W9 – Pemrograman Lanjut

Oleh :

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Penugasan

Capaian dan tugas minggu ini :

- String (built in function). Tugas 1. mencoba built-in function yang ada didalam modul.
- Try except. Tugas 2. Tugas nya mencoba yang ada didalam video. Dan coba bebarap tipe error.
- Manage with files. Tugas 3. Mencoba yang ada di link dan di modul.
- Tugas 4 yang ada di modul membuat aplikasi restoran, halaman 69.

Video


```
#### STRING ####

ch_1 = 'A'
ch_2 = 'a'

ord_1 = 65

print(ord(ch_1))
print(ord(ch_2))

print(chr(ord_1))
```

✓ 1.6s

```
65
97
A
```

```
sentence = "alimsatria"

print("alim" in sentence)
```

✓ 0.5s

```
True
```

```
print("terima kasih selamat malam".capitalize())
print(" terima kasih selamat malam".capitalize())
print("terima kasih. selamat malam".capitalize())
```

✓ 0.4s

```
Terima kasih selamat malam
 terima kasih selamat malam
Terima kasih. selamat malam
```

```
print('lambda30'.isalnum())
print('@'.isalnum())
```

✓ 0.4s

```
True
False
```

```
#### TRY EXCEPT ####

value = 1
value /= 0
```

⊗ 0.5s

```
---------------------------------------------
ZeroDivisionError                         Tra
/home/alimsatria/Documents/MATERI KULIAH/PEMR
      1 #### TRY EXCEPT ####
      3 value = 1
----> 4 value /= 0

ZeroDivisionError: division by zero
```

```
num_1 = int(input("Masukkan angka 1 : "))
num_2 = int(input("Masukkan angka 2 : "))

if num_2 != 0 :
    print(num_1/num_2)
else :
    print("Tidak dapat diproses")
```

✓ 3.4s

```
Tidak dapat diproses
```

Video


```
try :
    num_1 = int(input("Masukkan angka 1 : "))
    num_2 = int(input("Masukkan angka 2 : "))
    print(num_1/num_2)
except :
    print("tidak dapat diproses")
```

✓ 3.1s

```
tidak dapat diproses
```

```
try :
    num_1 = int(input("Masukkan angka 1 : "))
    num_2 = 1 /num_1
    print(num_2)
except ZeroDivisionError :
    print("tidak dapat dibagi nol")
except ValueError :
    print("Silahkan masukkan data dengan format integer")
```

✓ 1.9s

```
Silahkan masukkan data dengan format integer
```

Tugas 1

- TUGAS SATU

```
print("Hello world".split())
print("Hello World".swapcase())
print("Hello World".istitle())
print("12345678910".isdigit())
```

✓ 0.5s

```
['Hello', 'world']
hELLO wORLD
True
True
```

Tugas 2


```
try :
    print(3*alpha + 1)
except NameError:
    print("Variable belum di deklarasikan")

try :
    print('1'+100)
except TypeError :
    print("Tipe data yang dimasukkan salah")

try:
    import helloworld
except ImportError :
    print("Terdapat error pada library yang di import")
```

✓ 0.6s

```
Variable belum di deklarasikan
Tipe data yang dimasukkan salah
Terdapat error pada library yang di import
```

Tugas 3

- TUGAS TIGA

```
f = open('demofile.txt')
f = open("demofile.txt", "rt")
```
✓ 0.3s

```
f = open("demofile.txt", "r")
print(f.read())
```
✓ 0.4s

```
Hello! Welcome to demofile.txt
This file is for testing purposes.
Good Luck!
```

```
f = open("demofile.txt", "r")
print(f.read(5))
```
✓ 0.4s

```
Hello
```

```
f = open("demofile.txt", "r")
print(f.readline())
```
✓ 0.3s

```
Hello! Welcome to demofile.txt
```

```
f = open("demofile.txt", "r")
print(f.readline())
print(f.readline())
```
✓ 0.5s

```
Hello! Welcome to demofile.txt

This file is for testing purposes.
```

```
f = open("demofile.txt", "r")
for x in f:
  print(x)
```
✓ 0.4s

```
Hello! Welcome to demofile.txt

This file is for testing purposes.

Good Luck!
```

```
f = open("demofile.txt", "r")
print(f.readline())
f.close()
```
✓ 0.4s

```
Hello! Welcome to demofile.txt
```

