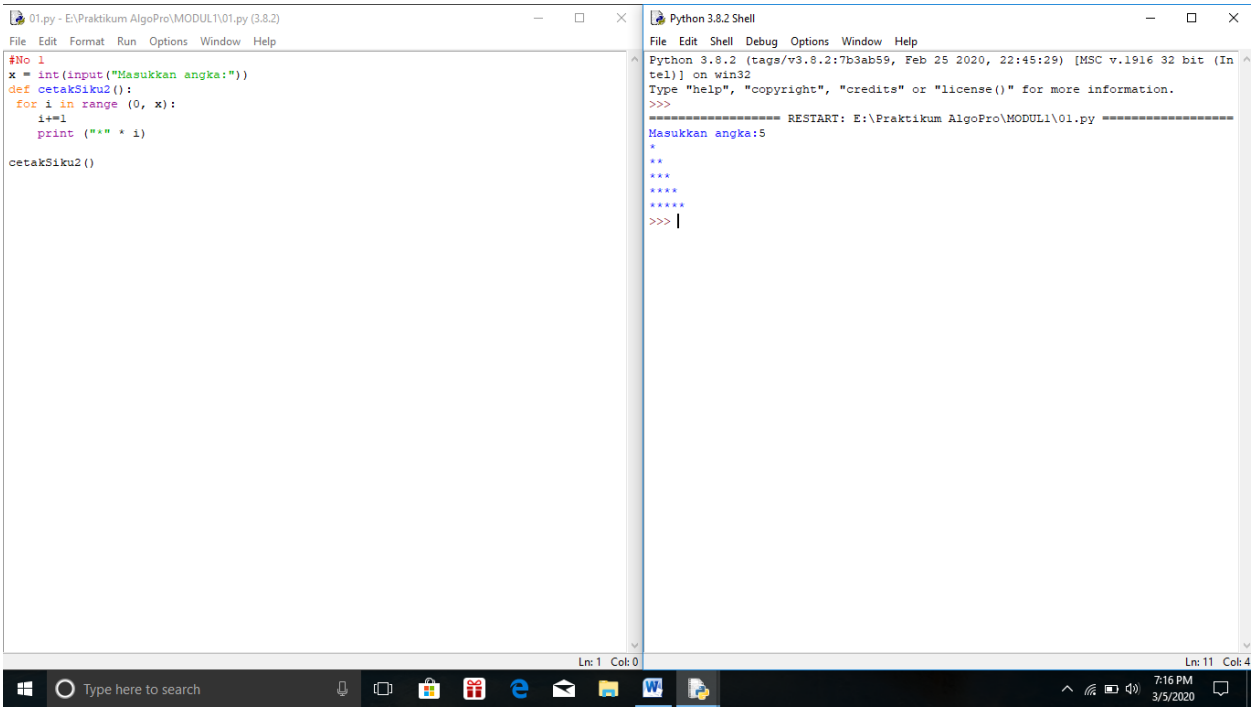
Nama : Suryo Pramuda Wicaksono

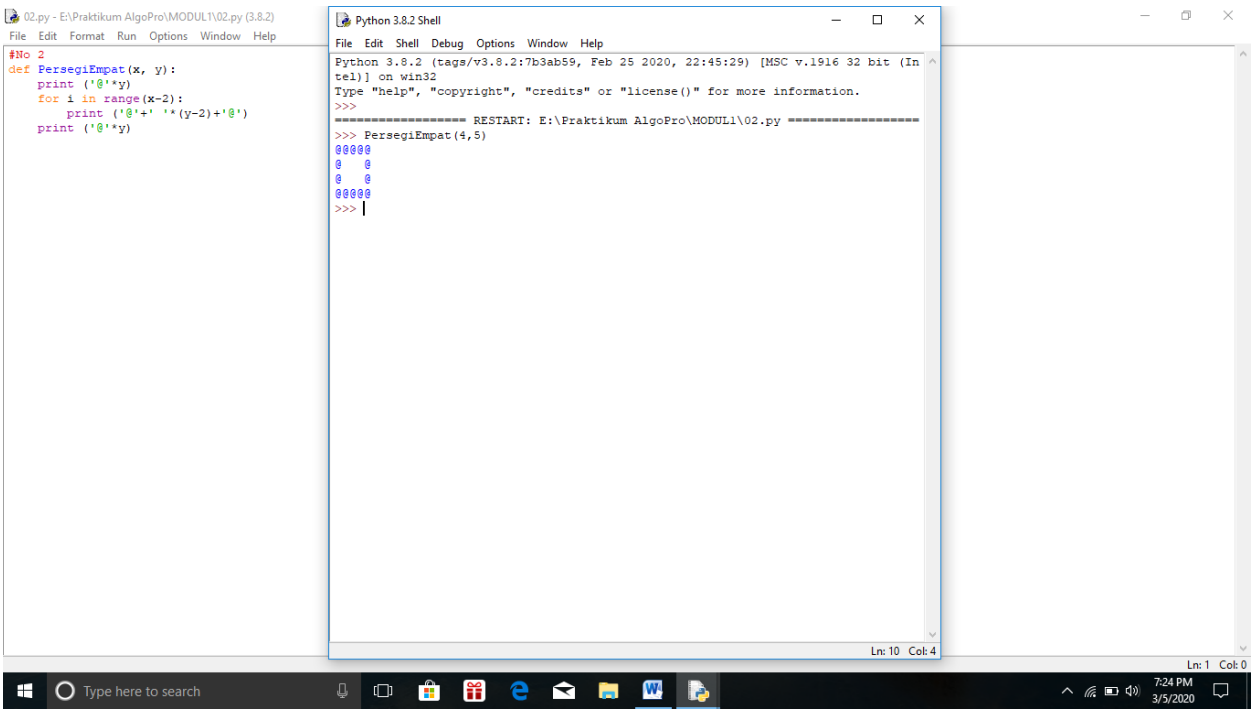
NIM : L200180053

