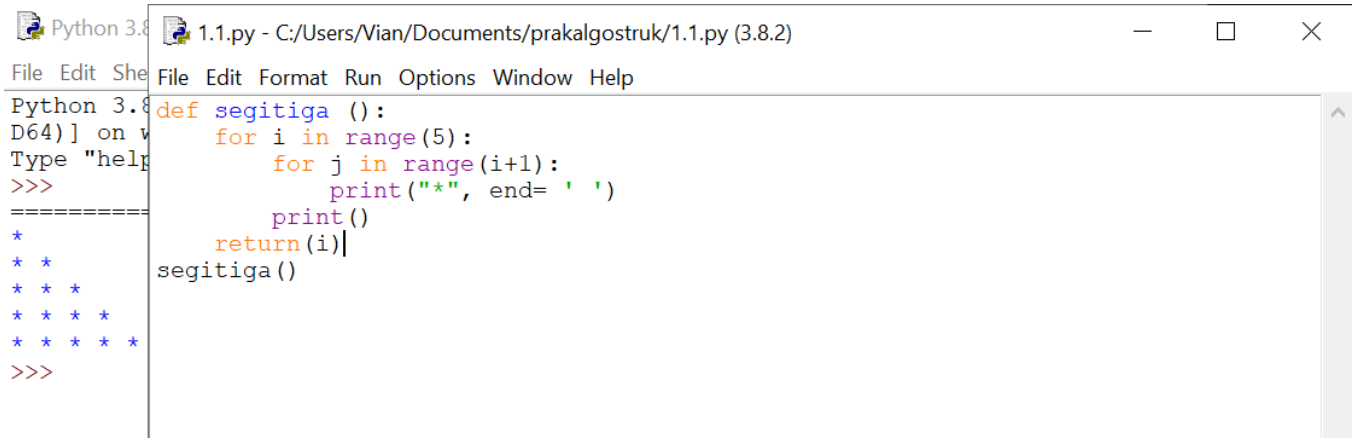
VIRLIANA AR

L20180017

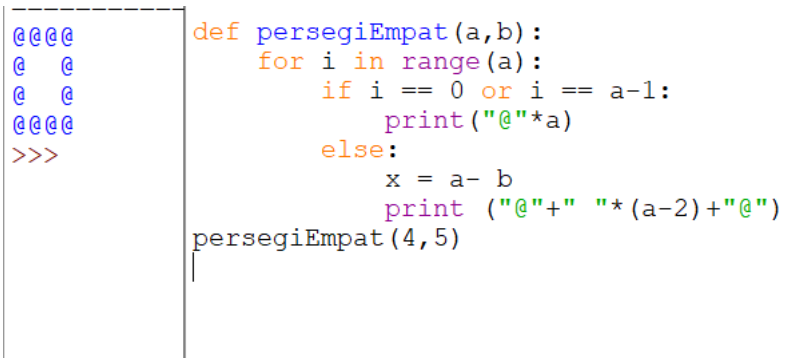
A

MODUL 1

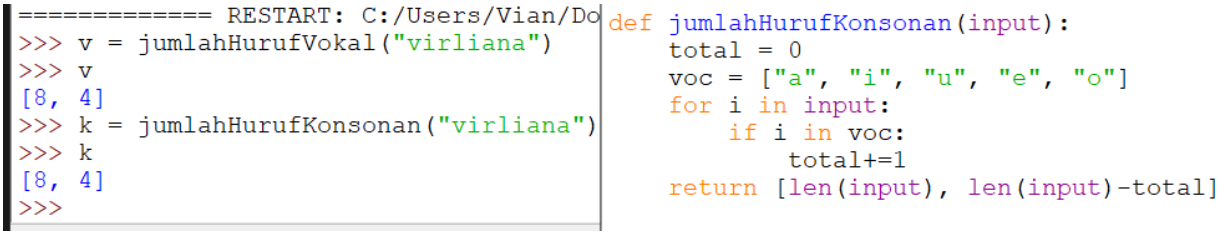
1



2



3



4

```
>>> rerata([1,2,3,4,5])
3.0
>>> g=[3,4,5,4,3,5,2,2,10,11,23]
>>> rerata(g)
6.545454545454546
>>>
```

```
def rerata(b):
    sum = 0
    for i in b :
        sum += i
    nilai=(sum/len(b))
    return nilai
```

5

```
========== RES
False
False
False
>>>
```

```
print(apakahPrima(112))
print(apakahPrima(57))
print(apakahPrima(25))
```

6

```
980 False
981 False
982 False
983 True
984 False
985 False
986 False
987 False
988 False
989 False
990 False
991 True

992 False
993 False
994 False
995 False
996 False
997 True
998 False
999 False
1000 False
>>>
```

```
#print(apakahPrima(25))

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
                break
        else :
            return True

for i in range (2,1001):
    print(str(i)+" "+str(apakahPrima(i)))
```

7

```
983 True
984 False
985 False
986 False
987 False
988 False
989 False
990 False
991 True

992 False
993 False
994 False
995 False
996 False
997 True
998 False
999 False
1000 False
>>>
========== RESTART: C:/Users/Via
>>> faktorPrima(10)
[2, 5]
>>> faktorPrima(5)
[]
>>> faktorPrima(28)
[2, 2, 7]
>>>
```

```
def faktorPrima(x) :
    a = []
    b = []
    hasil = 0
    bil = x
    prima =True
    for i in range(2,x):
        prima = True
        for u in range(2, i) :
            if i % u == 0 :
                prima = False
        if prima :
            a.append(i)
    idx = 0
    while bil > 1 :
        try:
            if (bil%a[idx]) == 0 :
                hasil = bil/a[idx]
                bil = hasil
                b.append(a[idx])
            else :
                idx = idx + 1
        except IndexError :
            break
    print (b)
```

