

NAURA FIKAMELYALLA
L200180207/H

```
#1
def cetakSiku(x):
    for i in range(1,x+1):
        print ('**'+i)

#2
def PersegiEmpat(a,b):
    for i in range(a):
        for j in range(b):
            if i==0 or i==a-1:
                print (b * '*')
            else:
                print ('*' + ' ' * (b-2) + '*')

#3
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

#3b
def jumlahHurufKonsonan(huruf):
    konsonan = 'bcdfghjklmnpqrstvwxyz'
    b = 0
    hasil = 0
    for i in huruf:
        if i in konsonan:
            b +=len(i)
        else:
            b +=0
    hasil = len(huruf),b
    return hasil

#4
def rerata(b):
    return sum(b)/len(b)

#5
from math import sqrt as sq

#5
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]
    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

#6
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)

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

#8
def apakahTerkandung(a,b):
    x = True
    for i in range(len(b)):
        if a in b:
```

```
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> cetakSiku(5)
**
**
**
**
**
>>> PersegiEmpat(4,5)
****
*
*
*
*
*
Traceback (most recent call last):
  File "<pyshell#1>", line 1, in <module>
    persegiEmpat(4,5)
  File "C:\Users\acer\Documents\naw.py", line 14, in PersegiEmpat
    print ('*' + ' ' * (b-2) + '*')
NameError: name 'persegiEmpat' is not defined
>>> PersegiEmpat(4,5)
Traceback (most recent call last):
  File "<pyshell#1>", line 1, in <module>
    persegiEmpat(4,5)
  File "C:\Users\acer\Documents\naw.py", line 14, in PersegiEmpat
    print ('*' + ' ' * (b-2) + '*')
NameError: name 'persegiEmpat' is not defined
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> jumlahHurufKonsonan('surakarta')
(9, 5)
>>> jumlahHurufKonsonan('surakarta')
(9, 5)
>>> 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
>>>
```

```
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> apakahPrima(17)
True
>>> apakahPrima(97)
True
>>> apakahPrima(123)
False
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> bilanganPrima(7)
2
3
5
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> faktorPrima(10)
[2, 5]
>>> faktorPrima(120)
[2, 2, 2, 3, 5]
>>> faktorPrima(19)
[19]
>>>
```

```
naw.py - C:\Users\acer\Documents\naw.py (3)
File Edit Format Run Options Window Help
#5
from math import sqrt as sq
def apakahPrima(n):
    n = int(n)
    assert n>=0
    primaKecil = [2,3,5,7,9,11]
    bukanPrKecil = [0,1,4,6,8,9]
    if n in primaKecil:
        return True
    elif n in bukanPrKecil:
        return False
    else:
        for i in range(2,int(sq
            if n%i==0:
                return False
            return True
#6
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)
#7
def faktorPrima(x):
    bilanganList = []
    loop = 2
    while loop <= x:
        if x%loop == 0:
            x/=loop
            bilanganList.append(
        else:
            loop +=1
    return bilanganList
#8
def apakahTerkandung(a,b):
    x = True
    for i in range(len(b)):
        if a in b:
            return True
            break
    return False

Python 3.7.0 Shell
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4)] on win32
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>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> apakahPrima(17)
True
>>> apakahPrima(97)
True
>>> apakahPrima(123)
False
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> bilanganPrima(7)
2
3
5
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> faktorPrima(10)
[2, 5]
>>> faktorPrima(120)
[2, 2, 2, 3, 5]
>>> faktorPrima(19)
[19]
>>>

Ln: 25 Col: 4

Ln: 87 Col: 2
```

naw.py - C:\Users\acer\Documents\naw.py (3.7.0)
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```
#8
def apakahTerkandung(a,b):
    x = True
    for i in range(len(b)):
        if a in b:
            x = True
        else:
            x = False
    return x

#9
def kelipatan(x):
    for i in range(x):
        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)

#10
from math import sqrt as akar
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 = "Determinannya negatif, persamaan tidak mempunyai akar real."
        return hasil
    else:
        x1 = (-b + akar(D))/(2*a)
        x2 = (-b - akar(D))/(2*a)
        hasil = (x1,x2)
        return hasil

#11
def apakahKabisat(tahun):
    hasil = False
    if(tahun%4==0 and tahun%100!=0 and tahun%400!=0):
```

Python 3.7.0 Shell
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```
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
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> selesaikanABC(1,2,3)
'Determinannya negatif, persamaan tidak mempunyai akar real.'
>>>
```

