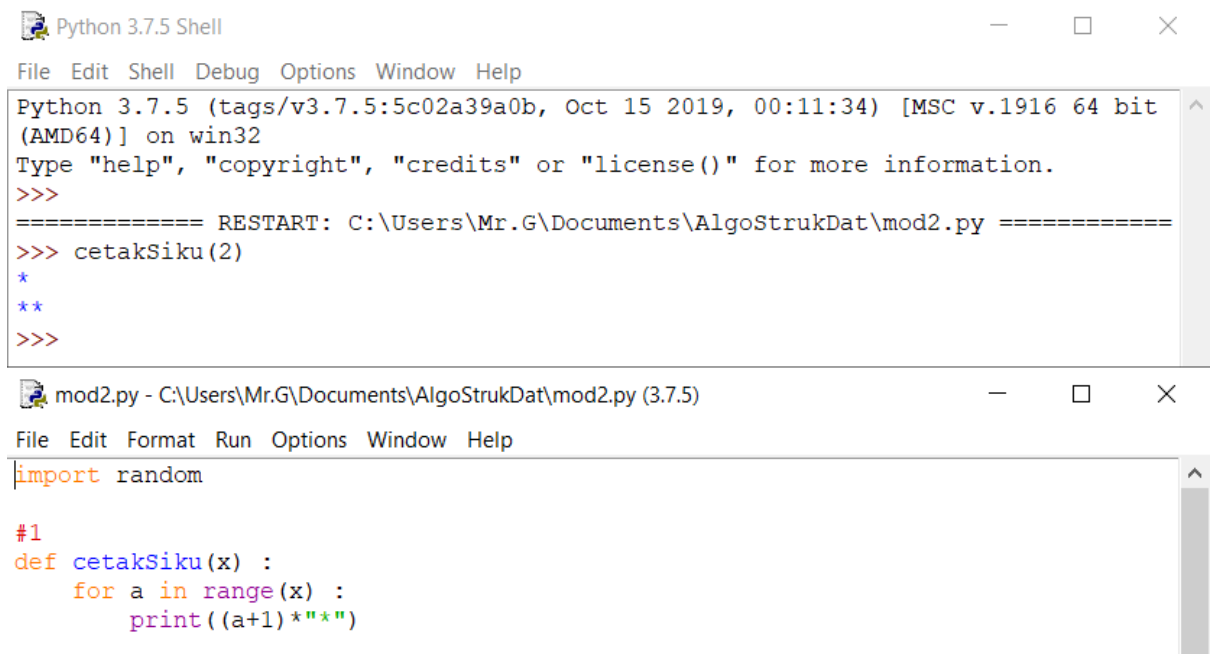


Nama : Guntur Jatmiko
NIM : L200180039
Kelas : B

MODUL 1 ASD

1. Output file 1.py



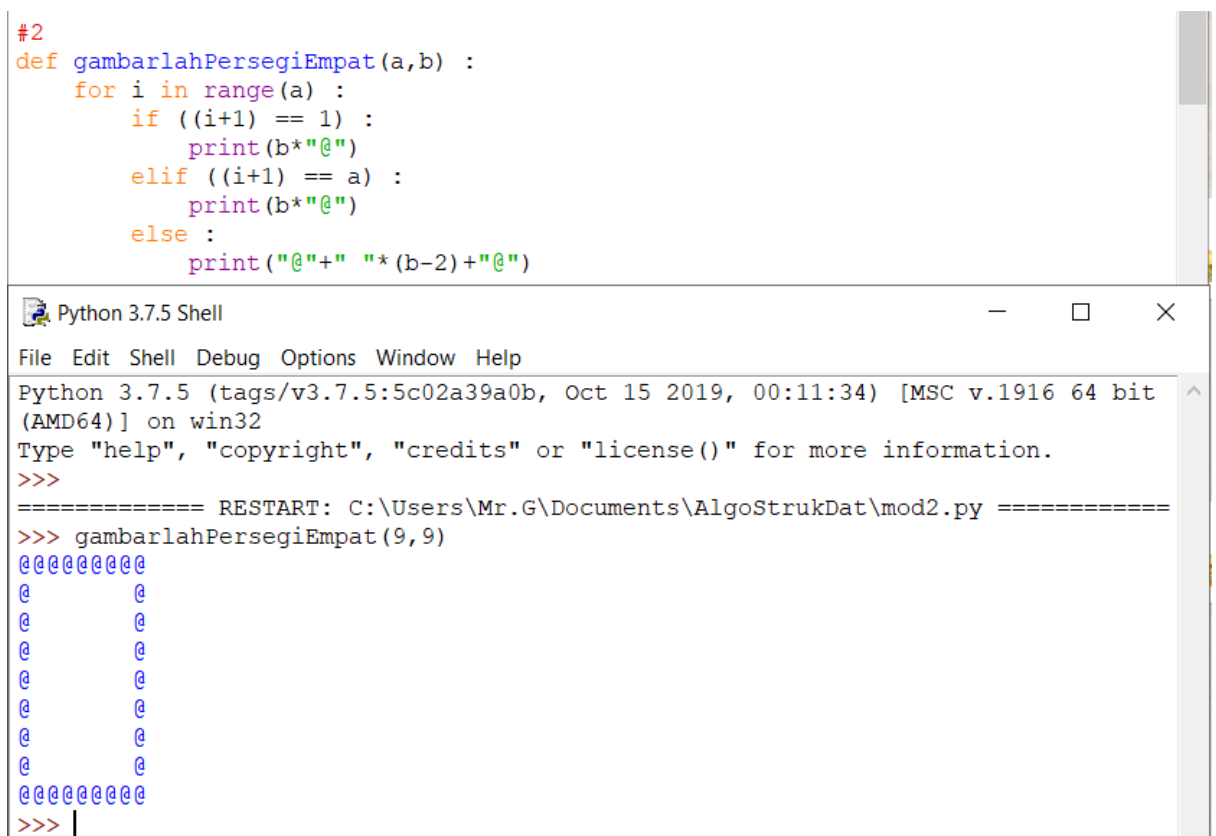
The screenshot shows two windows. The top window is the Python 3.7.5 Shell, which displays the output of the command `cetakSiku(2)`. The output consists of two lines of asterisks: `*` followed by `**`. The bottom window is the mod2.py editor, showing the code for the `cetakSiku` function. The code is as follows:

```
import random

#1
def cetakSiku(x) :
    for a in range(x) :
        print((a+1)*" ")

#2
def gambarlahPersegiEmpat(a,b) :
```

2. Output file 2.py



The screenshot shows two windows. The top window is the mod2.py editor, showing the code for the `gambarlahPersegiEmpat` function. The code is as follows:

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

The bottom window is the Python 3.7.5 Shell, which displays the output of the command `gambarlahPersegiEmpat(9,9)`. The output is a 9x9 grid of asterisks, forming a square shape. The output is as follows:

```
*****
*      *
*      *
*      *
*      *
*      *
*      *
*      *
*****
```

3. Output file 3.py

```
#3
def jumlahHurufVokal(ch) :
    b = len(ch)
    a = 0
    for i in ch :
        if (i=='A' or i=='a' or i=='E' or i=='e' or i=='I' or i=='i' or i=='O' or i=='o') :
            a += 1
    return b,a

def jumlahHurufKonsonan(ch) :
    b = len(ch)
    a = 0
    for i in ch :
        if (i=='A' or i=='a' or i=='E' or i=='e' or i=='I' or i=='i' or i=='O' or i=='o') :
            a += 1
    return b,b-a

v = jumlahHurufVokal("Guntur")
k = jumlahHurufKonsonan("Guntur")

print(v)
print(k)
```

Python 3.7.5 Shell

File Edit Shell Debug Options Window Help

Python 3.7.5 (tags/v3.7.5:5c02a39a0b, Oct 15 2019, 00:11:34) [MSC v.1916 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py =====

>>> jumlahHurufVokal(Guntur)

Traceback (most recent call last):

File "<pyshell#0>", line 1, in <module>

jumlahHurufVokal(Guntur)