Laporan Praktikum Algoritma dan Struktur Data

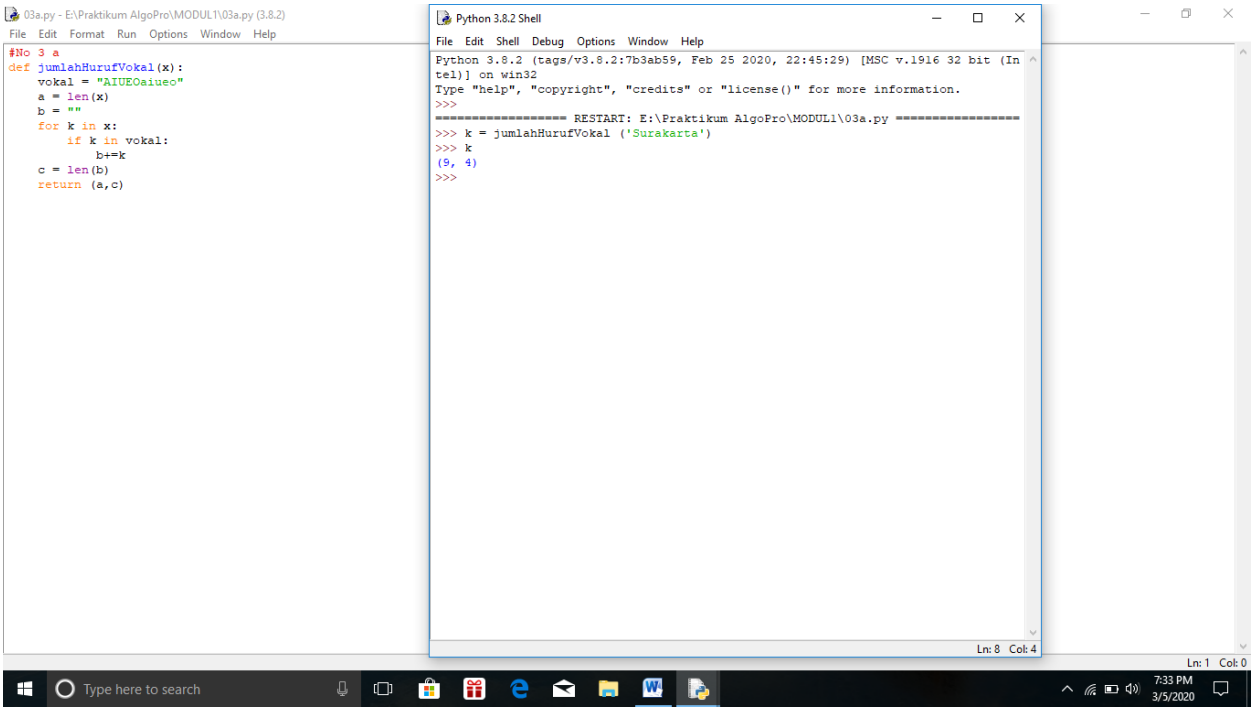
1.



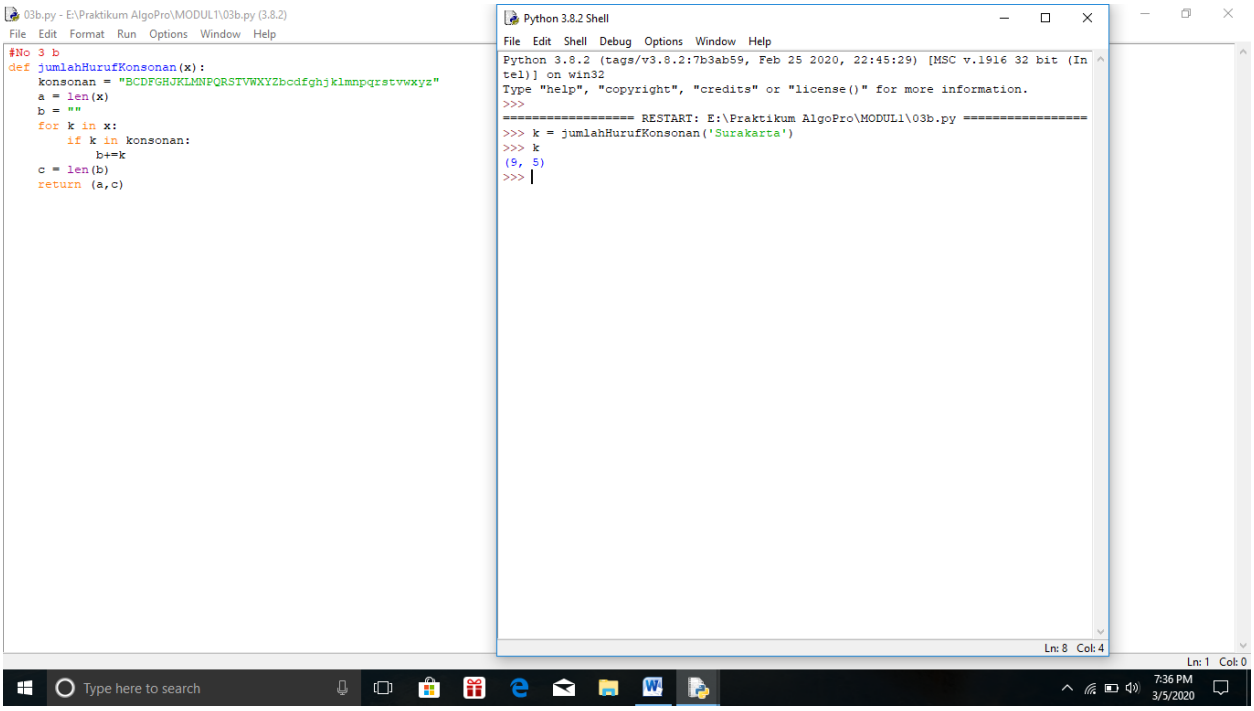
2.



