

LAPORAN PRAKTIKUM ALGORITMA & STRUKTUR DATA

MODUL 1

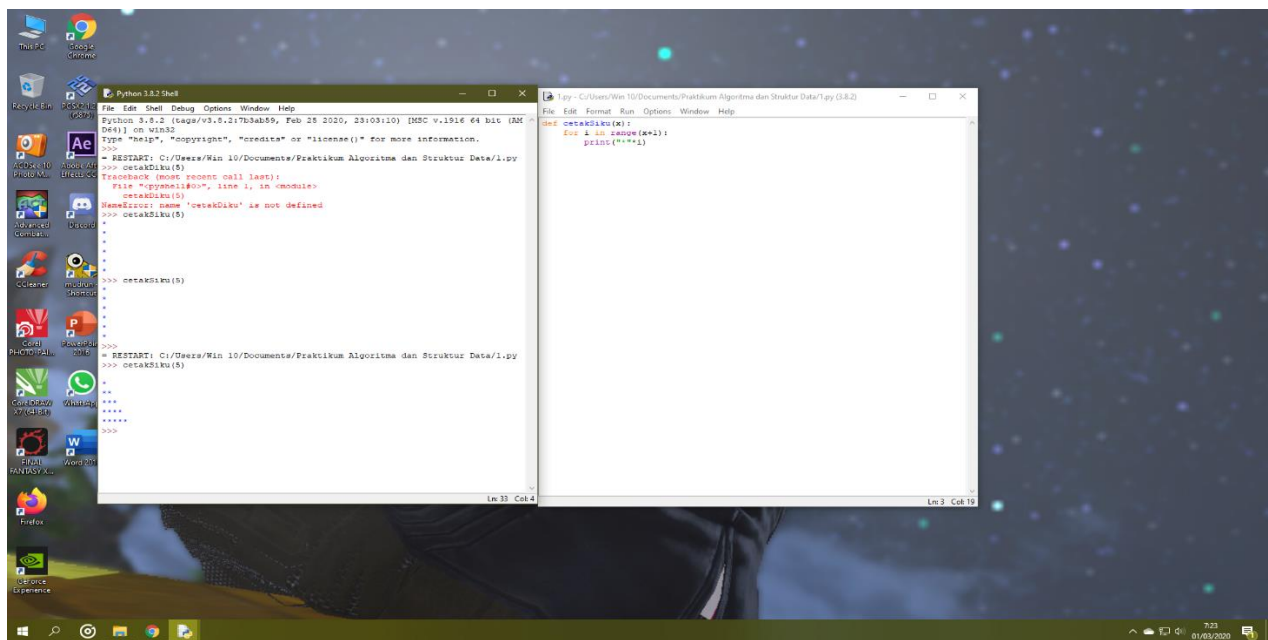
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Tanggal Praktikum : 27 Februari 2020

1.11 Soal-soal untuk Mahasiswa

1.





The screenshot displays a Windows 10 desktop environment. Two application windows are open:

- Left Window: Python 3.8.2 Shell**

```
>>> cetakDiku(5)
Traceback (most recent call last):
  File "<ipython180>", line 1, in <module>
    cetakDiku(5)
NameError: name 'cetakDiku' is not defined
>>> cetakDiku(5)
```
- Right Window: 01.py - C:\Users\Win 10\Downloads\01.py (3.8.2)**

```
def jumlahHurufVokal(x):
    vokal = "AIUEOaiueo"
    a = len(a)
    b = ""
    for k in x:
        if k in vokal:
            b+=k
    c = len(b)
    return (a,c)

>>>
```

The taskbar at the bottom shows various icons including Google Chrome, VLC media player, and several folders. The system clock indicates the date as 01/03/2020.

[illegible]

The screenshot shows a Windows 10 desktop environment. The desktop background is a dark, abstract image. The taskbar at the bottom displays the Start button, a search bar, and several pinned icons: File Explorer, Microsoft Edge, Google Chrome, and a folder icon. The system tray on the right shows the date and time as 7:38 on 01/03/2020.

