

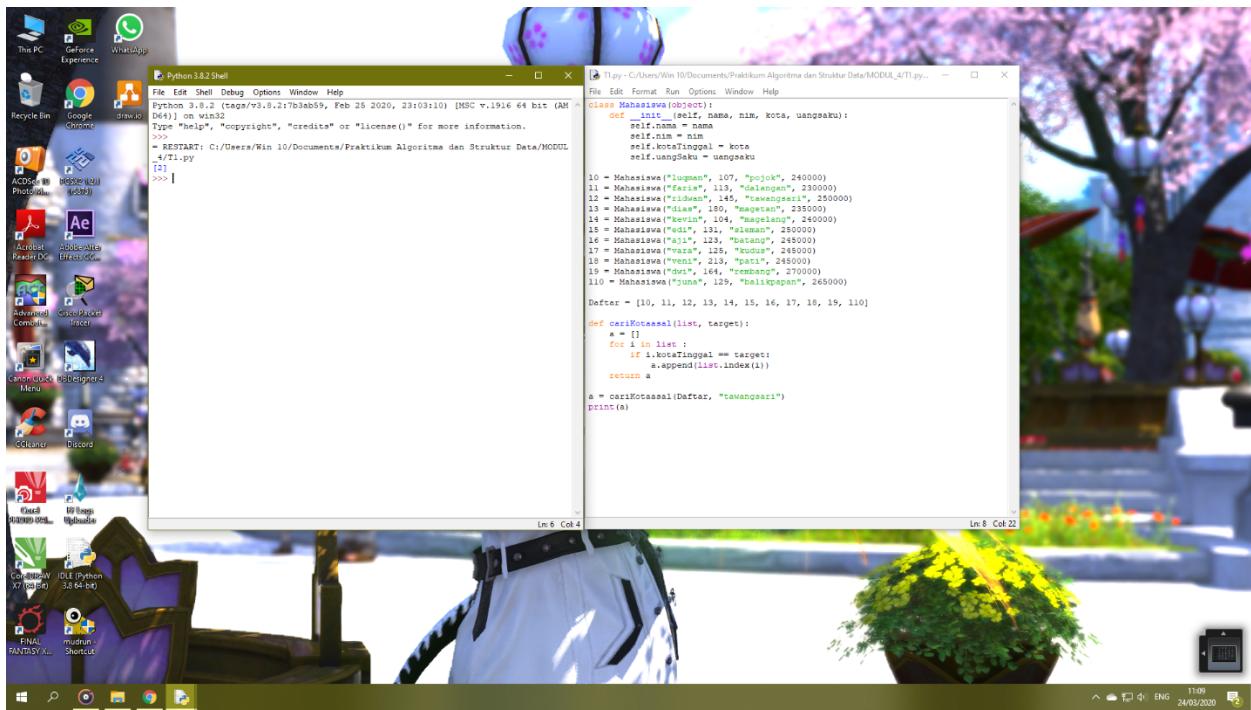
# LAPORAN TUGAS

## PRAKTIKUM ALGORITMA & STRUKTUR DATA

### MODUL 4

Nama : Muhammad Ridwan NurFarizi  
NIM : L200180020  
Kelas : A

#### Tugas 1



#### Tugas 2

```

Python 3.6.2 Shell
File Edit Shell Debug Options Window Help
Python 3.6.2 (tags/v3.6.2:7b3ab59, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> RESTART: C:/Users/Win 10/Documents/Praktikum Algoritma dan Struktur Data/MODUL_4/12.py...
4/12.py
>>>

```

```

10 = Mahasiswa("Iugman", 107, "pojok", 240000)
11 = Mahasiswa("Faria", 113, "dalangan", 230000)
12 = Mahasiswa("Rizki", 113, "merpati", 230000)
13 = Mahasiswa("Dina", 100, "manggur", 235000)
14 = Mahasiswa("Kevin", 104, "magelang", 240000)
15 = Mahasiswa("Edin", 131, "selatan", 250000)
16 = Mahasiswa("Aisyah", 125, "bekasi", 245000)
17 = Mahasiswa("Vera", 125, "kudus", 245000)
18 = Mahasiswa("Veni", 213, "pait", 245000)
19 = Mahasiswa("Duit", 164, "rembang", 270000)
20 = Mahasiswa("Yuna", 129, "haliliput", 245000)
Daftar = ([10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20])