NameError: name 'jumlahHurufVokal' is not defined

>>>

===== RESTART: C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py =====

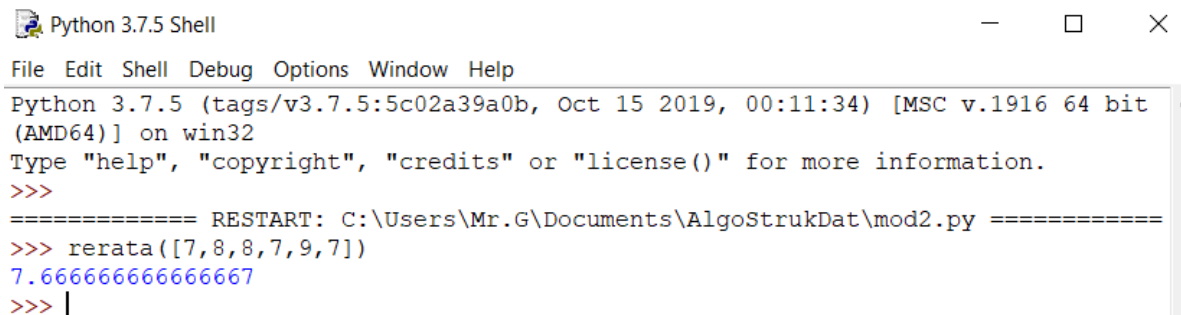
(6, 2)

(6, 4)

>>> |

4. Output file 4.py

```
#4
def rerata(x) :
    a = 0
    b = 0
    for i in x :
        a += 1
        b = b + i
        a = float(a)
        b = float(b)
    return(b/a)
```



Python 3.7.5 Shell

File Edit Shell Debug Options Window Help

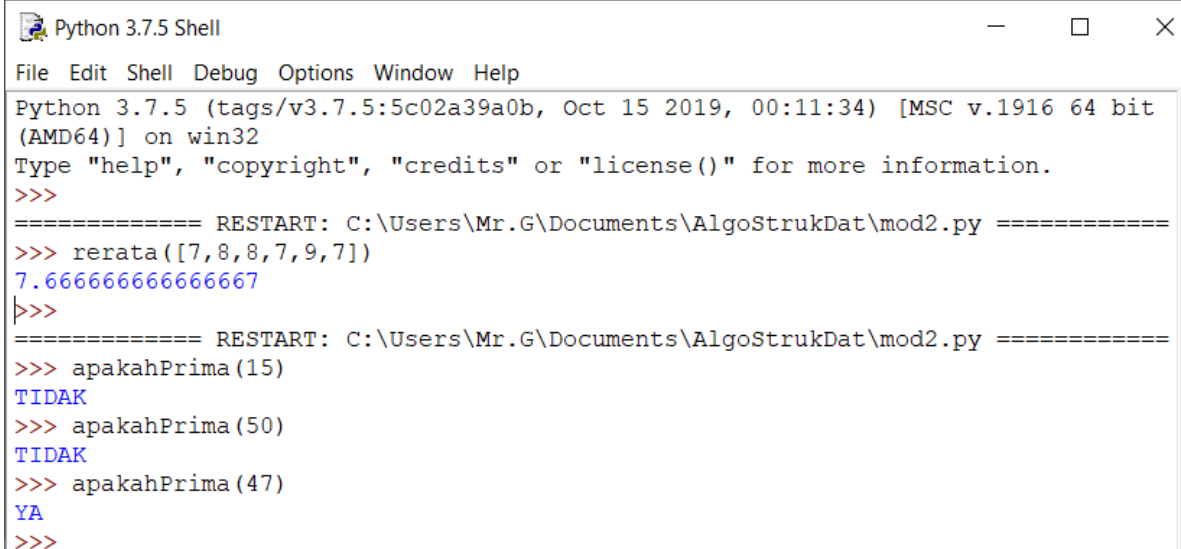
Python 3.7.5 (tags/v3.7.5:5c02a39a0b, Oct 15 2019, 00:11:34) [MSC v.1916 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

```
>>>
===== RESTART: C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py =====
>>> rerata([7,8,8,7,9,7])
7.666666666666667
>>> |
```

5. Output file 5.py

```
#5
def apakahPrima(a) :
    x = 0
    for i in range(a) :
        if a % (i+1) == 0 :
            x += 1
    if x == 2 :
        print("YA")
    else :
        print("TIDAK")
```