Ln: 108 Col: 1

naw.py - C:\Users\acer\Documents\naw.py (3.7.0)
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```
#8
def apakahTerkandung(a,b):
    x = True
    for i in range(len(b)):
        if a in b:
            x = True
        else:
            x = False
    return x

#9
def kelipatan(x):
    for i in range(x):
        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)

#10
from math import sqrt as akar
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 = "Determinannya negatif, persamaan tidak mempunyai akar real."
        return hasil
    else:
        x1 = (-b + akar(D))/(2*a)
        x2 = (-b - akar(D))/(2*a)
        hasil = (x1,x2)
        return hasil

#11
def apakahKabisat(tahun):
    hasil = False
    if(tahun%4==0 and tahun%100!=0 and tahun%400!=0):
```

Python 3.7.0 Shell
File Edit Shell Debug Options Window Help

```
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
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> selesaikanABC(1,2,3)
'Determinannya negatif, persamaan tidak mempunyai akar real.'
>>>
```

Ln: 108 Col: 1

Ln: 87 Col: 2

naw.py - C:\Users\acer\Documents\naw.py (3.7.0)
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```
#11
def apakahKabisat(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

#12
import random
def tebak():
    max = 7
    start = 1
    x = random.randrange(1,100,1)
    while (start <= max):
        s = 'Masukkan tebakan ke- ' +str(start)+ ' :> '
        i = input(s)
        if(i == x):
            print ('Ya, Anda Benar')
        elif(i > x):
            print ('Itu Terlalu Besar, Coba Lagi')
        elif(i < x):
            print ('Itu Terlalu Kecil, Coba Lagi')
        start +=1

#13
def Terbilang(bilangan):
    angka=['','Satu','Dua','Tiga','Empat','Lima','Enam','Tujuh','D
    Hasil = ' '
    n = int(bilangan)
    if (n >= 0 and n <= 11):
        Hasil = Hasil + angka[n]
    elif (n < 20):
        Hasil = Terbilang(n % 10) + ' Belas'
    elif (n < 100):
        Hasil = Terbilang(n / 10) + ' Puluh' + Terbilang(n % 10)
    elif (n < 200):
        Hasil = ' Seratus' + Terbilang(n-100)
    elif (n < 1000):
```

Python 3.7.0 Shell
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```
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4)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> apakahKabisat(2020)
Traceback (most recent call last):
  File "<pyshell#0>", line 1, in <module>
    apakahKabisat(2020)
NameError: name 'apakahKabisat' is not defined
>>> apakahKabisat(2020)
True
>>> apakahKabisat(2019)
False
>>> |
```

Ln: 14 Col: 4

naw.py - C:\Users\acer\Documents\naw.py (3.7.0)
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```
#11
def apakahKabisat(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

#12
import random
def tebak():
    max = 7
    start = 1
    x = random.randrange(1,100,1)
    while (start <= max):
        s = 'Masukkan tebakan ke- ' +str(start)+ ' :> '
        i = input(s)
        if(i == x):
            print ('Ya, Anda Benar')
        elif(i > x):
            print ('Itu Terlalu Besar, Coba Lagi')
        elif(i < x):
            print ('Itu Terlalu Kecil, Coba Lagi')
        start +=1

#13
def Terbilang(bilangan):
    angka=['','Satu','Dua','Tiga','Empat','Lima','Enam','Tujuh','D
    Hasil = ' '
    n = int(bilangan)
    if (n >= 0 and n <= 11):
        Hasil = Hasil + angka[n]
    elif (n < 20):
        Hasil = Terbilang(n % 10) + ' Belas'
    elif (n < 100):
        Hasil = Terbilang(n / 10) + ' Puluh' + Terbilang(n % 10)
    elif (n < 200):
        Hasil = ' Seratus' + Terbilang(n-100)
    elif (n < 1000):
```

Python 3.7.0 Shell
File Edit Shell Debug Options Window Help

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD6
4)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> apakahKabisat(2020)
Traceback (most recent call last):
  File "<pyshell#0>", line 1, in <module>
    apakahKabisat(2020)
NameError: name 'apakahKabisat' is not defined
>>> apakahKabisat(2020)
True
>>> apakahKabisat(2019)
False
>>>
```

Ln: 87 Col: 2

Ln: 87 Col: 2

