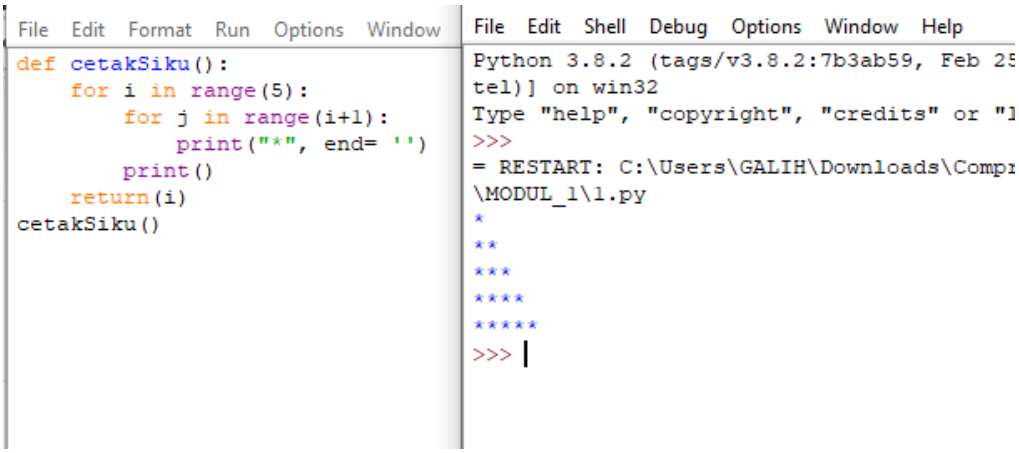
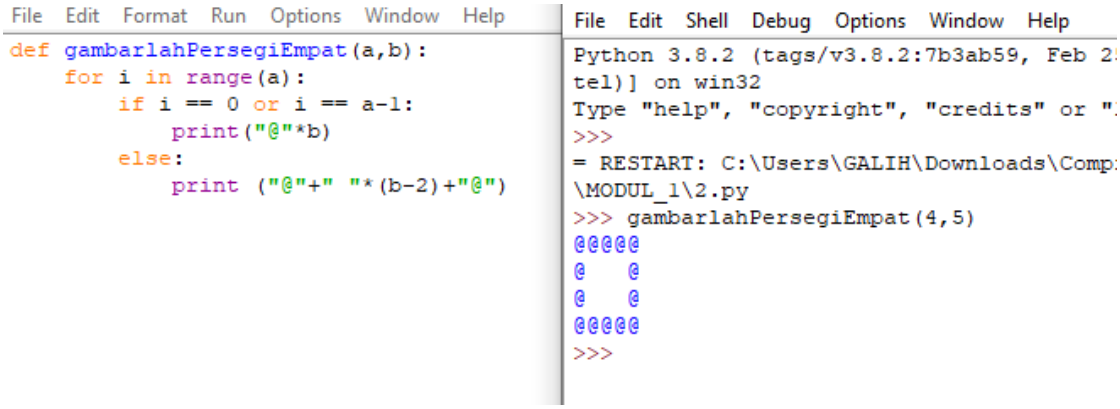
Nama : Galih Prayoga

NIM : L200180006

1.



2.



3.

```
File  Edit  Format  Run  Options  Window  Help
vokal = "aiueoAIUEO"

def jumlahHurufVokal(x):
    hrfVokal = 0
    jmlHuruf = len(x)
    for i in x:
        if i in vokal:
            hrfVokal = hrfVokal+1
    print(jmlHuruf, ",", hrfVokal)

def jumlahHurufKonsonan(x):
    hrfkonsonan = 0
    jmlHuruf = len(x)
    for i in x:
        if i not in vokal:
            hrfkonsonan = hrfkonsonan+1
    print(jmlHuruf, ",", hrfkonsonan)
```

```
File  Edit  Shell  Debug  Options  Window  Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 202
tel)] on win32
Type "help", "copyright", "credits" or "licen
>>>
= RESTART: C:\Users\GALIH\Downloads\Compresse
\MODUL_1\3ab.py
>>> k = jumlahHurufVokal("Surakarta")
9 , 4
>>> k = jumlahHurufKonsonan("Surakarta")
9 , 5
>>>
```

4.

```
File  Edit  Format  Run  Options
def rerata(b):
    jml = 0
    for i in b :
        jml += i
    return(jml/len(b))
```

```
File  Edit  Shell  Debug  Options  Window
Python 3.8.2 (tags/v3.8.2:7b3ab59
tel)] on win32
Type "help", "copyright", "credit
>>>
= RESTART: C:\Users\GALIH\Downloa
\MODUL_1\4.py
>>> rerata([1,2,3,4,5])
3.0
>>>
```

5.

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%1 ==0:
                return False
                break
            else:
                return True
```

File Edit Shell Debug Options Window Help

```
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb
tel)] on win32
Type "help", "copyright", "credits" or
>>>
= RESTART: C:\Users\GALIH\Downloads\Co
\MODUL_1\5.py
>>> apakahPrima(17)
False
>>> apakahPrima(97)
False
>>> apakahPrima(123)
False
>>>
```

6.