Python 3.7.5 Shell

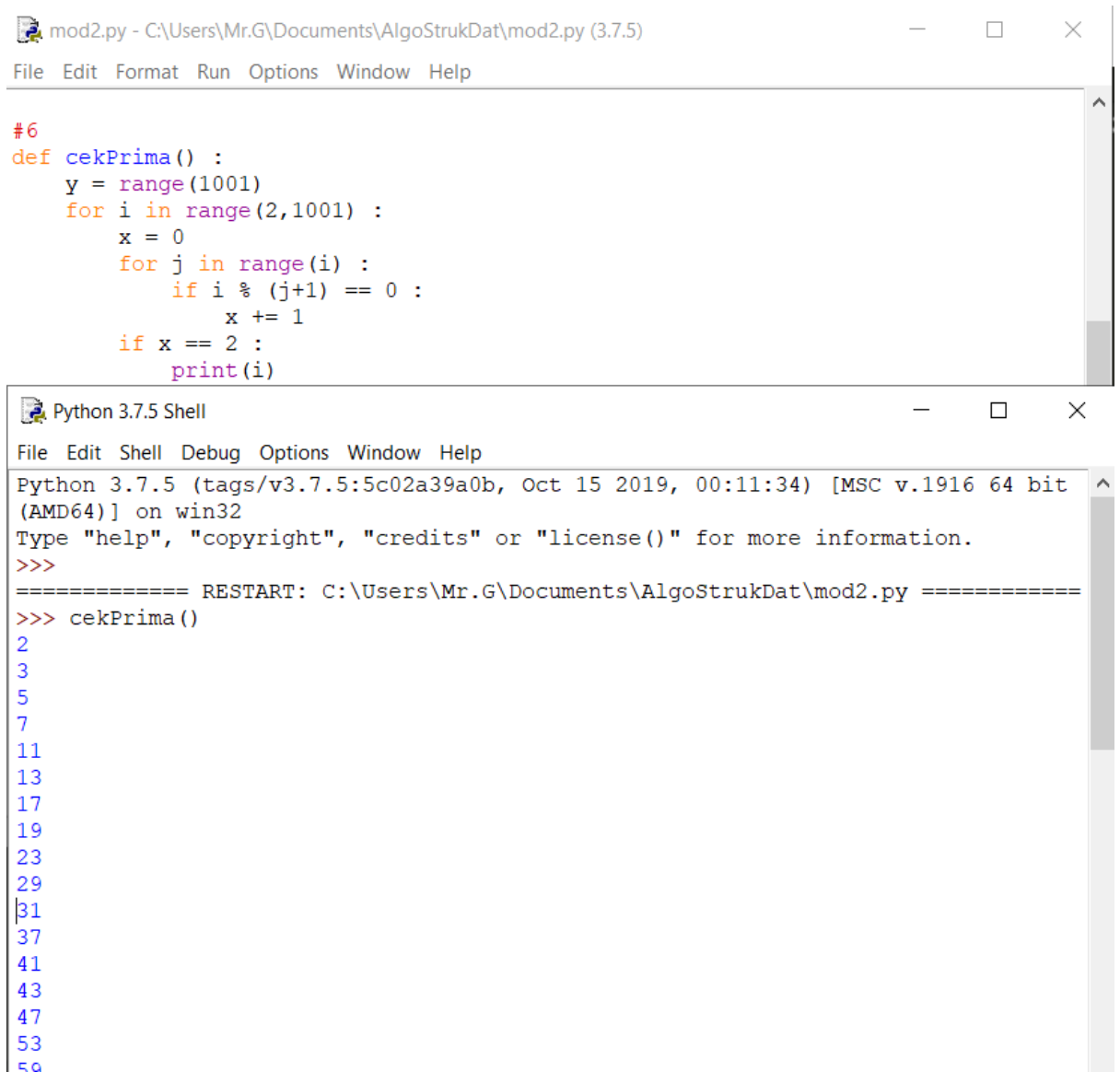
File Edit Shell Debug Options Window Help