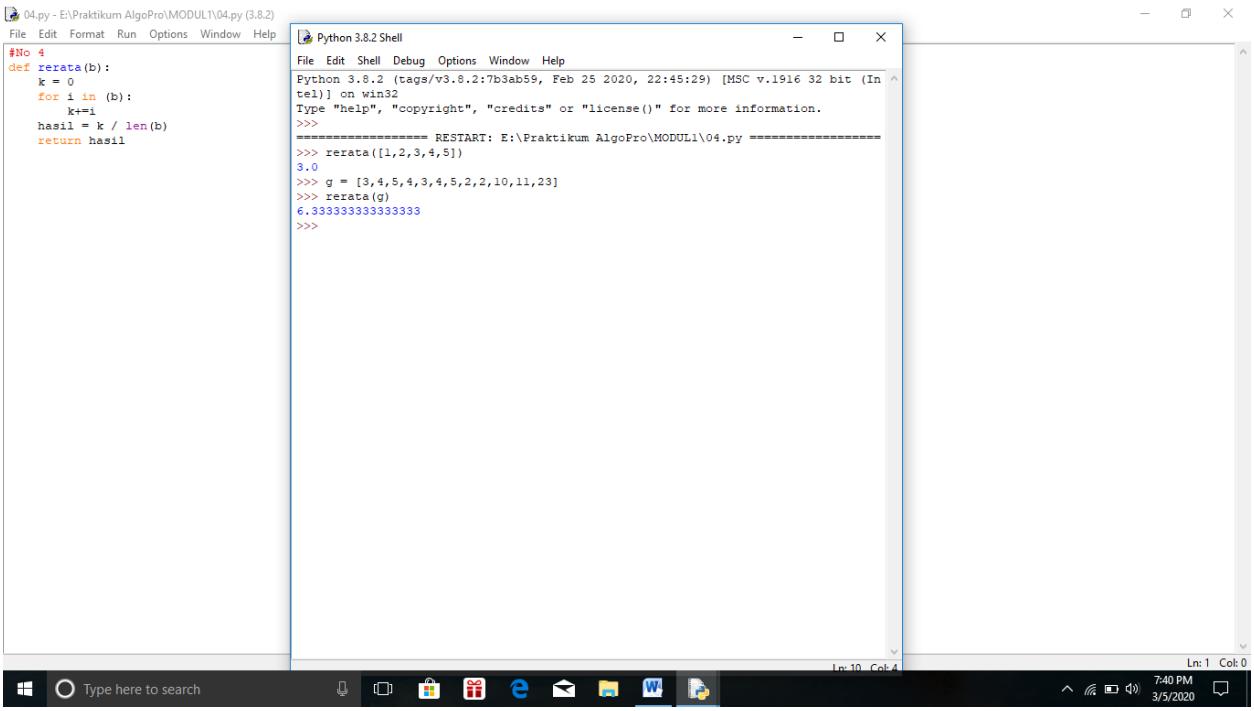
3.a


03a.py - E:\Praktikum AlgoPro\MODUL1\03a.py (3.8.2)
File Edit Format Run Options Window Help
#No 3 a
def jumlahHurufVokal(x):
vokal = "AIUEOaiueo"
a = len(x)
b = ""
for k in x:
if k in vokal:
b+=k
c = len(b)
return (a,c)
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\Praktikum AlgoPro\MODUL1\03a.py ==========
>>> k = jumlahHurufVokal ('Surakarta')
>>> k
(9, 4)
>>>
Ln: 8 Col: 4
Ln: 1 Col: 0
Type here to search
7:33 PM
3/5/2020

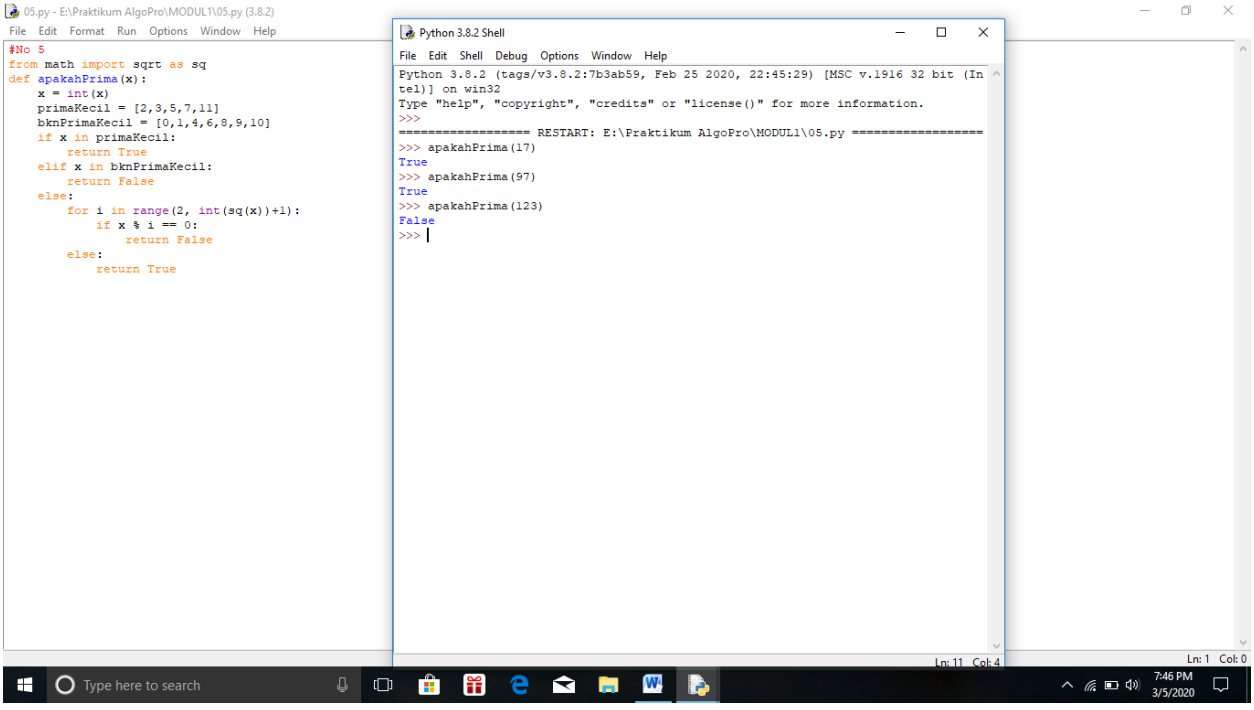
3.b


03b.py - E:\Praktikum AlgoPro\MODUL1\03b.py (3.8.2)
File Edit Format Run Options Window Help
#No 3 b
def jumlahHurufKonsonan(x):
konsonan = "BCDFGHJKLMNPQRSTVWXYZbcdfghjklmnpqrstvwxyz"
a = len(x)
b = ""
for k in x:
if k in konsonan:
b+=k
c = len(b)
return (a,c)
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\Praktikum AlgoPro\MODUL1\03b.py ==========
>>> k = jumlahHurufKonsonan('Surakarta')
>>> k
(9, 5)
>>>
Ln: 8 Col: 4
Ln: 1 Col: 0
Type here to search
7:36 PM
3/5/2020