```
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
                break
        else :
            return True

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

```
File  Edit  Shell  Debug  Opt
962 False
963 False
964 False
965 False
966 False
967 True
968 False
969 False
970 False
971 True
972 False
973 False
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975 False
976 False
977 True
978 False
979 False
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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
```

7.

```
File  Edit  Format  Run  Options  Window  Help
def faktorPrima(x):
    a = []
    b = []
    bil = x
    for i in range(2, x+1):
        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)
```

```
File  Edit  Shell  Debug  Options  Window
Python 3.8.2 (tags/v3.8.2:7b3ab59
tel)] on win32
Type "help", "copyright", "credit
>>>
== RESTART: C:\Users\GALIH\Downlo
>>> faktorPrima(10)
[2, 5]
>>> faktorPrima(120)
[2, 2, 2, 3, 5]
>>> faktorPrima(19)
[19]
>>>
```

8.

```
File  Edit  Format  Run  Options  Window
def apakahTerkandung(a, b):
    return a in b
```

```
File  Edit  Shell  Debug  Options  Window  Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Fel
tel)] on win32
Type "help", "copyright", "credits" o
>>>
== RESTART: C:\Users\GALIH\Downloads\
>>> h = 'do'
>>> k = 'Indonesia tanah air beta'
>>> apakahTerkandung(h,k)
True
>>> apakahTerkandung('pusaka',k)
False
>>>
```

9.

```
File  Edit  Format  Run  Options  Window  Help
for i in range(1, 101):
    if(i % 3) == 0 and (i % 5) == 0:
        i = "Python UMS"
    elif(i % 3) == 0:
        i = "Python"
    elif(i % 5) == 0:
        i = "UMS"
    print(i)
```

```
File  Edit  Shell  Debu
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
```

10.

```
File  Edit  Format  Run  Options  Window  Help
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
```

```
File  Edit  Shell  Debug  Options  Window  Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29)
tel)] on win32
Type "help", "copyright", "credits" or "license()" for mo
>>>
= RESTART: C:\Users\GALIH\Downloads\Compressed\algostruk-
\MODUL_1\10.py
>>> selesaikanABC(1,2,3)
Determinan negatif. Persamaan tidak mempunyai akar real.
>>> selesaikanABC(4,5,6)
Determinan negatif. Persamaan tidak mempunyai akar real.
>>> selesaikanABC(1,-5,6)
(3.0, 2.0)
>>>
```

11.

```
File  Edit  Format  Run  Options  Windo
def apakahKabisat(n):
    if n%4==0:
        if n%100==0 and n%400==
            return True
        elif n%100==0 and n%400
            return False
        return True
    return False

print(apakahKabisat(1896))
print(apakahKabisat(1897))
print(apakahKabisat(1900))
print(apakahKabisat(2000))
print(apakahKabisat(2004))
print(apakahKabisat(2100))
print(apakahKabisat(2400))
```

```
File  Edit  Shell  Debug  Options  Window  Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb
tel)] on win32
Type "help", "copyright", "credits" or
>>>
= RESTART: C:\Users\GALIH\Downloads\Cor
\MODUL_1\11.py
True
False
False
True
True
False
True
>>>
```

12.

```
File  Edit  Format  Run  Options  Window  Help
import random

r = random.randint(1, 100)
a = """Coba Tebak sebuah angka bulat
antara 1 sampai 100 yang saya simpan."""

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("Ya. Anda benar")
        break
```

```
File  Edit  Shell  Debug  Options  Window  Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25
tel)] on win32
Type "help", "copyright", "credits" or "l
>>>
== RESTART: C:\Users\GALIH\Downloads\Comp
Coba Tebak sebuah angka bulat
antara 1 sampai 100 yang saya simpan.
Masukkan tebakan ke-1:> 50
Itu terlalu besar. Coba lagi.
Masukkan tebakan ke-2:> 40
Itu terlalu besar. Coba lagi.
Masukkan tebakan ke-3:> 30
Itu terlalu kecil. Coba lagi.
Masukkan tebakan ke-4:> 35
Itu terlalu besar. Coba lagi.
Masukkan tebakan ke-5:> 32
Itu terlalu kecil. Coba lagi.
Masukkan tebakan ke-6:> 33
Itu terlalu kecil. Coba lagi.
Masukkan tebakan ke-7:> 34
Ya. Anda benar
>>>
```

13.

```
File  Edit  Format  Run  Options  Window  Help
def katakan(bil):
    angka = ["", "Satu ", "Dua ", "Tiga ", "Empat ", "Lima ", "Enam ",
             "Tujuh ", "Delapan ", "Sembilan ", "Sepuluh ", "Sebelas "]
    hasil = ""
    n = int(bil)
    if 0 <= 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
```

```
File  Edit  Shell  Debug  Options  Window  Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v
tel)] on win32
Type "help", "copyright", "credits" or "license()" for more info
>>>
== RESTART: C:\Users\GALIH\Downloads\Compressed\algostruk-master
>>> katakan(3125750)
'Tiga Juta Seratus Dua Puluh Lima Ribu Tujuh Ratus Lima Puluh '
>>>
```

14.

```
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
```

```
File  Edit  Shell  Debug  Options  Win
Python 3.8.2 (tags/v3.8.2:7b3
tel)] on win32
Type "help", "copyright", "cr
>>>
== RESTART: C:\Users\GALIH\Do
>>> formatRupiah(1500)
'Rp 1.500'
>>> formatRupiah(2560000)
'Rp 2.560.000'
>>>
```