Python 3.7.5 (tags/v3.7.5:5c02a39a0b, Oct 15 2019, 00:11:34) [MSC v.1916 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

```
>>>
===== RESTART: C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py =====
>>> rerata([7,8,8,7,9,7])
7.666666666666667
>>>
===== RESTART: C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py =====
>>> apakahPrima(15)
TIDAK
>>> apakahPrima(50)
TIDAK
>>> apakahPrima(47)
YA
>>>
```

6. Output file 6.py



The image shows a screenshot of a Python IDE with two windows. The top window, titled 'mod2.py - C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py (3.7.5)', contains a Python function named 'cekPrima()' that checks for prime numbers. The function iterates from 2 to 1001, and for each number 'i', it checks if it is divisible by any number 'j' from 2 to 'i-1'. If it is, it increments a counter 'x'. If 'x' is 2, it prints 'i'. The bottom window, titled 'Python 3.7.5 Shell', shows the execution of the script. It displays the Python version and architecture, followed by a restart message. The output of the 'cekPrima()' function is a list of prime numbers: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, and 59.

```
mod2.py - C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py (3.7.5)
File Edit Format Run Options Window Help

#6
def cekPrima() :
    y = range(1001)
    for i in range(2,1001) :
        x = 0
        for j in range(i) :
            if i % (j+1) == 0 :
                x += 1
        if x == 2 :
            print(i)

Python 3.7.5 Shell
File Edit Shell Debug Options Window Help

Python 3.7.5 (tags/v3.7.5:5c02a39a0b, Oct 15 2019, 00:11:34) [MSC v.1916 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py =====
>>> cekPrima()
2
3
5
7
11
13
17
19
23
29
31
37
41
43
47
53
59
```

7. Output file 7.py

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

```
Python 3.7.5 Shell
File Edit Shell Debug Options Window Help
Python 3.7.5 (tags/v3.7.5:5c02a39a0b, Oct 15 2019, 00:11:34) [MSC v.1916 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py =====
>>> faktorPrima(143)
[11, 13]
```

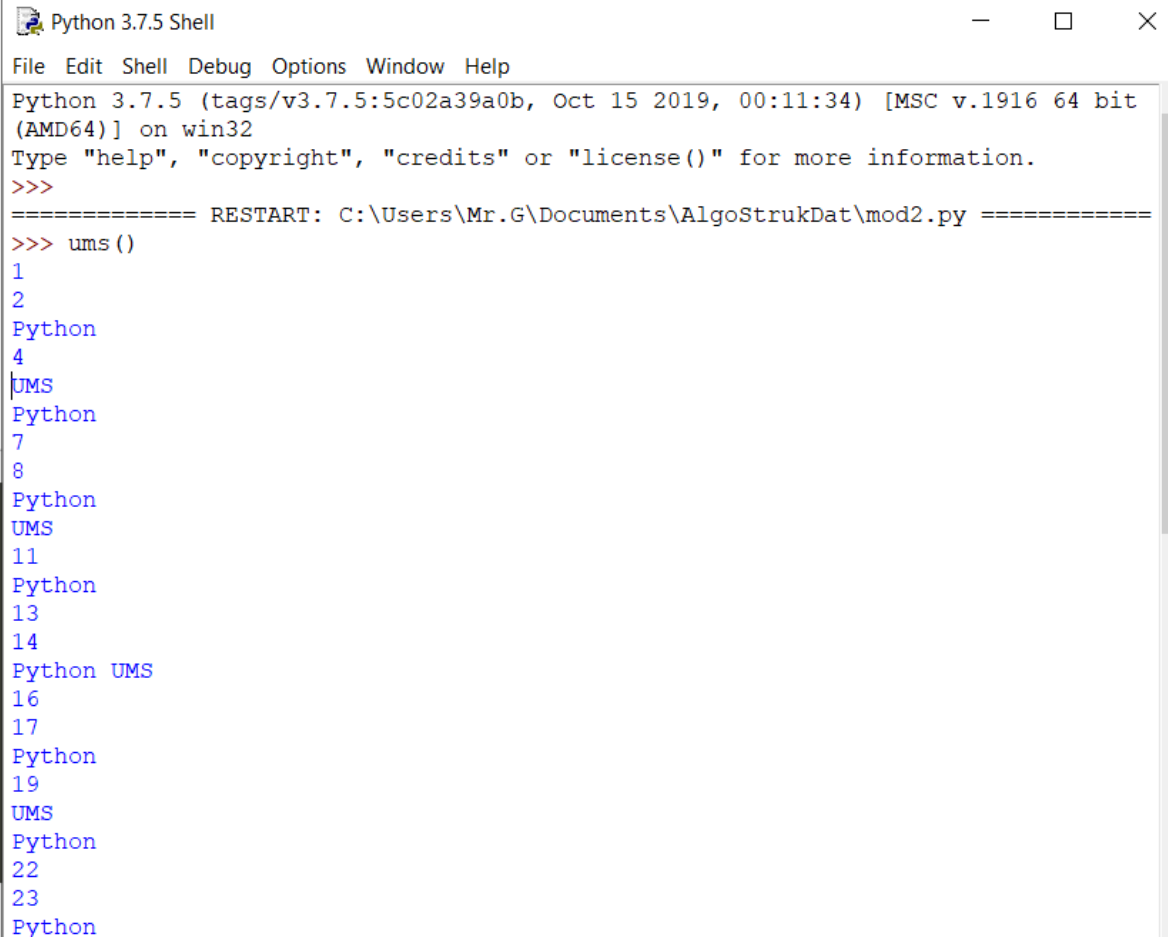
8. Output file 8.py

```
#8
def apakahTerkandung(a,b) :
    if a in b :
        return True
    else :
        return False
```

```
Python 3.7.5 Shell
File Edit Shell Debug Options Window Help
Python 3.7.5 (tags/v3.7.5:5c02a39a0b, Oct 15 2019, 00:11:34) [MSC v.1916 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py =====
>>> apakahTerkandung("db","awddasdadwawawds")
False
>>> apakahTerkandung("awkarin","awokawokawokoawkarin")
True
>>> |
```

