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MODUL 1
SOAL-SOAL MAHASISWA

Nomor 1

NO1.py - C:/Users/Asus/AppData/Local/Programs/Python/Pyt

File Edit Format Run Options Window Help

```
def cetakSiku(x):  
    for i in range(x+1):  
        print (i * "**")
```

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018  
1)] on win32  
Type "copyright", "credits" or "license()" :  
>>>  
== RESTART: C:/Users/Asus/AppData/Local/Pro  
>>> cetakSiku(5)  
  
*  
**  
***  
****  
*****  
>>> |
```

Nomor 2

NO2.py - C:/Users/Asus/AppData/Local/Programs/Python/Pyt

File Edit Format Run Options Window Help

```
def gambarlahPersegiEmpat(a,b):  
    for i in range(a):  
        if i==0 or i==a-1:  
            print("@"*b)  
        else:  
            print("@"+" "*(b-2)+"@")
```

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018  
1)] on win32  
Type "copyright", "credits" or "license()" f  
>>>  
== RESTART: C:/Users/Asus/AppData/Local/Prog  
>>> gambarlahPersegiEmpat(4,5)  
@@@@@  
@  @  
@  @  
@@@@@  
>>> |
```

Nomor 3A

NO3.py - C:/Users/Asus/AppData/Local/Programs/Python/Py...

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```
def jumlahHurufVokal(hruf):  
    vokal = "AIUEOaiueo"  
    a=0  
    hasil=0  
    for i in hruf:  
        if i in vokal:  
            a += len(i)  
        else:  
            a += 0  
    hasil = len(hruf),a  
    return hasil
```

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018  
1)] on win32  
Type "copyright", "credits" or "license()" f  
>>>  
== RESTART: C:/Users/Asus/AppData/Local/Prog  
>>> k = jumlahHurufVokal("Surakarta")  
>>> k  
(9, 4)  
>>> |
```

Nomor 3B

NO3B.py - C:/Users/Asus/AppData/Local/Programs/Python/Py...

File Edit Format Run Options Window Help

```
def jumlahHurufKonsonan(hruf):  
    konsonan = "BCDFGHJKLMNPQRSTVWXYZbcd fghjkl"  
    b = 0  
    hasil = 0  
    for i in hruf:  
        if i in konsonan:  
            b += len(i)  
        else:  
            b += 0  
    hasil = len(hruf),b  
    return hasil
```

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018  
1)] on win32  
Type "copyright", "credits" or "license()" :  
>>>  
== RESTART: C:/Users/Asus/AppData/Local/Prog  
>>> k = jumlahHurufKonsonan("Surakarta")  
>>> k  
(9, 5)  
>>> |
```

Nomor 4

NO4.py - C:/Users/Asus/AppData/Local/Programs/Python/Py...

File Edit Format Run Options Window Help

```
def rerata(x):  
    jumlah = 0  
    for i in range(len(x)):  
        jumlah += x[i]  
    jumlah = jumlah/len(x)  
    return jumlah
```

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018  
1)] on win32  
Type "copyright", "credits" or "license()" f  
>>>  
== RESTART: C:/Users/Asus/AppData/Local/Prog  
>>> 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  
>>>
```

Nomor 5

NO5.py - C:/Users/Asus/AppData/Local/Programs/Python/Py

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```

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
        return True
      
```

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```

Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018
1)] on win32
Type "copyright", "credits" or "license()" f
>>>
== RESTART: C:/Users/Asus/AppData/Local/Prog
>>> apakahPrima(17)
True
>>> apakahPrima(97)
True
>>> apakahPrima(123)
False
>>> |
    
```

Nomor 6

NO6.py - C:/Users/Asus/AppData/Local/Programs/Python/Py

File Edit Format Run Options Window Help

```

lower = 2
upper = 1000
if lower>=1 and upper>1:
    for x in range(lower,upper):
        prima=True
        for i in range (2,x):
            if(x%i==0):
                prima=False
        if prima==True:
            print(x)
else:
    print("Bukan Bilangan Prima")
      
```

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```

Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018
1)] on win32
Type "copyright", "credits" or "license()" f
>>>
== RESTART: C:/Users/Asus/AppData/Local/Prog
2
3
5
7
11
13
17
19
23
29
31
37
41
43
47
53
59
61
67
71
73
79
83
89
97
101
103
107
109
113
127
131
137
139
    
```

Nomor 7

File Edit Format Run Options Window Help	File Edit Shell Debug Options Window Help
<pre> def faktorPrima(a): bilanganList = [] loop = 2 while loop <=a: if a%loop == 0: a/=loop bilanganList.append(loop) else: loop+=1 return bilanganList </pre>	<pre> Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018) on win32 Type "copyright", "credits" or "license()" for more >>> == RESTART: C:/Users/Asus/AppData/Local/Programs/Python/Python37-Shell >>> faktorPrima(10) [2, 5] >>> faktorPrima(120) [2, 2, 2, 3, 5] >>> faktorPrima(19) [19] >>> </pre>

Nomor 8

File Edit Format Run Options Window Help	File Edit Shell Debug Options Window Help
<pre> def apakahTerkandung(x,y): a = True for i in range(len(y)): if x in y: a = True else: a = False return a </pre>	<pre> Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018) on win32 Type "copyright", "credits" or "license()" for more >>> == RESTART: C:/Users/Asus/AppData/Local/Programs/Python/Python37-Shell >>> h = 'do' >>> k = 'Indonesia tanah air beta' >>> apakahTerkandung(h,k) True >>> apakahTerkandung('pusaka',k) False >>> </pre>

Nomor 9

NO9.py - C:/Users/Asus/AppData/Local/Programs/Python/Py...

File Edit Format Run Options Window Help