Two application windows are open:

- Python 3.8.2 Shell:** This window shows a command prompt with several commands and their outputs. The commands include:
 - `>>> = RESTART: C:\Users\Win 10\Documents\Praktikum Algoritma dan Struktur Data\1.py`
 - `>>> cetakSiku(5)`
 - `>>> = RESTART: C:\Users\Win 10\Downloads\02.py`
 - `>>> gambarBalokPersegiEmpat(4, 5)`
 - `>>> jumlahHurufVokal('Surakarta')`
 - `>>> jumlahHurufKonsongan('Surakarta')`
 - `>>> = RESTART: C:\Users\Win 10\Downloads\04.py`
 - `>>> zerate([1,2,3,4,5])`
 - `>>> g = [1,4,5,4,3,4,5,2,10,11,23]`
 - `>>> zerate(g)`
- Wey - C:\Users\Win 10\Downloads\04.py (3.8.2):** This window shows a Python script with comments and code. The script includes a function `zerate` and a loop that prints the results of the function for different inputs.


```
def zerate(b):
    k = 0
    for i in b:
        k+=1
    hasil = k / len(b)
    return hasil
```

5.

```

Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
>>>
===== RESTART: C:\Users\Win 10\Downloads\02.py =====
>>> qambarlahPersegiEmpat(4, 5)
00000
0 0
0 0
>>>
===== RESTART: C:\Users\Win 10\Downloads\03.py =====
>>> jumlahHurufVokal('Suzakata')
(P, 4)
>>>
===== RESTART: C:\Users\Win 10\Downloads\03.py =====
>>> jumlahHurufKonsonan('Suzakata')
(P, 5)
>>>
===== RESTART: C:\Users\Win 10\Downloads\04.py =====
>>> rerata([1,2,3,4,5])
3.0
>>> g = [3,4,5,4,3,4,5,2,2,10,11,23]
>>> rerata(g)
4.333333333333333
>>>
===== RESTART: C:\Users\Win 10\Downloads\05.py =====
>>> apakahPrima(17)
True
>>> apakahPrima(97)
True
>>> apakahPrima(123)
True
>>>

OSpy - C:\Users\Win 10\Downloads\05.py (3.8.2)
File Edit Format Run Options Window Help
from math import sqrt as sq
def apakahPrima(x):
    x = int(x)
    primaKecil = [2,3,5,7,11]
    buPrimaKecil = [0,1,4,6,8,9,10]
    if x in primaKecil:
        return True
    elif x in buPrimaKecil:
        return False
    else:
        for i in range(2, int(sq(x))+1):
            if x % i == 0:
                return False
            else:
                return True

```

6.