9. Output file 9.py

```
#9
def ums() :
    for i in range(101) :
        if (i+1) % 15 == 0 :
            print("Python UMS")
        elif (i+1) % 3 == 0 :
            print("Python")
        elif (i+1) % 5 == 0 :
            print("UMS")
        else :
            print(i+1)
```



```
Python 3.7.5 Shell
File Edit Shell Debug Options Window Help
Python 3.7.5 (tags/v3.7.5:5c02a39a0b, Oct 15 2019, 00:11:34) [MSC v.1916 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py =====
>>> ums()
1
2
Python
4
UMS
Python
7
8
Python
UMS
11
Python
13
14
Python UMS
16
17
Python
19
UMS
Python
22
23
Python
```

10. Output file 10.py

```
#10
def selesaikanABC(a,b,c) :
    res = 0
    res = (b**2) - (4*a*c)

    if res == 0 :
        print("Determinannya nol. Persamaan mempunyai satu akar kembar.")
    elif res > 0 :
        print("Determinannya positif. Persamaan mempunyai akar real dan berlain")
    elif res < 0 :
        print("Determinannya negatif. Persamaan tidak mempunyai akar real.")
```

Python 3.7.5 Shell

File Edit Shell Debug Options Window Help

Python 3.7.5 (tags/v3.7.5:5c02a39a0b, Oct 15 2019, 00:11:34) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py =====
>>> selesaikanABC(3,2,1)
Determinannya negatif. Persamaan tidak mempunyai akar real.
>>> |

11. Output file 11.py

```
#11
def apakahKabisat() :
    thn = int(input("Masukkan Tahun : "))
    if thn % 4 == 0 :
        if thn % 100 == 0 :
            if thn % 400 == 0 :
                print(True)
            else :
                print(False)
        else :
            print(True)
    else :
        print(False)
```

apakahKabisat()

