

Nama : MuchFatan Rahmadan  
NIM : L200180061  
Kelas : C

## Modul 4

### Latihan 2

```
Python 3.7.2 Shell
File Edit Shell Debug Options Window Help
Python 3.7.2 (tags/v3.7.2:9a3ffc0492, Dec 23 2018, 22:20:52) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\Mr_Darkness\AppData\Local\Programs\Python\Python37-32\Modul 4
Latihan.py
>>> A = [10, 51, 2, 18, 4, 31, 13, 5, 23, 64, 29]
>>> cariLurus(A,31)
True
>>> cariLurus(A,8)
False
>>> |

Latihan_modul_4.py - C:\Users\Mr_Darkness\Desktop\Latihan_modul_4.py (3.7.2)
File Edit Format Run Options Window Help
##Latihan 2
def cariLurus(wadah, target):
    n = len(wadah)
    for i in range(n):
        if wadah[i] == target:
            return True
    return False

##Latihan 3
c0 = mdl2.MhsTIF('Ika', 10, 'Sukoharjo', 240000)
c1 = mdl2.MhsTIF('Budi', 51, 'Sragen', 230000)
c2 = mdl2.MhsTIF('Ahmad', 2, 'Surakarta', 250000)
c3 = mdl2.MhsTIF('Chandra', 18, 'Surakarta', 235000)
c4 = mdl2.MhsTIF('Eka', 4, 'Boyolali', 240000)
c5 = mdl2.MhsTIF('Fandi', 31, 'Salatiga', 250000)
c6 = mdl2.MhsTIF('Deni', 13, 'Klaten', 245000)
c7 = mdl2.MhsTIF('Galuh', 5, 'Wonogiri', 245000)
c8 = mdl2.MhsTIF('Janto', 23, 'Klaten', 245000)
c9 = mdl2.MhsTIF('Hasan', 64, 'Karanganyar', 270000)
c10 = mdl2.MhsTIF('Khalid', 29, 'Purwodadi', 265000)

Daftar = [c0, c1, c2, c3, c4, c5, c6, c7, c8, c9, c10]

target = 'Klaten'
for i in Daftar:
    if i.kotaTinggal == target:
        print(i.nama + ' tinggal di ' + target)

##LATIHAN 4
def cariTerkecil(kumpulan):
    n = len(kumpulan)
    #anggap item pertama adalah yang terkecil
    terkecil = kumpulan[0]
    #tentukan apakah item lain lebih kecil
    for i in range(1, n):
        if kumpulan[i] < terkecil:
            terkecil = kumpulan[i]
    return terkecil

def main():
    Daftar = [c0, c1, c2, c3, c4, c5, c6, c7, c8, c9, c10]
    terkecil = cariTerkecil(Daftar)
    print(terkecil)

if __name__ == '__main__':
    main()
```

### Latihan 3

```
Python 3.7.2 Shell
File Edit Shell Debug Options Window Help
Python 3.7.2 (tags/v3.7.2:9a3ffc0492, Dec 23 2018, 22:20:52) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\Mr_Darkness\Desktop\Latihan_modul_4.py
Deni tinggal di Klaten
Janto tinggal di Klaten
>>>

Latihan_modul_4.py - C:\Users\Mr_Darkness\Desktop\Latihan_modul_4.py (3.7.2)
File Edit Format Run Options Window Help
##Latihan 2
def cariLurus(wadah, target):
    n = len(wadah)
    for i in range(n):
        if wadah[i] == target:
            return True
    return False

import modul2 as mdl2

##Latihan 3
c0 = mdl2.MhsTIF('Ika', 10, 'Sukoharjo', 240000)
c1 = mdl2.MhsTIF('Budi', 51, 'Sragen', 230000)
c2 = mdl2.MhsTIF('Ahmad', 2, 'Surakarta', 250000)
c3 = mdl2.MhsTIF('Chandra', 18, 'Surakarta', 235000)
c4 = mdl2.MhsTIF('Eka', 4, 'Boyolali', 240000)
c5 = mdl2.MhsTIF('Fandi', 31, 'Salatiga', 250000)
c6 = mdl2.MhsTIF('Deni', 13, 'Klaten', 245000)
c7 = mdl2.MhsTIF('Galuh', 5, 'Wonogiri', 245000)
c8 = mdl2.MhsTIF('Janto', 23, 'Klaten', 245000)
c9 = mdl2.MhsTIF('Hasan', 64, 'Karanganyar', 270000)
c10 = mdl2.MhsTIF('Khalid', 29, 'Purwodadi', 265000)

Daftar = [c0, c1, c2, c3, c4, c5, c6, c7, c8, c9, c10]

target = 'Klaten'
for i in Daftar:
    if i.kotaTinggal == target:
        print(i.nama + ' tinggal di ' + target)

####LATIHAN 4
def cariTerkecil(kumpulan):
    n = len(kumpulan)
    #anggap item pertama adalah yang terkecil
    terkecil = kumpulan[0]
    #tentukan apakah item lain lebih kecil
    for i in range(1, n):
        if kumpulan[i] < terkecil:
            terkecil = kumpulan[i]
    return terkecil

if __name__ == '__main__':
    Daftar = [c0, c1, c2, c3, c4, c5, c6, c7, c8, c9, c10]
    terkecil = cariTerkecil(Daftar)
    print(terkecil)
```