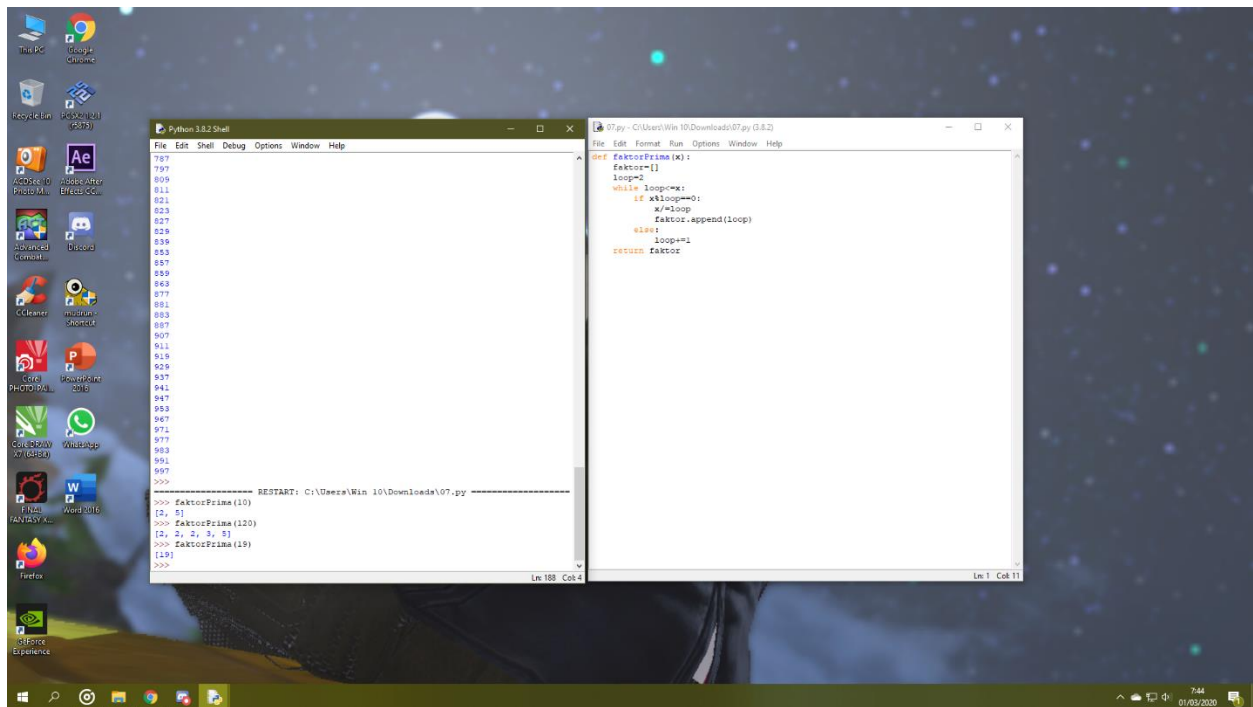
```

Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
>>>
===== RESTART: C:\Users\Win 10\Downloads\06.py =====
>>> bilanganPrima()
Bilangan prima antara 2 and 1000 :
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
149
151
>>>

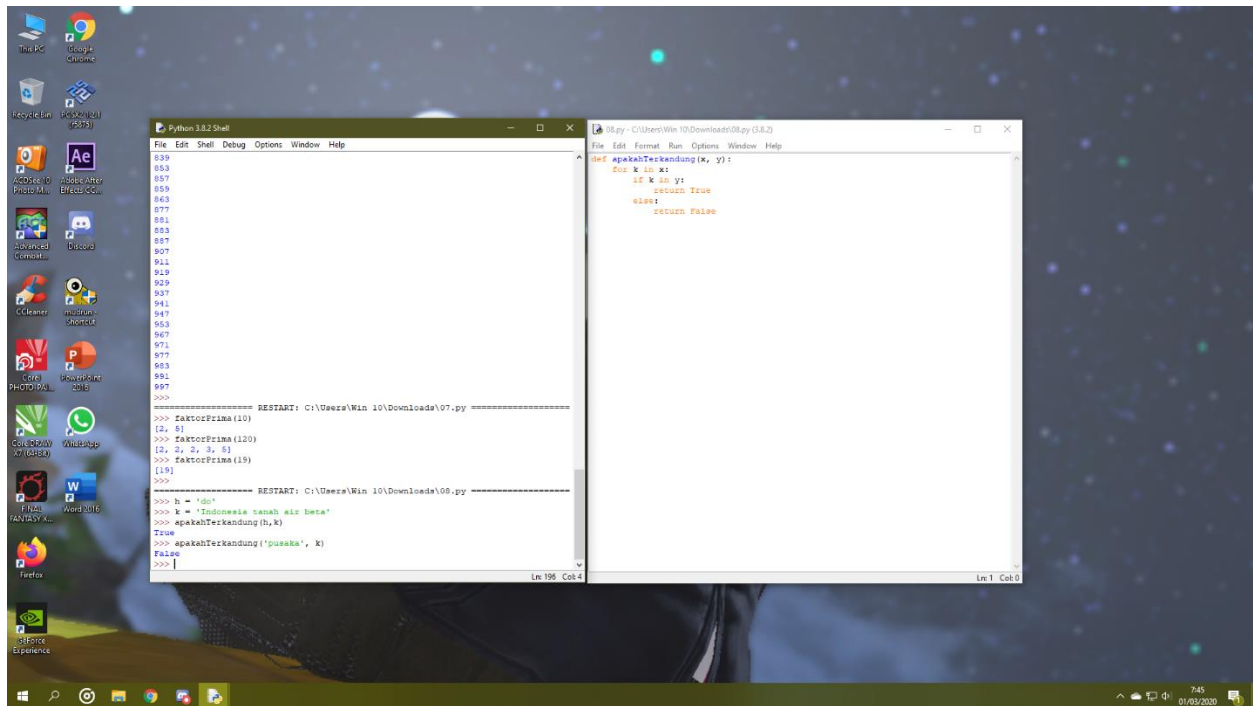
OSpy - C:\Users\Win 10\Downloads\06.py (3.8.2)
File Edit Format Run Options Window Help
def bilanganPrima():
    lower = 2
    upper = 1000
    print("Bilangan prima antara",lower,"and",upper,":")
    for num in range(lower,upper + 1):
        if num > 1:
            for i in range(2,num):
                if (num % i) == 0:
                    break
            else:
                print(num)