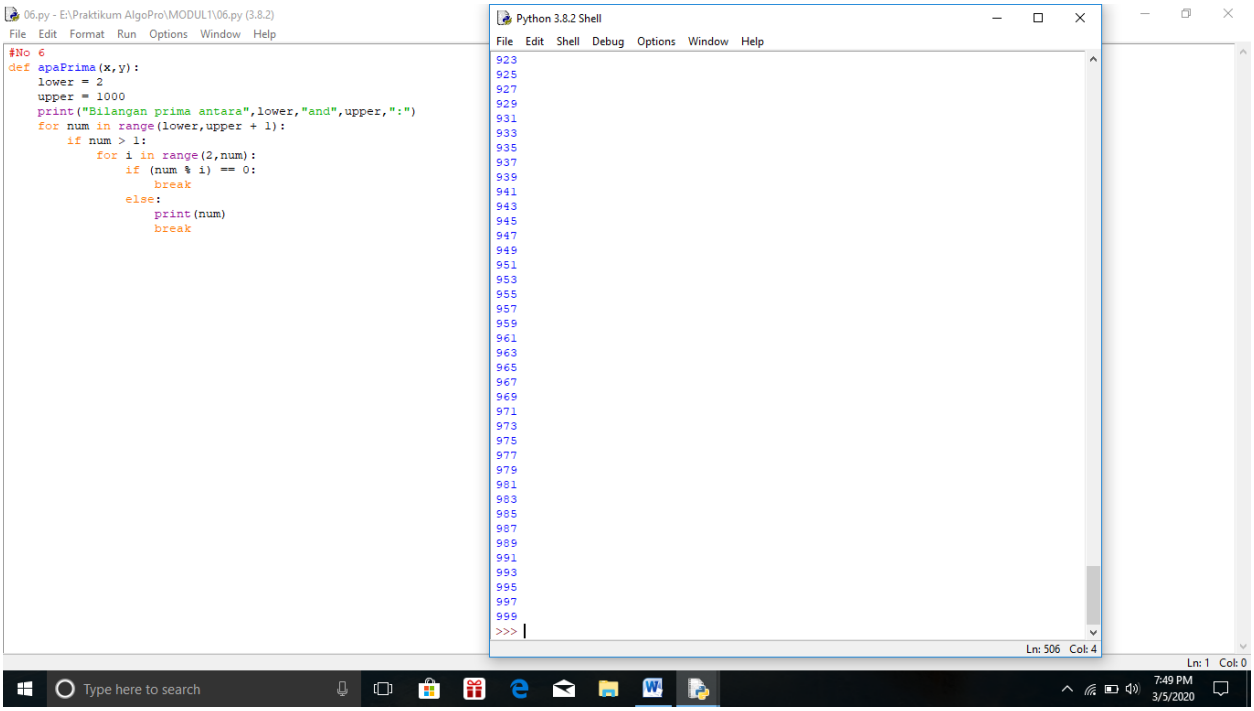
4.


04.py - E:\Praktikum AlgoPro\MODUL1\04.py (3.8.2)
File Edit Format Run Options Window Help
#No 4
def rerata(b):
k = 0
for i in (b):
k+=i
hasil = k / len(b)
return hasil
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\Praktikum AlgoPro\MODUL1\04.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
>>>
Ln: 10 Col: 4
Ln: 1 Col: 0
Type here to search
7:40 PM
3/5/2020

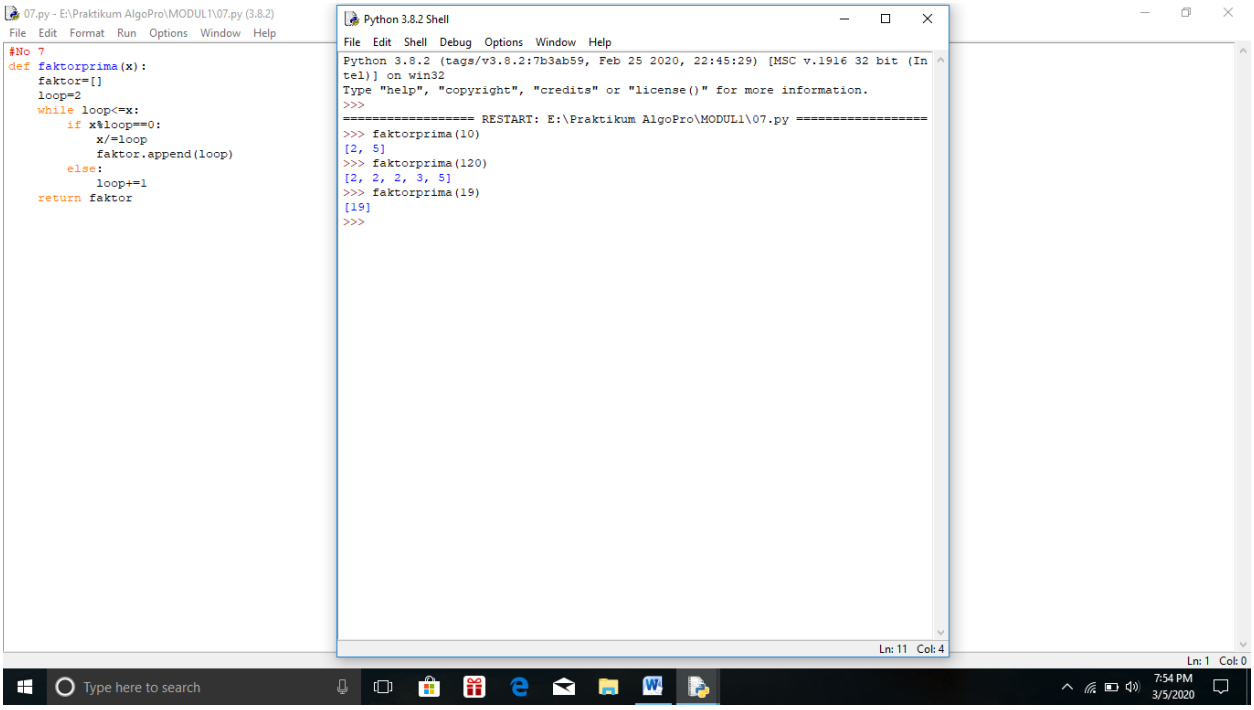
5.