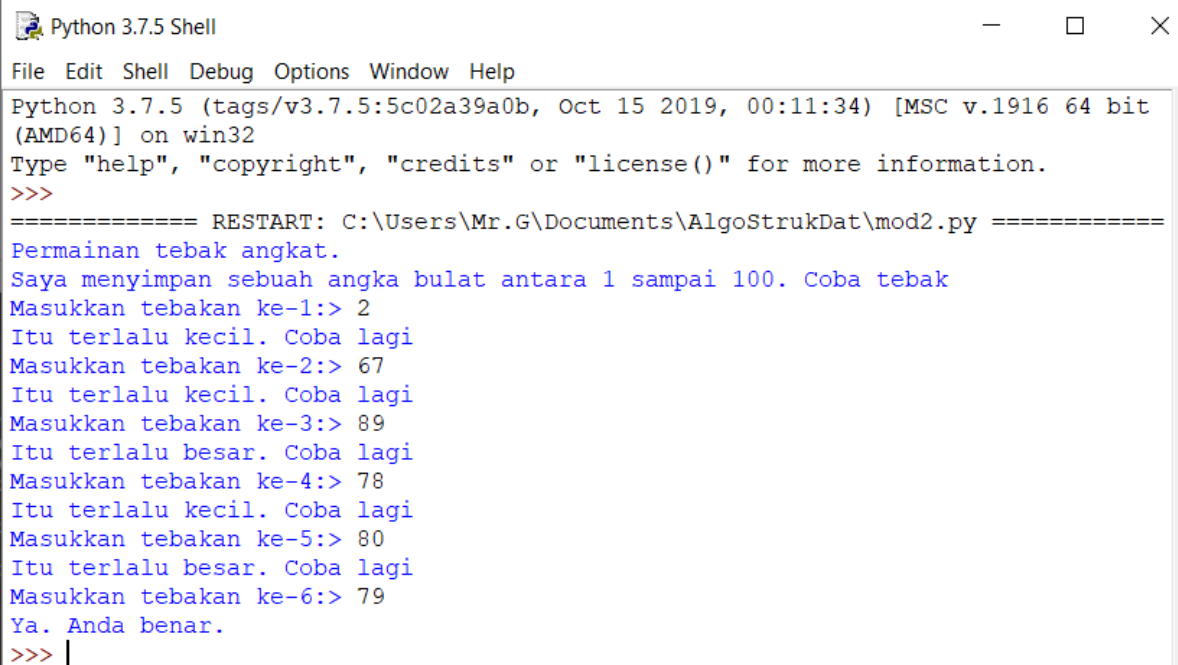
Python 3.7.5 Shell

File Edit Shell Debug Options Window Help

Python 3.7.5 (tags/v3.7.5:5c02a39a0b, Oct 15 2019, 00:11:34) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py =====
Masukkan Tahun : 2020
True
>>> |

12. Output file 12.py

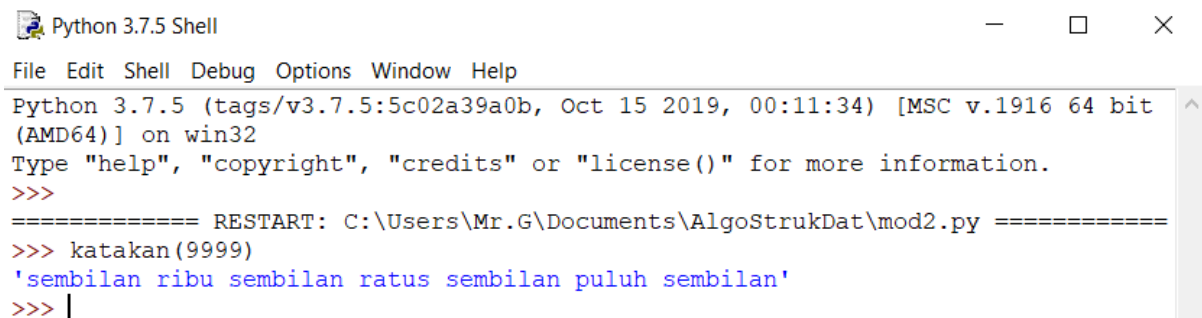
```
#12
def tebak() :
    a = random.randrange(1,101)
    b = -1
    n = 0
    print("Permainan tebak angkat.")
    print("Saya menyimpan sebuah angka bulat antara 1 sampai 100. Coba tebak")
    while a != b :
        n = n + 1
        b= int(input("Masukkan tebakan ke-"+str(n)+":> "))
        if b < a :
            print("Itu terlalu kecil. Coba lagi")
        elif b > a :
            print("Itu terlalu besar. Coba lagi")
        else :
            print("Ya. Anda benar.")
            break
    tebak()
```



```
Python 3.7.5 Shell
File Edit Shell Debug Options Window Help
Python 3.7.5 (tags/v3.7.5:5c02a39a0b, Oct 15 2019, 00:11:34) [MSC v.1916 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py =====
Permainan tebak angkat.
Saya menyimpan sebuah angka bulat antara 1 sampai 100. Coba tebak
Masukkan tebakan ke-1:> 2
Itu terlalu kecil. Coba lagi
Masukkan tebakan ke-2:> 67
Itu terlalu kecil. Coba lagi
Masukkan tebakan ke-3:> 89
Itu terlalu besar. Coba lagi
Masukkan tebakan ke-4:> 78
Itu terlalu kecil. Coba lagi
Masukkan tebakan ke-5:> 80
Itu terlalu besar. Coba lagi
Masukkan tebakan ke-6:> 79
Ya. Anda benar.
>>> |
```