Tugas 3


```
f = open("demofile2.txt", "a")
f.write("Now the file has more content!")
f.close()

#open and read the file after the appending:
f = open("demofile2.txt", "r")
print(f.read())
```

✓ 0.4s

```
Now the file has more content!
```

```
f = open("demofile3.txt", "w")
f.write("Woops! I have deleted the content!")
f.close()

#open and read the file after the appending:
f = open("demofile3.txt", "r")
print(f.read())
```

✓ 0.4s

```
Woops! I have deleted the content!
```

```
f = open("demofile3.txt", "w")
f.write("Woops! I have deleted the content!")
f.close()

#open and read the file after the appending:
f = open("demofile3.txt", "r")
print(f.read())
```

✓ 0.4s

```
Woops! I have deleted the content!
```

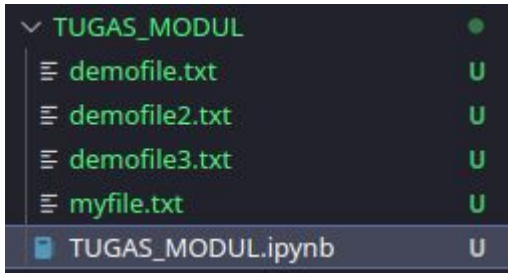
```
f = open("myfile.txt", "x")
```

✓ 0.3s

```
f = open("myfile.txt", "w")
```

✓ 0.4s

File file yang dihasilkan selama pemrograman



Tugas 3

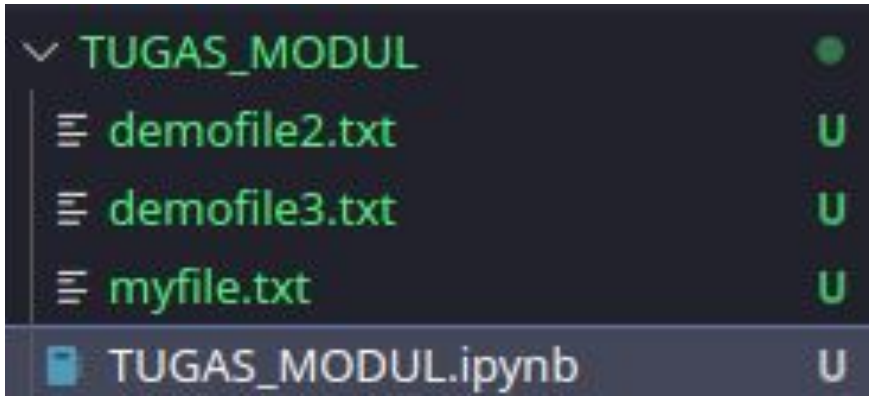

```
import os

os.remove("demofile.txt")
```

✓ 0.4s

```
import os
if os.path.exists("demofile.txt"):
  os.remove("demofile.txt")
else:
  print("The file does not exist")
```

✓ 0.4s

```
The file does not exist
```



List file setelah dilakukan penghapusan pada demofile.txt

Tugas 4

UNIVERSITAS GADJAH MADA

```python
import csv

data = []
purchased_item = []
purchased_total = 0

def input_user_data() :

    data = []

    data.append(str(input('Silahkan masukkan username :')))
    data.append(str(input('Silahkan masukkan password :')))

    return data
```

```python
def read_user_database() :

    with open('user.txt') as csv_file :

        data = []
        data_ = []

        for row in csv.reader(csv_file) :
            data.append(row)

        for i in range(2) :
            data_.append(data[i][0])

    return data_

def input_order() :

    data = []

    while(1) :
        order = int(input('Masukkan nominal harga makanan : (masukkan nilai nol apabila order sudah penuh) '))
        if(order == 0) :
            print('nominal terdekesi nol, order akan dijumlahkan...')
            break
        else :
            data.append(order)
    return data
```