05.py - E:\Praktikum AlgoPro\MODUL1\05.py (3.8.2)
File Edit Format Run Options Window Help
#No 5
from math import sqrt as sq
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 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\Praktikum AlgoPro\MODUL1\05.py ==========
>>> apakahPrima(17)
True
>>> apakahPrima(97)
True
>>> apakahPrima(123)
False
>>>
Ln: 11 Col: 4
Ln: 1 Col: 0
Type here to search
7:46 PM
3/5/2020

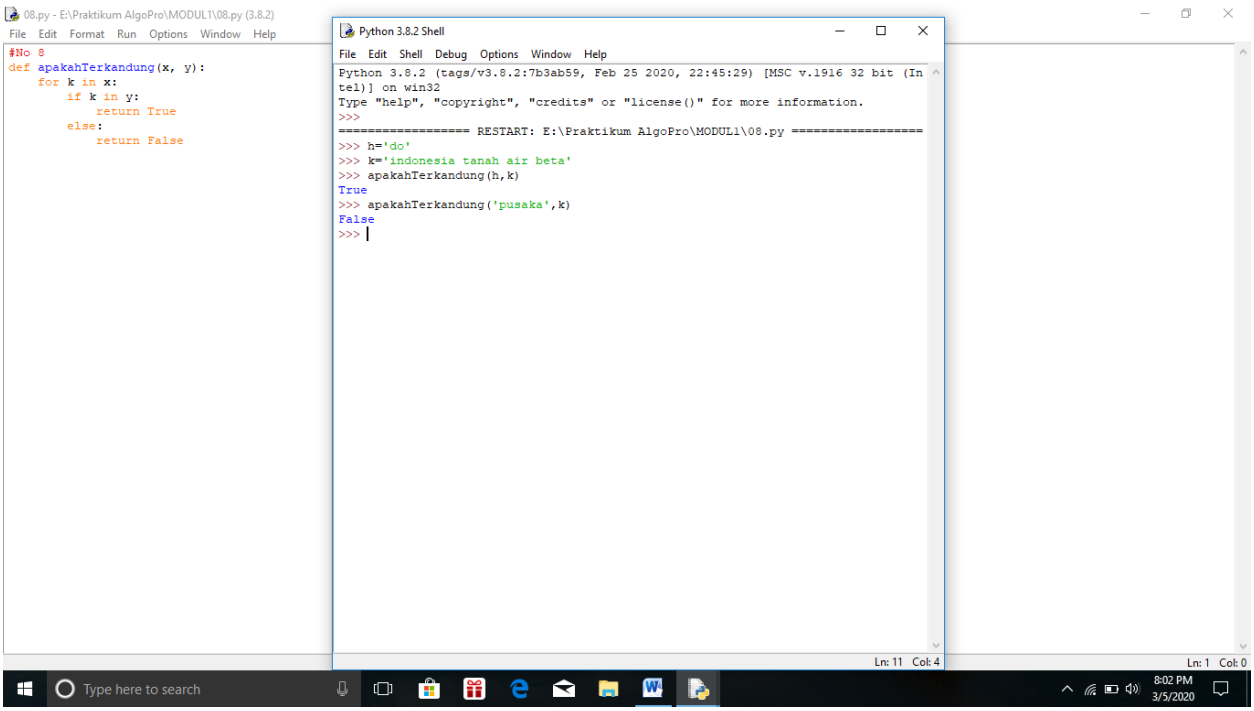
6.


06.py - E:\Praktikum AlgoPro\MODUL1\06.py (3.8.2)
File Edit Format Run Options Window Help
#No 6
def apaPrima(x,y):
lower = 2
upper = 1000
print("Bilangan prima antara",lower,"and",upper,":")
for num in range(lower,upper + 1):
if num > 1:
for i in range(2,num):
if (num % i) == 0:
break
else:
print(num)
break
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
923
925
927
929
931
933
935
937
939
941
943
945
947
949
951
953
955
957
959
961
963
965
967
969
971
973
975
977
979
981
983
985
987
989
991
993
995
997
999
>>>
Ln: 506 Col: 4
Ln: 1 Col: 0
Type here to search
7:49 PM
3/5/2020

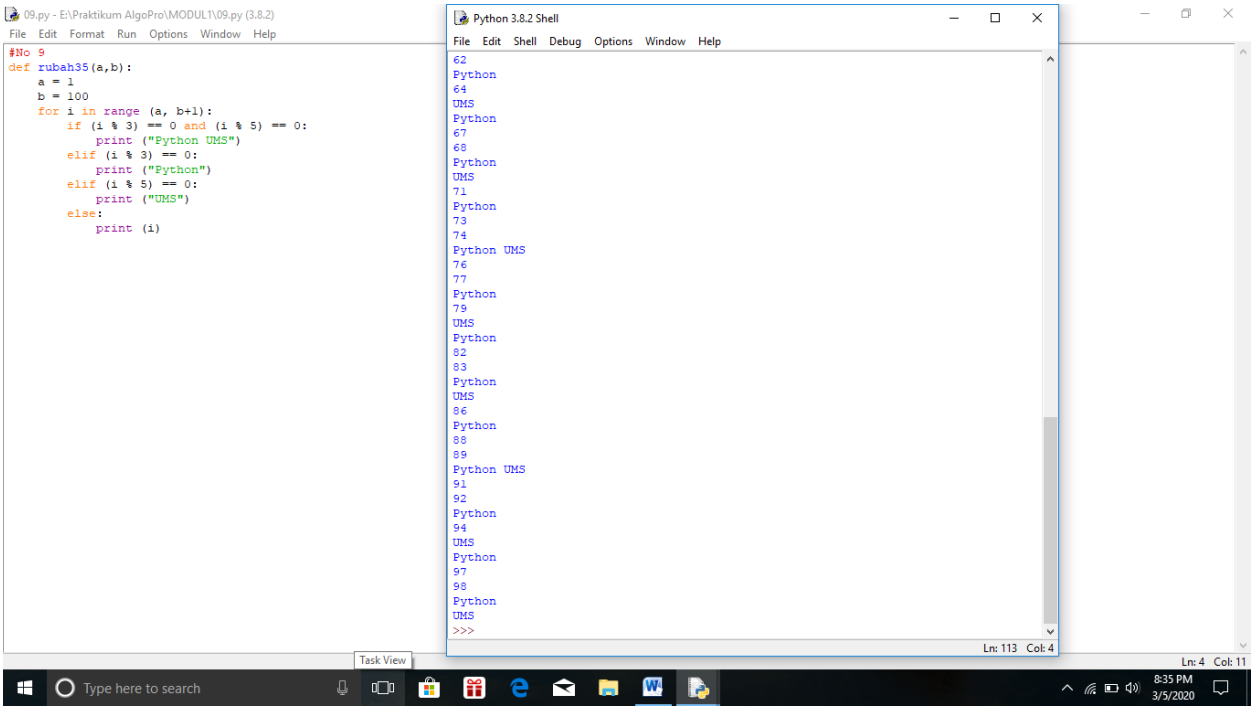
7.


