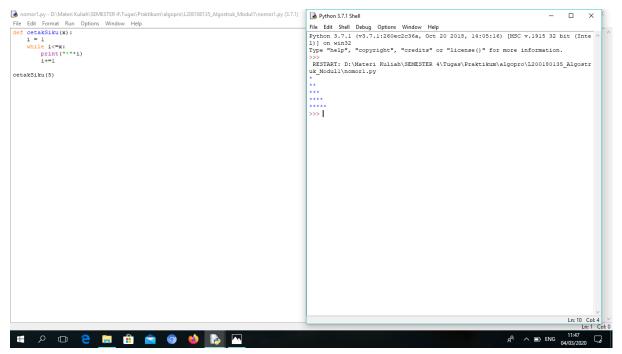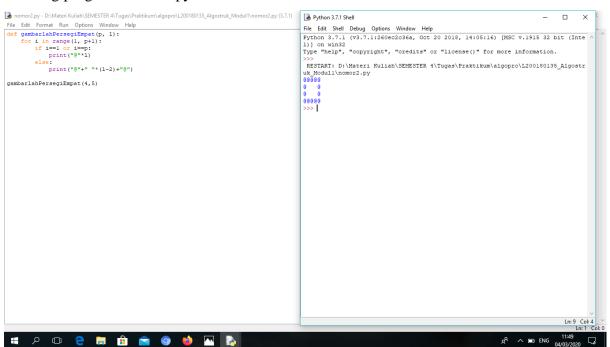Nama : Anisa Ghoyatul Firdaus

NIM : L200180135
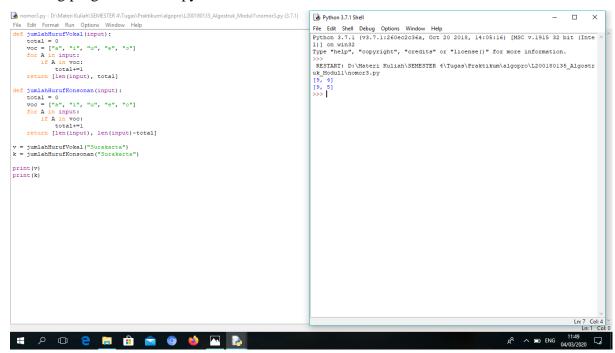
1. Running program nomor1.py
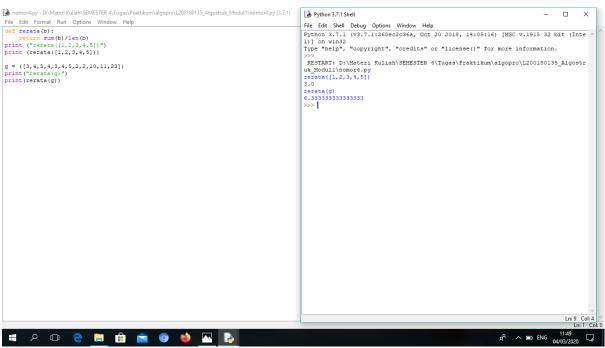

2. Running program nomor2.py

3. Running program nomor3.py

```python
def jumlahHurufVokal(input):
    total = 0
    voc = ["a", "i", "u", "e", "o"]
    for A in input:
        if A in voc:
            total+=1
    return [len(input), total]

def jumlahHurufKonsonan(input):
    total = 0
    voc = ["a", "i", "u", "e", "o"]
    for A in input:
        if A in voc:
            total+=1
    return [len(input), len(input)-total]

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

print(v)
print(k)
```

Python 3.7.1 Shell output:

```
Python 3.7.1 (v3.7.1:260ec2c36a, Oct 20 2018, 14:05:16) [MSC v.1915 32 bit (Inte
l)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
 RESTART: D:\Materi Kuliah\SEMESTER 4\Tugas\Praktikum\algopro\L200180135_Algostr
uk_Modul1\nomor3.py
[9, 4]
[9, 5]
>>>
```

4. Running program nomor4.py

```python
def rerata(b):
    return sum(b)/len(b)
print ("rerata([1,2,3,4,5])")
print (rerata([1,2,3,4,5]))

g = ([3,4,5,4,3,4,5,2,2,10,11,23])
print("rerata(g)")
print(rerata(g))
```