```

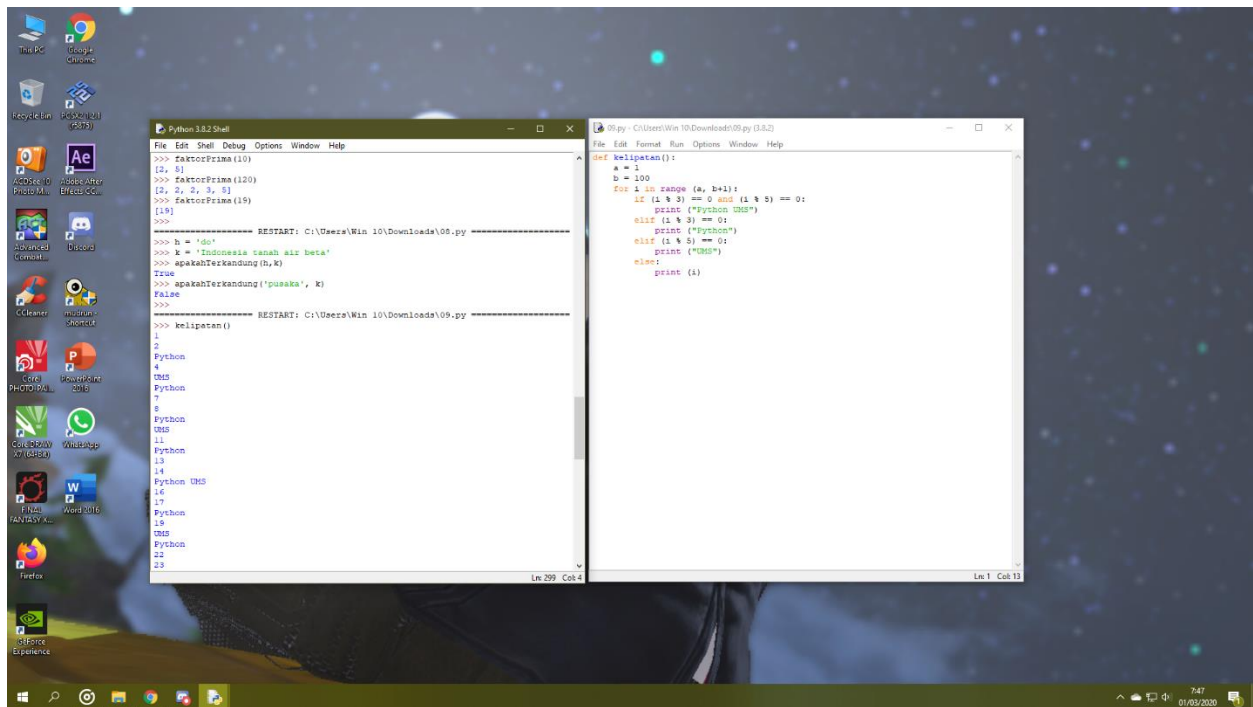
7.



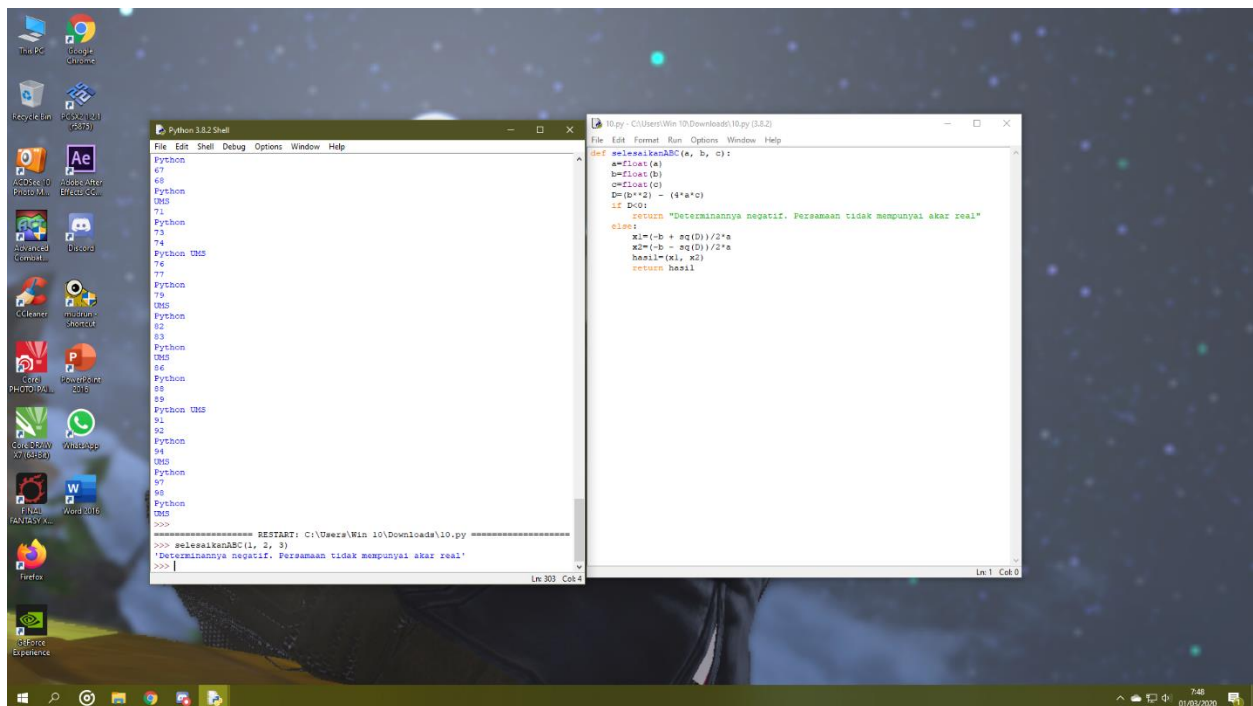
8.