07.py - E:\Praktikum AlgoPro\MODUL1\07.py (3.8.2)
File Edit Format Run Options Window Help
#No 7
def faktorprima(x):
faktor=[]
loop=2
while loop<=x:
if x%loop==0:
x/=loop
faktor.append(loop)
else:
loop+=1
return faktor
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\Praktikum AlgoPro\MODUL1\07.py ==========
>>> faktorprima(10)
[2, 5]
>>> faktorprima(120)
[2, 2, 2, 3, 5]
>>> faktorprima(19)
[19]
>>>
Ln: 11 Col: 4
Ln: 1 Col: 0
Type here to search
7:54 PM
3/5/2020

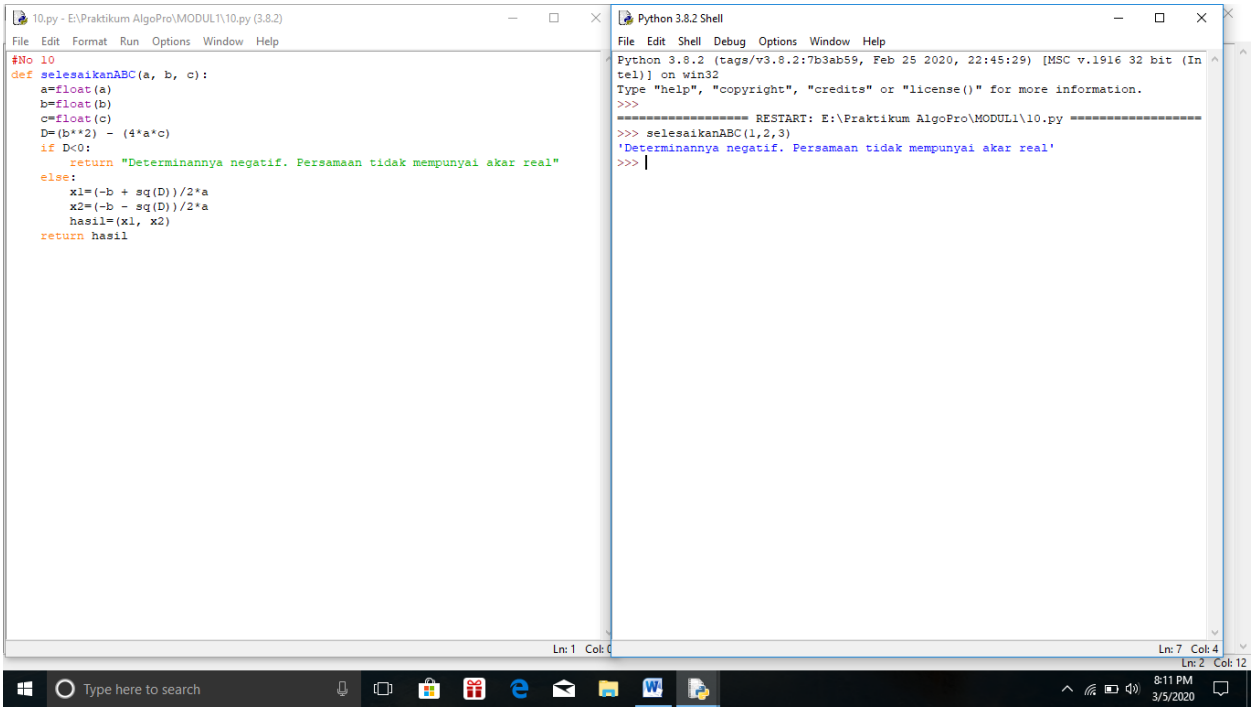
8.


08.py - E:\Praktikum AlgoPro\MODUL1\08.py (3.8.2)
File Edit Format Run Options Window Help
#No 8
def apakahTerkandung(x, y):
for k in x:
if k in y:
return True
else:
return False
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\Praktikum AlgoPro\MODUL1\08.py ==========
>>> h='do'
>>> k='indonesia tanah air beta'
>>> apakahTerkandung(h,k)
True
>>> apakahTerkandung('pusaka',k)
False
>>>
Ln: 11 Col: 4
Ln: 1 Col: 0
Type here to search
8:02 PM
3/5/2020

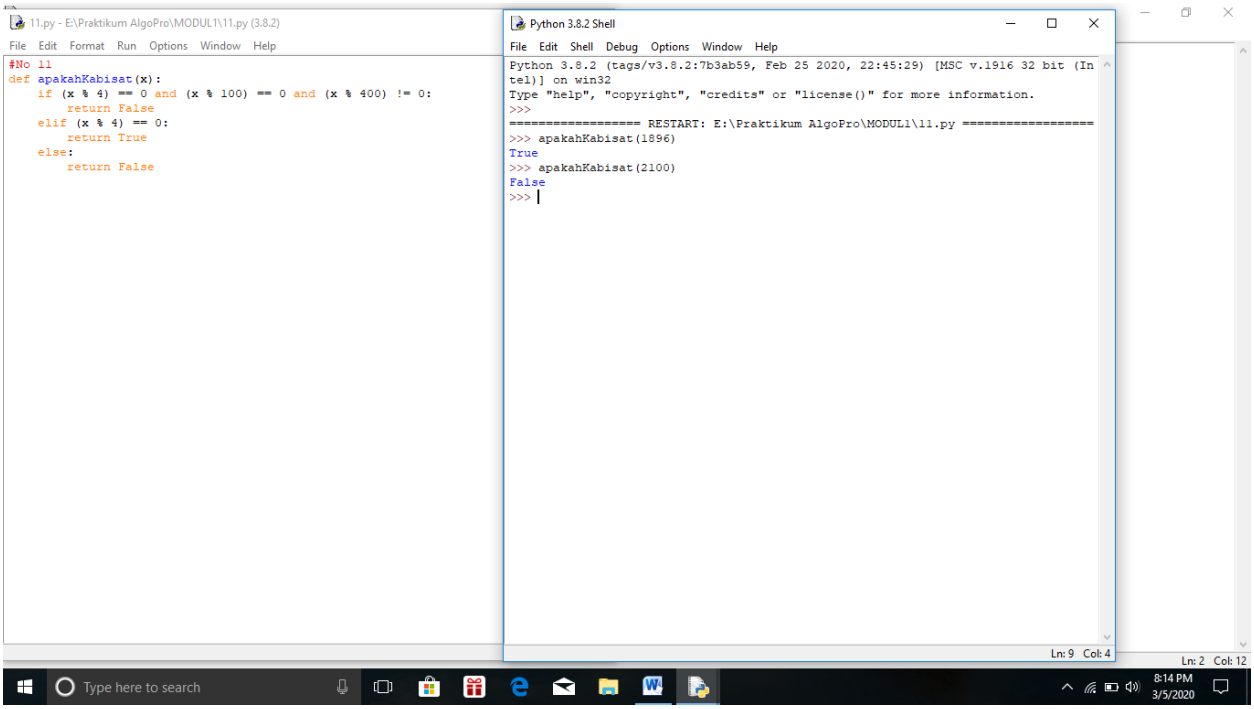
9.