```
def mencetak(a):  
    for i in range(a):  
        if(i<=0):  
            pass  
        elif(i%3==0 and i%5==0):  
            print("Phyton UMS")  
        elif(i%3==0):  
            print("Phyton")  
        elif(i%5==0):  
            print("UMS")  
        else:  
            print(i)
```

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```
62  
Phyton  
64  
UMS  
Phyton  
67  
68  
Phyton  
UMS  
71  
Phyton  
73  
74  
Phyton UMS  
76  
77  
Phyton  
79  
UMS  
Phyton  
82  
83  
Phyton  
UMS  
86  
Phyton  
88  
89  
Phyton UMS  
91  
92  
Phyton  
94  
UMS  
Phyton  
97  
98  
Phyton  
UMS
```

Nomor 10

NO10.py - C:/Users/Asus/AppData/Local/Programs/Python/Python37-32/NO10.py (3.7.0)

File Edit Format Run Options Window Help

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

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:06:47) [MSC v.1914  
1)] on win32  
Type "copyright", "credits" or "license()" for more information.  
>>>  
== RESTART: C:/Users/Asus/AppData/Local/Programs/Python/Python37-32/  
>>> selesaikanABC(1,2,3)  
'Determinan negatif, persamaan tidak mempunyai akar real'  
>>> |
```

Nomor 11

```
NO11.py - C:/Users/Asus/AppData/Local/Programs/Python/Python37-32/NO1
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:06:47
1)] on win32
Type "copyright", "credits" or "license()" for more in
>>>
== RESTART: C:/Users/Asus/AppData/Local/Programs/Pytho
>>> tahunKabisat(1896)
True
>>> tahunKabisat(1897)
False
>>> tahunKabisat(1900)
False
>>> tahunKabisat(2000)
True
>>> tahunKabisat(2004)
True
>>> tahunKabisat(2100)
False
>>> tahunKabisat(2400)
True
>>> |

def tahunKabisat(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
```

Nomor 12

```
nomer12.py - D:\PERKULIAHAN\SEMESTER 4\PRAKTIKUM ALGOSTRUK\L200180211_Modul1_...
File Edit Format Run Options Window Help
import random
def tebakAngka():
    a = random.randrange(1,101,1)
    b = -1
    n = 0
    print ("Permainan Tebak Angka")
    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")
        elif b > a :
            print ("Itu Terlalu Besar")
        else :
            print ("Ya. Anda Benar.")
            break

Python 2.7.15 Shell
File Edit Shell Debug Options Window Help
Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:22:17) [MSC v.1500 32 bit (In
tel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: D:\PERKULIAHAN\SEMESTER 4\PRAKTIKUM ALGOSTRUK\L200180211_Modul1_H_ASD\
nomer12.py
>>> tebakAngka()
Permainan Tebak Angka
Saya Menyimpan sebuah Angka Bulat antara 1 sampai 100. Coba Tebak.
Masukkan Tebakan ke- 1:> 78
Itu Terlalu Kecil
Masukkan Tebakan ke- 2:> 100
Itu Terlalu Besar
Masukkan Tebakan ke- 3:> 90
Itu Terlalu Besar
Masukkan Tebakan ke- 4:> 85
Ya. Anda Benar.
>>> |
```

Nomor 13

NO13.py - C:/Users/Asus/AppData/Local/Programs/Python/Python37-32/NO13.py (3.7.0)

File Edit Format Run Options Window Help

```
def katakan(bilangan):
    angka = ["", "Satu", "Dua", "Tiga", "Empat", "Lima",
             "Enam", "Tujuh", "Delapan", "Sembilan", "Sepuluh", "Sebelas"]
    Hasil = " "
    n = int(bilangan)
    if n>=0 and n<=11:
        Hasil = Hasil+angka[n]
    elif n<2:
        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<10000:
        Hasil = katakan(n/1000) + "Ribu" + katakan(n%1000)
    elif n<20000:
        Hasil = "Sepuluh Ribu" + katakan(n-10000)
    elif n<100000:
        Hasil = katakan(n/10000) + "Puluh" + katakan(n%10000)
    elif n<200000:
        Hasil = "Seratus Ribu" + katakan(n-100000)
    elif n<1000000:
        Hasil = katakan(n/100000) + "Ratus" + katakan(n%100000)
    elif n<2000000:
        Hasil = "Satu Juta" + katakan(n-1000000)
    elif n<10000000:
        Hasil = katakan(n/1000000) + "Juta" + katakan(n%1000000)
    elif n==100000000:
        Hasil = "Satu Milyar" + katakan(n%100000000)
    else:
        Hasil = "Angka Hanya Sampai Satu Milyar"
    return Hasil
```

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:06:47) [MSC v.1914 32
1)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/Asus/AppData/Local/Programs/Python/Python37-32/NO1
>>> katakan(3125750)
' TigaJutaSeratus Ribu DuaPuluh LimaRibu TujuhRatus LimaPuluh '
>>> |
```

Nomor 14

NO14.py - C:/Users/Asus/AppData/Local/Programs/Python/Pytl

File Edit Format Run Options Window Help

```
def formatRupiah(bilangan):
    a = str(bilangan)
    if len(a)<=3:
        return "Rp "+a
    else:
        y = a[-3:]
        z = a[:-3]
        return formatRupiah(z)+"."+y
    print(("Rp ")+formatRupiah(z)+"."+y)
```

Python 3.7.0 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 201
1)] on win32
Type "copyright", "credits" or "license()"
>>>
== RESTART: C:/Users/Asus/AppData/Local/Pro
>>> formatRupiah(1500)
'Rp 1.500'
>>> formatRupiah(2560000)
'Rp 2.560.000'
>>>
```