```

Hasil = ''
n = int(bilangan)
if (n >= 0 and n <= 11):
    Hasil = Hasil + angka[n]
elif (n < 20):
    Hasil = Terbilang(n % 10) + ' Belas'
elif (n < 100):
    Hasil = Terbilang(n / 10) + ' Puluh' + Terbilang(n % 10)
elif (n < 200):
    Hasil = ' Seratus' + Terbilang(n-100)
elif (n < 1000):
    Hasil = Terbilang(n / 100) + ' Ratus' + Terbilang(n % 100)
elif (n < 2000):
    Hasil = ' Seribu' + Terbilang(n-1000)
elif (n < 10000):
    Hasil = Terbilang(n / 1000) + ' Ribu' + Terbilang(n % 1000)
elif (n < 200000):
    Hasil = ' Sepuluh Ribu' + Terbilang(n-10000)
elif (n < 1000000):
    Hasil = Terbilang(n / 10000) + ' Puluh' + Terbilang(n % 10000)
elif (n < 2000000):
    Hasil = ' Seratus' + Terbilang(n-1000000)
elif (n < 10000000):
    Hasil = Terbilang(n / 1000000) + ' Ratus' + Terbilang(n % 1000000)
elif (n < 20000000):
    Hasil = ' Satu Juta' + Terbilang(n-10000000)
elif (n < 100000000):
    Hasil = Terbilang(n / 10000000) + ' Juta' + Terbilang(n % 10000000)
elif (n < 1000000000):
    Hasil = ' Satu Miliar' + Terbilang(n % 100000000)
else:
    Hasil = 'Angka hanya sampai satu miliar'
return Hasil

#14
def formatRupiah(bilangan):
    y = str(bilangan)
    if len(y) <= 3:
        return ('Rp ' + y)
    else:
        p = y[-3:]
        q = y[:-3]
        return formatRupiah(q) + ',' + p
    print ('Rp' + formatRupiah(q) + ',' + p)

```

```

Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> Terbilang(325679)
'Tiga Ratus Dua Puluh Lima Ribu Enam Ratus Tujuh Puluh Sembilan'
>>> formatRupiah(2000)
'Rp 2.000'
>>>

```

naw.py - C:\Users\acer\Documents\naw.py (3.7.0)
File Edit Format Run Options Window Help

```
#8
def apakahTerkandung(a,b):
    x = True
    for i in range(len(b)):
        if a in b:
            x = True
        else:
            x = False
    return x

#9
def kelipatan(x):
    for i in range(x):
        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)

#10
from math import sqrt as akar
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 = "Determinannya negatif, persamaan tidak mempunyai akar real."
        return hasil
    else:
        x1 = (-b + akar(D))/(2*a)
        x2 = (-b - akar(D))/(2*a)
        hasil = (x1,x2)
        return hasil

#11
def apakahKabisat(tahun):
    hasil = False
    if(tahun%4==0 and tahun%100!=0 and tahun%400!=0):
```

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> h = 'do'
>>> k = 'Indonesia tanah air beta'
>>> apakahTerkandung(h,k)
True
>>> apakahTerkandung('pusaka',k)
False
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> Python
Traceback (most recent call last):
  File "<pyshell#4>", line 1, in <module>
    Python
NameError: name 'Python' is not defined
>>> Python UMS
SyntaxError: invalid syntax
>>> def(101)
SyntaxError: invalid syntax
>>> kelipatan(101)
1
2
Python
4
UMS
Python
7
Python
8
UMS
Python
11
Python
13
14
Python UMS
16
17
```

Ln: 125 Col: 4

naw.py - C:\Users\acer\Documents\naw.py (3.7.0)
File Edit Format Run Options Window Help

```
#1
def cetakSiku(x):
    for i in range(1,x+1):
        print ('*' * i)

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

#3
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

#3b
def jumlahHurufKonsonan (huruf):
    konsonan = 'bcdghjklmnpqrstvwxyz'
    b = 0
    hasil = 0
    for i in huruf:
        if i in konsonan:
            b += len(i)
        else:
            b += 0
    hasil = len(huruf),b
    return hasil

#4
def rerata(b):
    return sum(b)/len(b)

#5
from math import sqrt as sq
```

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> cetakSiku(5)
*
**
***
****
*****
>>> persegiEmpat(4,5)
Traceback (most recent call last):
  File "<pyshell#1>", line 1, in <module>
    persegiEmpat(4,5)
NameError: name 'persegiEmpat' is not defined
>>> PersegiEmpat(4,5)
@@@@
@
@
@@@@
>>>
===== RESTART: C:\Users\acer\Documents\naw.py =====
>>> jumlahHurufKonsonan('surakarta')
(9, 5)
>>> jumlahHurufKonsonan('surakarta')
(9, 5)
>>> 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: 32 Col: 4

Ln: 14 Col: 2