09.py - E:\Praktikum AlgoPro\MODUL1\09.py (3.8.2)
File Edit Format Run Options Window Help
#No 9
def rubah35(a,b):
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 3.8.2 Shell
File Edit Shell Debug Options Window Help
62
Python
64
UMS
Python
67
68
Python
UMS
71
Python
73
74
Python UMS
76
77
Python
79
UMS
Python
82
83
Python
UMS
86
Python
88
89
Python UMS
91
92
Python
94
UMS
Python
97
98
Python
UMS
>>>
Ln: 113 Col: 4
Task View
Ln: 4 Col: 11
Type here to search
8:35 PM
3/5/2020

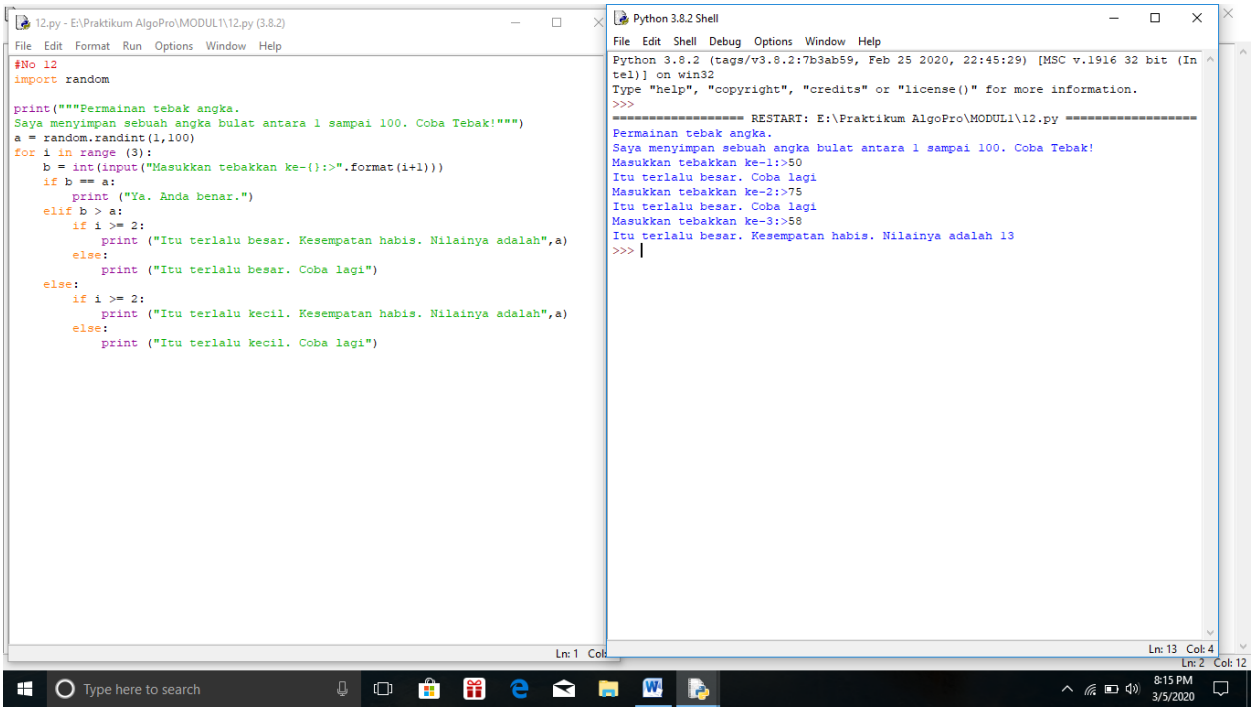
10.


10.py - E:\Praktikum AlgoPro\MODUL1\10.py (3.8.2)
File Edit Format Run Options Window Help
#No 10
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
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\Praktikum AlgoPro\MODUL1\10.py ==========
>>> selesaikanABC(1,2,3)
'Determinannya negatif. Persamaan tidak mempunyai akar real'
>>>
Ln: 1 Col:
Ln: 7 Col: 4
Ln: 2 Col: 12
Type here to search
8:11 PM
3/5/2020

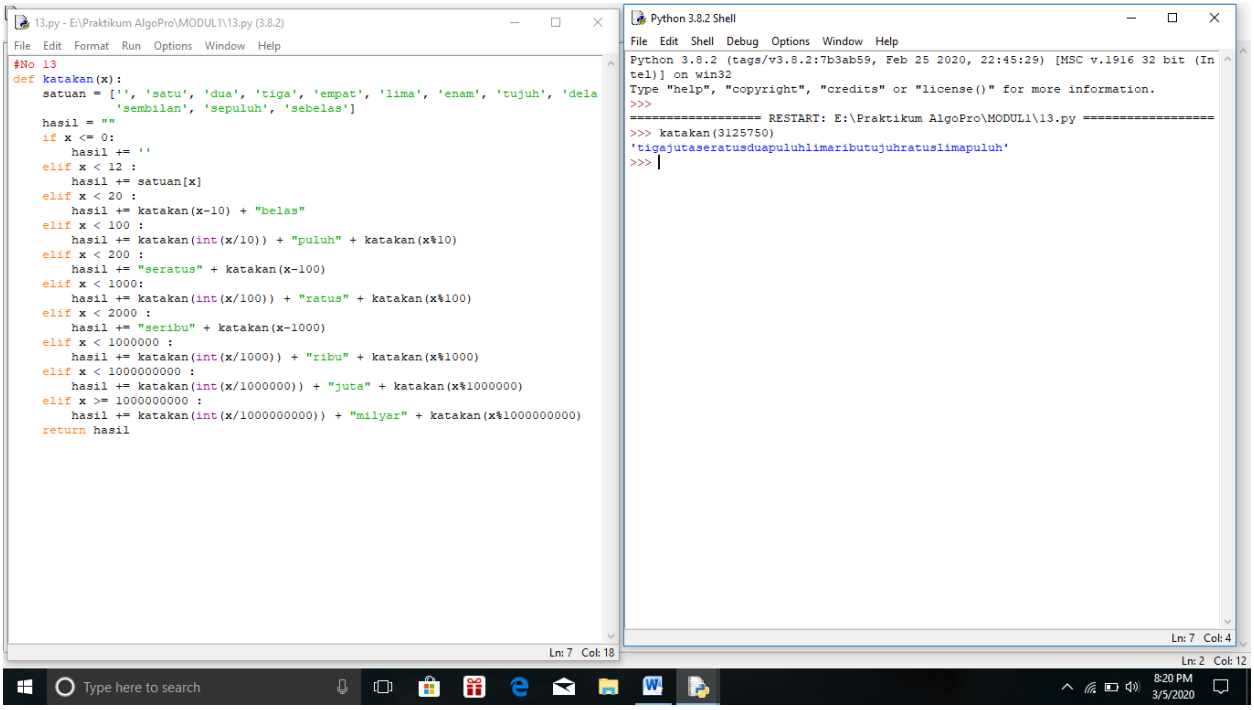
11.