```

```

def cariUangSakuTerkecil(list):
    temp = list[0].uangSaku
    for i in list[1:]:
        if i.uangSaku < temp:
            temp = i.uangSaku
    return temp

p = cariUangSakuTerkecil(Daftar)
print(p)

```

```

10 = Mahasiswa("Iugman", 107, "pojok", 289000)
11 = Mahasiswa("Faria", 113, "merpati", 230000)
12 = Mahasiswa("Rizki", 113, "dalangan", 230000)
13 = Mahasiswa("Dina", 100, "manggur", 265000)
14 = Mahasiswa("Kevin", 104, "magelang", 200000)
15 = Mahasiswa("Edin", 131, "selatan", 250000)
16 = Mahasiswa("Aisyah", 125, "bekasi", 290000)
17 = Mahasiswa("Vera", 125, "kudus", 290000)
18 = Mahasiswa("Veni", 213, "pait", 267000)
19 = Mahasiswa("Duit", 164, "rembang", 242000)
20 = Mahasiswa("Yuna", 129, "haliliput", 269000)

```

```

Daftar = ([10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20])
def cariTerkecil(self):
    terkecil = self[0].uangSaku
    c = len(self)
    for i in self:
        if i.uangSaku < terkecil :
            c.append((i.nama, i.NIM, i.kotaTinggal, i.uangSaku))
    return c
print(cariTerkecil(Daftar))

```

## Tugas 3

```

Python 3.6.2 Shell
File Edit Shell Debug Options Window Help
Python 3.6.2 (tags/v3.6.2:7b3ab59, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> RESTART: C:/Users/Win 10/Documents/Praktikum Algoritma dan Struktur Data/MODUL_4/13.py...
4/13.py
>>>

```

```

10 = Mahasiswa("Iugman", 107, "pojok", 289000)
11 = Mahasiswa("Faria", 113, "merpati", 230000)
12 = Mahasiswa("Rizki", 113, "dalangan", 230000)
13 = Mahasiswa("Dina", 100, "manggur", 265000)
14 = Mahasiswa("Kevin", 104, "magelang", 200000)
15 = Mahasiswa("Edin", 131, "selatan", 250000)
16 = Mahasiswa("Aisyah", 125, "bekasi", 290000)
17 = Mahasiswa("Vera", 125, "kudus", 290000)
18 = Mahasiswa("Veni", 213, "pait", 267000)
19 = Mahasiswa("Duit", 164, "rembang", 242000)
20 = Mahasiswa("Yuna", 129, "haliliput", 269000)

```

```

Daftar = ([10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20])
def cariTerkecil(self):
    terkecil = self[0].uangSaku
    c = len(self)
    for i in self:
        if i.uangSaku < terkecil :
            c.append((i.nama, i.NIM, i.kotaTinggal, i.uangSaku))
    return c
print(cariTerkecil(Daftar))

```

## Tugas 4

```

Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:fb087d2, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> = RESTART: C:/Users/Win 10/Documents/Praktikum Algoritma dan Struktur Data/MODUL_4/T4.py...
Data[4] = Mahasiswa("Juna", 129, "balikpapan", 265000)
Data[5] = Mahasiswa("Fajar", 113, "semenanjung", 230000)
Data[6] = Mahasiswa("Dwi", 125, "tambang", 250000)
Data[7] = Mahasiswa("Cici", 128, "mantan", 265000)
Data[8] = Mahasiswa("Kevin", 104, "magelang", 200000)
Data[9] = Mahasiswa("Edi", 131, "sleman", 250000)
Data[10] = Mahasiswa("Rita", 122, "bekasi", 250000)
Data[11] = Mahasiswa("Yoga", 125, "kutai", 250000)
Data[12] = Mahasiswa("Tora", 213, "patti", 267000)
Data[13] = Mahasiswa("Gwi", 164, "rembang", 2420000)
Data[14] = Mahasiswa("Juna", 129, "balikpapan", 265000)

Daftar = [10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20]