8

```
[]
>>> faktorPrima(28)
[2, 2, 7]
>>>
============= RESTART: C:/Users/Via
True
False
>>>
```

```
def apakahTerkandung(a,b):
    return a in b

h = "ma"
k = "Universitas muhammadiyah surakarta"
print (apakahTerkandung(h, k))
print (apakahTerkandung("solo", k))
```

9

```
solo
94
indah
solo
97
98
solo
>>>
```

```
for i in range(1,100):
    if(i % 3) == 0 and (i % 5) == 0 :
        i = "solo indah"
    elif(i % 3) == 0:
        i = "solo"
    elif(i % 5) == 0:
        i = "indah"
    print(i)
```

10

```
solo indah
91
92
solo
94
indah
solo
97
98
solo
>>>
============= RESTART: C:/Users/Vian
>>> selesaikanABC (1,2,3)
Determinan negatif. Persamaan tidak
>>>
```

```
##    print(1)

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
    if (D < 0):
        print("Determinan negatif. Persamaan tidak mempunyai akar real.")
    else:
        x1 = (-b + akar(D))/(2*a)
        x2 = (-b - akar(D))/(2*a)
        hasil = (x1,x2)
        return hasil
```

11

```
length : 315   lines : 14    Ln : 1   Col : 1   Sel : 315 | 14    Windows (CR LF)    UTF-8

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 bi
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============= RESTART: C:\Users\Vian\Documents\prakalgostruk\1.1.py =======
False
False
True
True
>>>
```

```
def apakahKabisat(n):
    if n%4==0:
        if n%100==0 and n%400==0:
            return True
        elif n%100==0 and n%400!=0:
            return False
        return True
    return False

print(apakahKabisat(1851))
print(apakahKabisat(1900))
print(apakahKabisat(2000))
print(apakahKabisat(2400))
```

12

```
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 23:03:10) [MSC v.1
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more inform
>>>
========== RESTART: C:\Users\Vian\Documents\prakalgostruk\1.1.p
Permainan tebak angka.
Saya menyimpan sebuah angka bulat antara 1 sampai 100. Coba Tebak.
Masukkan tebakan ke-1:> 32
Itu terlalu kecil. Coba lagi.
Masukkan tebakan ke-2:> 33
Itu terlalu kecil. Coba lagi.
Masukkan tebakan ke-3:> 36
Itu terlalu kecil. Coba lagi.
Masukkan tebakan ke-4:> 38
Itu terlalu kecil. Coba lagi.
Masukkan tebakan ke-5:> 99
Itu terlalu besar. Coba lagi.
Masukkan tebakan ke-6:> 66
Itu terlalu kecil. Coba lagi.
Masukkan tebakan ke-7:> 77
Itu terlalu kecil. Coba lagi.
Masukkan tebakan ke-8:> 88
Itu terlalu besar. Coba lagi.
Masukkan tebakan ke-9:> 78
benar
>>>
```

```
import random

r = random.randint(1,100)
a = """Permainan tebak angka.
Saya menyimpan sebuah angka bulat antara 1 sampai 100. Coba Tebak."""

print(a)

b = "Masukkan tebakan ke-"
f = ":> "
c = 1
d = str(c)

for i in range(1,100):
    e = (b+d+f)
    a = int(input(e))
    c+=1
    d = str(c)
    if(a < r):
        print("Itu terlalu kecil. Coba lagi.")
    elif(a > r):
        print("Itu terlalu besar. Coba lagi.")
    elif(a == r):
        print("benar")
        break
```

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```
*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
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more inf
>>>
========== RESTART: C:\Users\Vian\Documents\prakalgostruk\1.
Masukkan angka dari 1 sd 1.000.000.000: 10000
Sepuluh  Ribu  Rupiah
Masukkan angka dari 1 sd 1.000.000.000:
```

```
def katakan(bil):
    angka = ["","Satu ","Dua ","Tiga ","Empat ","Lima ","Enam ",
             "Tujuh ","Delapan ","Sembilan ","Sepuluh ","Sebelas "]
    hasil = ""
    n = int(bil)
    if n >= 0 and n <= 11:


        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 < 1000000:
        hasil = katakan(n/1000) + " Ribu " + katakan(n%1000)
    elif n < 1000000000:
        hasil = katakan(n/1000000) + " Juta " + katakan(n%1000000)
    elif n > 1000000000:
        hasil = 'Maaf, program tidak membaca angka lebih dari Satu Milyar'
    return hasil


a = 1
while a != 0:
    a = input(' Masukkan angka dari 1 sd 1.000.000.000: ')
    huruf = katakan(a)
    print(huruf +' Rupiah')
```

14

```
Python 3.8.2 Shell
File Edit Shell Debug Options Windo
Python 3.8.2 (tags/v3.8.2:7b
D64)] on win32
Type "help", "copyright", "c
>>>
========== RESTART: C:/Us
>>> formatRupiah(9800000)
'Rp 9.800.000'
>>>
```

```
1.2.py - C:/Users/Vian/Documents/prakalgostruk/1.2.py (3.8.2)
File Edit Format Run Options Window Help
def formatRupiah(n):
    y = str(n)
    if len(y) <= 3 :
        return 'Rp ' + y
    else:
        p = y[-3:]
        q = y[:-3]
        return (formatRupiah(q) + '.' + p)
        print ('Rp' + (formatRupiah(q)) + '.' + p)
```