Python 3.7.1 Shell output:

```
Python 3.7.1 (v3.7.1:260ec2c36a, Oct 20 2018, 14:05:16) [MSC v.1915 32 bit (Inte
l)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
 RESTART: D:\Materi Kuliah\SEMESTER 4\Tugas\Praktikum\algopro\L200180135_Algostr
uk_Modul1\nomor4.py
rerata([1,2,3,4,5])
3.0
rerata(g)
6.333333333333333
>>>
```

5. Running program nomor5.py


```python
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
print ("apakahPrima(17)")
print (apakahPrima(17))

print ("apakahPrima(97)")
print (apakahPrima(97))

print ("apakahPrima(123)")
print (apakahPrima(123))
```

```
apakahPrima(17)
True
apakahPrima(97)
True
apakahPrima(123)
False
>>>
```

6. Running program nomor6.py


```python
def bilanganprima():
    prima=list()
    for i in range(2,1000):
        a = True
        for iter in prima:
            if(i%iter==0):
                a=False
                break
        if(a):
            print(i)
            prima.append(i)
bilanganprima()
```

```
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
```

7. Running program nomor7.py


```
def faktorprima(n):
    prima=list()
    for i in range(2,n):
        a = True
        for iter in prima:
            if(i%iter==0):
                a=False
                break
        if a and n%i==0:
            prima.append(i)
    return prima
print(faktorprima(143))
```

Python 3.7.1 Shell
```
Python 3.7.1 (v3.7.1:260ec2c36a, Oct 20 2018, 14:05:16) [MSC v.1915 32 bit (Inte
l)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
 RESTART: D:\Materi Kuliah\SEMESTER 4\Tugas\Praktikum\algopro\L200180135_Algostr
uk_Modul1\nomor7.py
[11, 13]
>>>
```

8. Running program nomor8.py


```
def apakahTerkandung(a,b):
    return a in b
print(apakahTerkandung("db","abcdcdsqwedb"))
print(apakahTerkandung("abd","abc"))
```

Python 3.7.1 Shell
```
Python 3.7.1 (v3.7.1:260ec2c36a, Oct 20 2018, 14:05:16) [MSC v.1915 32 bit (Inte
l)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
 RESTART: D:\Materi Kuliah\SEMESTER 4\Tugas\Praktikum\algopro\L200180135_Algostr
uk_Modul1\nomor8.py
True
False
>>>
```

9. Running program nomor9.py

10. Running program nomor10.py

11. Running program nomor11.py


```python
def apakahKabisat(a):
    if(a%400==0):
        return True
    if(a%100==0):
        return False
    if(a%4==0):
        return True
    return False
print(apakahKabisat(1896))
```

```
Python 3.7.1 (v3.7.1:260ec2c36a, Oct 20 2018, 14:05:16) [MSC v.1915 32 bit (Inte
l)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
 RESTART: D:\Materi Kuliah\SEMESTER 4\Tugas\Praktikum\algopro\L200180135_Algostr
uk_Modul1\nomor11.py
True
>>>
```

12. Running program nomor12.py


```python
import random
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 3.7.1 (v3.7.1:260ec2c36a, Oct 20 2018, 14:05:16) [MSC v.1915 32 bit (Inte
l)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
 RESTART: D:\Materi Kuliah\SEMESTER 4\Tugas\Praktikum\algopro\L200180135_Algostr
uk_Modul1\nomor12.py
Permainan tebak angkat.
Saya menyimpan sebuah angka bulat antara 1 sampai 100. Coba tebak
Masukkan tebakan ke-1:>
```

13. Running program nomor13.py

```python
def katakan(x):
    satuan = [' ', 'satu', 'dua', 'tiga', 'empat', 'lima', 'enam', 'tujuh', 'delapan', 'sembilan', 'sepuluh', 'sebelas']
    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

print(katakan(299))
```

Shell output:
```
dua ratus sembilan puluh sembilan
```

14. Running program nomor14.py

```python
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)

print(formatRupiah(1500))
```

Shell output:
```
Rp 1.500
None
```