```

```

14.py - C:/Users/Win 10/Documents/Praktikum Algoritma dan Struktur Data/MODUL_4/T4.py...
File Edit Format Run Options Window Help
class Mahasiswa(object):
    def __init__(self, name, nim, kota, wangSaku):
        self.name = name
        self.nim = nim
        self.kotaTinggal = kota
        self.wangSaku = wangSaku

    10 = Mahasiswa("Juguman", 107, "pojok", 289000)
    11 = Mahasiswa("Fariq", 113, "semenanjung", 230000)
    12 = Mahasiswa("Dwi", 125, "tambang", 250000)
    13 = Mahasiswa("Cici", 128, "mantan", 265000)
    14 = Mahasiswa("Kevin", 104, "magelang", 200000)
    15 = Mahasiswa("Edi", 131, "sleman", 250000)
    16 = Mahasiswa("Rita", 122, "bekasi", 250000)
    17 = Mahasiswa("Yoga", 125, "kutai", 250000)
    18 = Mahasiswa("Tora", 213, "patti", 267000)
    19 = Mahasiswa("Gwi", 164, "rembang", 2420000)
    20 = Mahasiswa("Juna", 129, "balikpapan", 265000)

Daftar = [10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20]

def cariMahasiswaKurangDari250rb(List):
    temp = []
    for i in list:
        if i.wangSaku < 250000:
            temp.append(i)
    return temp

T = cariMahasiswaKurangDari250rb(Daftar)
for i in T:
    print(i.name)

```

## Tugas 5

```

Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:fb087d2, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> = RESTART: C:/Users/Win 10/Documents/Praktikum Algoritma dan Struktur Data/MODUL_4/T5.py...
Data[4] = ada dalam Linked List
Data[60] tidak ada linked list
Data[41] ada dalam Linked List

```

```

15.py - C:/Users/Win 10/Documents/Praktikum Algoritma dan Struktur Data/MODUL_4/T5.py...
File Edit Format Run Options Window Help
class node(object):
    def __init__(self, data, next = None):
        self.data = data
        self.next = next
    def cari(self, cari):
        curNode = self
        while curNode.next != None:
            if curNode.data == cari:
                curNode = curNode.next
            else:
                print ("Data", cari, "ada dalam Linked List")
                break
        elif curNode.next == None:
            print ("Data", cari, "tidak ada linked list")
            break

a = node(10)
node = a
a.next = node(11)
a = a.next
a.next = node(11)
a = a.next
a.next = node(19)
menu.cari(41)
menu.cari(60)

```

## Tugas 6

```
Python 3.8.2 (tags/v3.8.2:7b3eb59, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> RESTART: C:/Users/Win 10/Documents/Praktikum Algoritma dan Struktur Data/MODUL_4/T6.py...
True
<input> nilai target : 123
<input> False
>>>
```

```
Python 3.8.2 (tags/v3.8.2:7b3eb59, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> RESTART: C:/Users/Win 10/Documents/Praktikum Algoritma dan Struktur Data/MODUL_4/T6.py...
True
<input> nilai target : 123
<input> False
>>>
```

## Tugas 7

```
Python 3.8.2 (tags/v3.8.2:7b3eb59, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> RESTART: C:/Users/Win 10/Documents/Praktikum Algoritma dan Struktur Data/MODUL_4/T7.py...
[3, 5, 8]
>>>
```

```
Python 3.8.2 (tags/v3.8.2:7b3eb59, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> RESTART: C:/Users/Win 10/Documents/Praktikum Algoritma dan Struktur Data/MODUL_4/T7.py...
[2, 4, 5, 6, 6, 8, 9, 9, 10, 11, 12, 13, 13, 14]
print(binSeMass(list, 6))
```

## Tugas 8