## Latihan 4

```
Python 3.7.2 Shell
File Edit Shell Debug Options Window Help
Python 3.7.2 (tags/v3.7.2:9a3ffc0492, Dec 23 2018, 22:20:52) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Mr_Darkness\Desktop\Latihan_modul_4.py =====
Deni tinggal di Klaten
Janto tinggal di Klaten
>>>
===== RESTART: C:\Users\Mr_Darkness\Desktop\Latihan_modul_4.py =====
Deni tinggal di Klaten
Janto tinggal di Klaten
('Budi', 2300000)
('Hasan', 2700000)
['Ika', 'Budi', 'Chandra', 'Eka', 'Deni', 'Galuh', 'Janto']
['Ahmad', 'Fandi', 'Hasan', 'Khalid']
>>>

Latihan_modul_4.py - C:\Users\Mr_Darkness\Desktop\Latihan_modul_4.py (3.7.2)
File Edit Format Run Options Window Help
c9 = md12.MhaTIF('Hasan', 64, 'Karanganyar', 2700000)
c10 = md12.MhaTIF('Khalid', 29, 'Purwodadi', 2650000)

Daftar = [c0, c1, c2, c3, c4, c5, c6, c7, c8, c9, c10]

target = 'Klaten'
for i in Daftar:
    if i.kotaTinggal == target:
        print(i.nama + ' tinggal di ' + target)

##LATIHAN 4
def cariTerkecil(kumpulan):
    n = len(kumpulan)
    #anggap item pertama adalah yang terkecil
    terkecil = kumpulan[0]
    #tentukan apakah item lain lebih kecil
    for i in range(1, n):
        if kumpulan[i] < terkecil:
            terkecil = kumpulan[i]
    return terkecil

def kecil(Daftar):
    minim = Daftar[0].uangSaku
    for i in Daftar:
        if i.uangSaku < minim:
            minim = i.uangSaku
            if i.uangSaku == minim:
                nama = i.nama
    return nama, minim
print(kecil(Daftar))

def besar(Daftar):
    maxim = Daftar[0].uangSaku
    for i in Daftar:
        if i.uangSaku > maxim:
            maxim = i.uangSaku
            if i.uangSaku == maxim:
                nama = i.nama
    return nama, maxim
print(besar(Daftar))

Ln: 15 Col: 4

Ln: 45 Col: 17
```

## Latihan 5

```
Python 3.7.2 Shell
File Edit Shell Debug Options Window Help
Python 3.7.2 (tags/v3.7.2:9a3ffc0492, Dec 23 2018, 22:20:52) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Mr_Darkness\Desktop\Latihan_modul_4.py =====
Deni tinggal di Klaten
Janto tinggal di Klaten
('Budi', 2300000)
('Hasan', 2700000)
['Ika', 'Budi', 'Chandra', 'Eka', 'Deni', 'Galuh', 'Janto']
['Ahmad', 'Fandi', 'Hasan', 'Khalid']
True
False
[10, 11]
False
>>>

Latihan_modul_4.py - C:\Users\Mr_Darkness\Desktop\Latihan_modul_4.py (3.7.2)
File Edit Format Run Options Window Help
print(lebih(Daftar))

##LATIHAN 5
def binSe(list, target):
    low = 0
    high = len(list) - 1

    while low <= high:
        #temukan pertengahan runtut itu
        mid = (high + low) // 2
        #Apakah pertengahannya semua target?
        if list[mid] == target:
            return True
        #ataukah targetnya di sebelah kirinya?
        elif target < list[mid]:
            high = mid - 1
        #atau targetnya ada di sebelah kananya?
        else:
            low = mid + 1
    return False

list = [2,3,5,6,6,6,8,9,9,10,11,12,13,13,14]
target = 6
print(binSe(list,target))
list = [2,3,5,6,6,6,8,9,9,10,11,12,13,13,14]
target = 7
print(binSe(list,target))

def binSe(list, target):
    a=[]
    low = 0
    high = len(list) - 1
    while (low<=high):
        mid = (low+high)//2
        if (list[mid] == target):
            a.append(list.index(target))
            i=list.index(target)-1
            j = list.index(target) + 1
            while target == list[i]:
                i=i-1
            while target == list[j]:
                j=j+1

Ln: 15 Col: 4

Ln: 123 Col: 20
```