Dari kiri ke kanan

Tugas 4

UNIVERSITAS GADJAH MADA

```python
def summary(data) :

    total = 0

    for i in range(len(data)) :
        total = total + data[i-1]
    return total

def mid_or_end_month_disc() :

    flag = int(input('Masukkan tanggal pembelian : '))

    if flag == 15 or range(28,30) :
        print('diskon tengah/akhir bulan : 10 persen ',)
        return 0.1 #diskon sepuluh persen untuk tengah / akhir bulan
    else :
        return 0
```

```python
def member_disc() :
    flag = str(input('Apakah pembeli masuk member? (y/n)'))

    if flag == 'y' :
        print('Diskon member sebesar : 20 persen')
        return 0.2 #diskon dua puluh persen untuk member
    else : return 0

def individual_or_businees_tax() :
    flag = str(input('Apakah untuk pembelian pribadi atau perusahaan (p/u)'))

    if flag == 'p' :
        return 0
    else :
        print('Pajak pembelian pursahaan : 5 persen')
        return 0.05

def restaurant_tax(total) :
    if total >= 500000 :
        print('pajak restoran : 5 persen')
        return 0.05
    else : return 0
```

Dari kiri ke kanan

Tugas 4

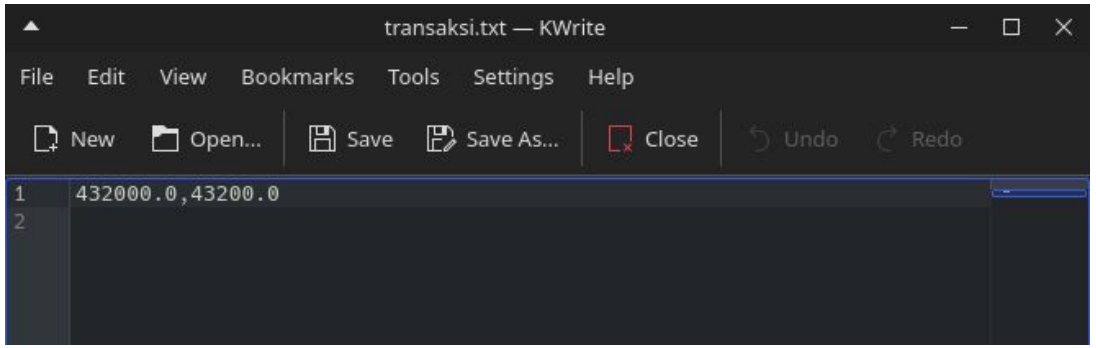

```
while(1) :

    while (1) :
        if input_user_data() != read_user_database() :
            print('Username atau password salah, silahkan ulangi')
        else :
            print('Username dan password benar, silahkan lanjutkan')
        break

    while(1) :
        purchased_item = input_order()
        purchased_total = summary(purchased_item)

        print('Pembelian makanan anda sebagai berikut : ',purchased_item)
        print('total sebelum diskon dan pajak : ',purchased_total)

        purchased_total = purchased_total - (purchased_total*mid_or_end_month_disc())
        purchased_total = purchased_total - (purchased_total*member_disc())
        purchased_total = purchased_total + (purchased_total*individual_or_businees_tax())
        purchased_total = purchased_total + (purchased_total*restaurant_tax(purchased_total))

        print('Pembelian setelah diskon dan pajak : ',purchased_total)

        data.append(purchased_total)
```

```
        with open('transaksi.txt',mode = 'w') as transc_file :
            t_file_write = csv.writer(transc_file,delimiter =',' )
            t_file_write.writerow(data)

        flag = str(input('Apakah ada transaksi lain? (y/n)'))

        if(flag == 'n') :
            print('terimakasih telah memesan')
            break
```

Tugas 4


```
Username dan password benar, silahkan lanjutkan
nominal terdekesi nol, order akan dijumlahkan...
Pembelian makanan anda sebagai berikut :  [100000, 200000, 300000]
total sebelum diskon dan pajak :  600000
diskon tengah/akhir bulan : 10 persen
Diskon member sebesar : 20 persen
Pembelian setelah diskon dan pajak :  432000.0
nominal terdekesi nol, order akan dijumlahkan...
Pembelian makanan anda sebagai berikut :  [10000, 20000, 30000]
total sebelum diskon dan pajak :  60000
diskon tengah/akhir bulan : 10 persen
Diskon member sebesar : 20 persen
Pembelian setelah diskon dan pajak :  43200.0
terimakasih telah memesan
```

Output console



Instruksi.txt