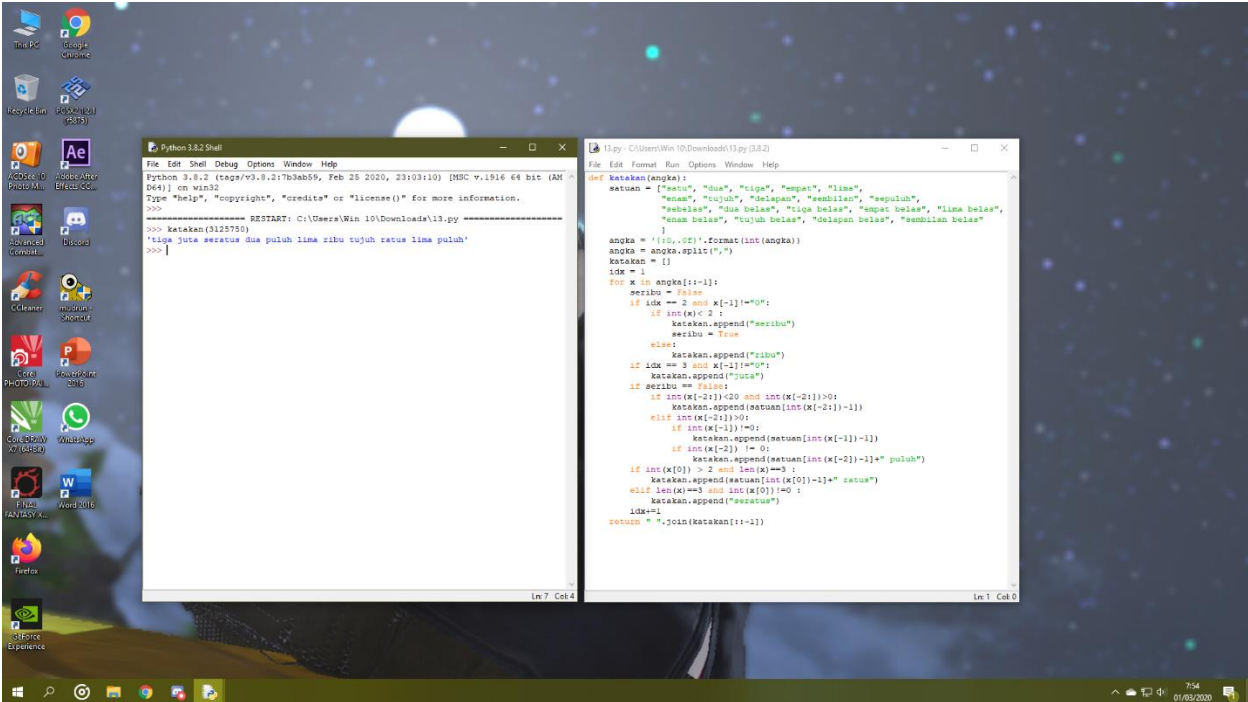
9.



10.



13.



14.