13. Output file 13.py

```
#13
def katakan(x):
    satuan = [' ', 'satu', 'dua', 'tiga', 'empat', 'lima', 'enam', 'tujuh', 'del
    hasil = ""
    if x <= 0:
        hasil += 'Bilangan Haruslah Positif\ndan Bilangan Asli'
    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
```



Python 3.7.5 Shell

File Edit Shell Debug Options Window Help

Python 3.7.5 (tags/v3.7.5:5c02a39a0b, Oct 15 2019, 00:11:34) [MSC v.1916 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

>>>

===== RESTART: C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py =====

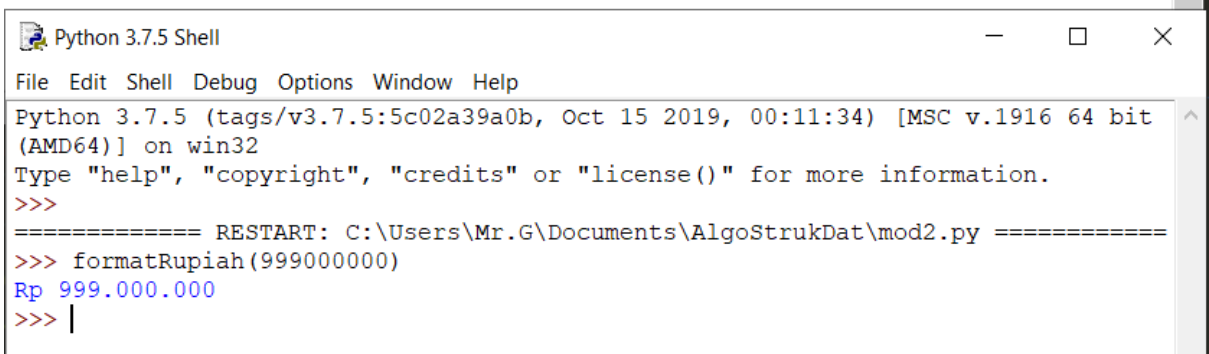
>>> katakan(9999)

'sembilan ribu sembilan ratus sembilan puluh sembilan'

>>> |

14. Output file 14.py

```
#14
def formatRupiah(a) :
    a = list(str(a))
    b = len(a)
    if b % 3 == 0 :
        b = int(b/3) - 1
    else :
        b = int(b/3)
    n = 0
    for i in range(b) :
        x = -3*(i+1)
        a.insert(int(x)+n, ".")
        n = n - 1
    a = "".join(a)
    print("Rp "+a)
```



The screenshot shows a Python 3.7.5 Shell window with the following content:

```
Python 3.7.5 Shell
File Edit Shell Debug Options Window Help
Python 3.7.5 (tags/v3.7.5:5c02a39a0b, Oct 15 2019, 00:11:34) [MSC v.1916 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Mr.G\Documents\AlgoStrukDat\mod2.py =====
>>> formatRupiah(999000000)
Rp 999.000.000
>>> |
```