11.py - E:\Praktikum AlgoPro\MODUL1\11.py (3.8.2)
File Edit Format Run Options Window Help
#No 11
def apakahKabisat(x):
if (x % 4) == 0 and (x % 100) == 0 and (x % 400) != 0:
return False
elif (x % 4) == 0:
return True
else:
return False
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\Praktikum AlgoPro\MODUL1\11.py ==========
>>> apakahKabisat(1896)
True
>>> apakahKabisat(2100)
False
>>>
Ln: 9 Col: 4
Ln: 2 Col: 12
Type here to search
8:14 PM
3/5/2020

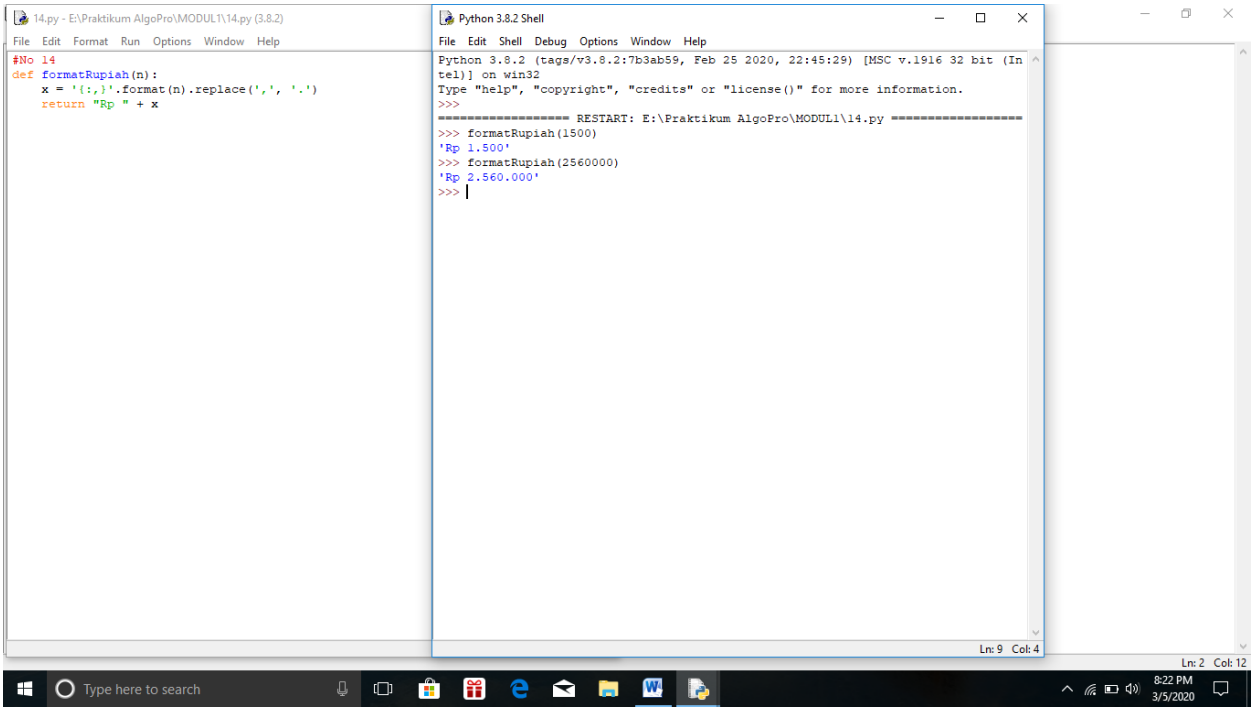
12.


12.py - E:\Praktikum AlgoPro\MODUL1\12.py (3.8.2)
File Edit Format Run Options Window Help
#No 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",a)
else:
print ("Itu terlalu besar. Coba lagi")
else:
if i >= 2:
print ("Itu terlalu kecil. Kesempatan habis. Nilainya adalah",a)
else:
print ("Itu terlalu kecil. Coba lagi")
Ln: 1 Col:
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\Praktikum AlgoPro\MODUL1\12.py ==========
Permainan tebak angka.
Saya menyimpan sebuah angka bulat antara 1 sampai 100. Coba Tebak!
Masukkan tebakkan ke-1:>50
Itu terlalu besar. Coba lagi
Masukkan tebakkan ke-2:>75
Itu terlalu besar. Coba lagi
Masukkan tebakkan ke-3:>58
Itu terlalu besar. Kesempatan habis. Nilainya adalah 13
>>>
Ln: 13 Col: 4
Ln: 2 Col: 12
Type here to search
8:15 PM
3/5/2020

13.


13.py - E:\Praktikum AlgoPro\MODUL1\13.py (3.8.2)
File Edit Format Run Options Window Help
#No 13
def katakan(x):
satuan = ['', 'satu', 'dua', 'tiga', 'empat', 'lima', 'enam', 'tujuh', 'delapan', 'sembilan', 'sepuluh', 'sebelas']
hasil = ""
if x <= 0:
hasil += ''
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 += katakan(int(x/1000000000)) + "milyar" + katakan(x%1000000000)
return hasil
Ln: 7 Col: 18
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\Praktikum AlgoPro\MODUL1\13.py ==========
>>> katakan(3125750)
'tigajutaseratusduapuluhlimaributujuhratuslimapuluh'
>>>
Ln: 7 Col: 4
Ln: 2 Col: 12
Type here to search
8:20 PM
3/5/2020

14.


14.py - E:\Praktikum AlgoPro\MODUL1\14.py (3.8.2)
File Edit Format Run Options Window Help
#No 14
def formatRupiah(n):
x = '{:,}'.format(n).replace(',', '.')
return "Rp " + x
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\Praktikum AlgoPro\MODUL1\14.py ==========
>>> formatRupiah(1500)
'Rp 1.500'
>>> formatRupiah(2560000)
'Rp 2.560.000'
>>>
Ln: 9 Col: 4
Ln: 2 Col: 12
Type here to search
8:22 PM
3/5/2020