

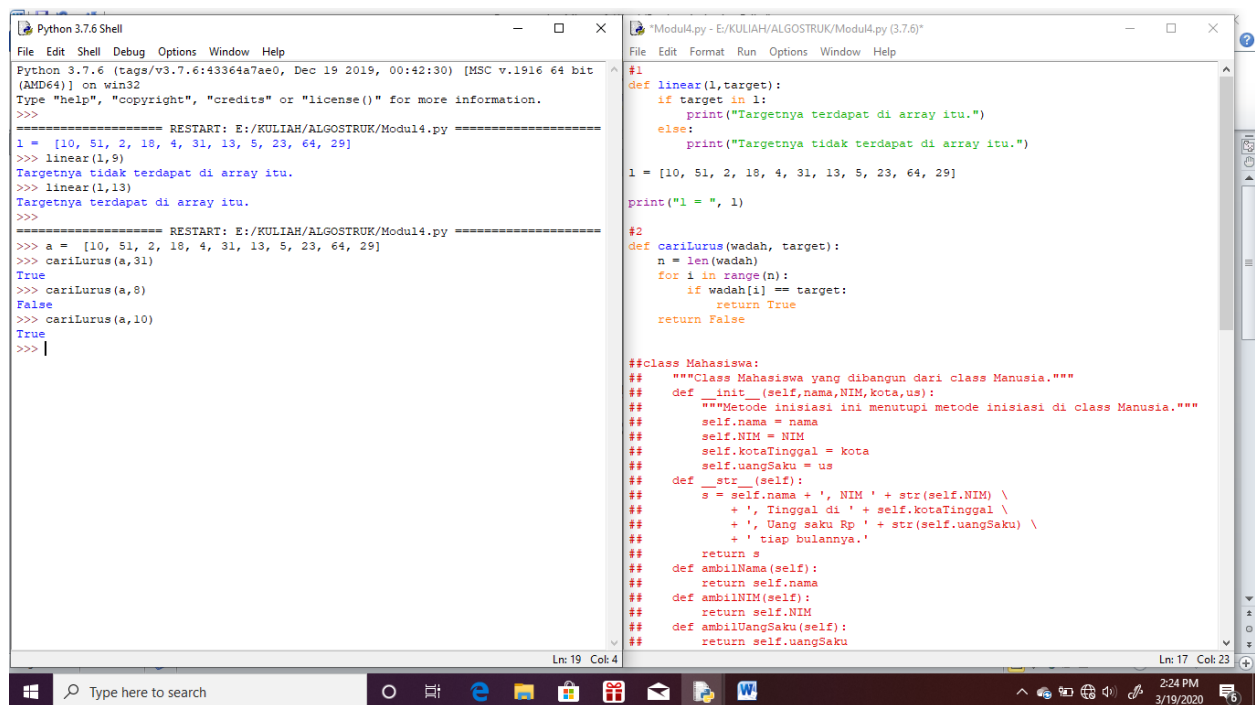
Modul 4

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Nama : Rohana Murniati Furshotun

Mata Kuliah : Praktikum Algoritma & Struktur Data

Tanggal Praktikum : 19 Maret 2020



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Python 3.7.6 Shell
File Edit Shell Debug Options Window Help
Python 3.7.6 (tags/v3.7.6:43364a7ae0, Dec 19 2019, 00:42:30) [MSC v.1916 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: E:/KULIAH/ALGOSTRUK/Modul4.py =====
>>>
1 = [10, 51, 2, 18, 4, 31, 13, 5, 23, 64, 29]
>>> linear(1,9)
Targetnya tidak terdapat di array itu.
>>> linear(1,13)
Targetnya terdapat di array itu.
>>>
===== RESTART: E:/KULIAH/ALGOSTRUK/Modul4.py =====
>>> a = [10, 51, 2, 18, 4, 31, 13, 5, 23, 64, 29]
>>> cariLurus(a,31)
True
>>> cariLurus(a,8)
False
>>> cariLurus(a,10)
True
>>> |

Modul4.py - E:/KULIAH/ALGOSTRUK/Modul4.py (3.7.6)
File Edit Format Run Options Window Help
#1
def linear(l,target):
    if target in l:
        print("Targetnya terdapat di array itu.")
    else:
        print("Targetnya tidak terdapat di array itu.")

l = [10, 51, 2, 18, 4, 31, 13, 5, 23, 64, 29]

print("l = ", l)

#2
def cariLurus(wadah, target):
    n = len(wadah)
    for i in range(n):
        if wadah[i] == target:
            return True
    return False

##class Mahasiswa:
##    """Class Mahasiswa yang dibangun dari class Manusia."""
##    def __init__(self,nama,NIM,kota,us):
##        """Metode inisiasi ini menutupi metode inisiasi di class Manusia."""
##        self.nama = nama
##        self.NIM = NIM
##        self.kotaTinggal = kota
##        self.uangSaku = us
##    def __str__(self):
##        s = self.nama + ', NIM ' + str(self.NIM) \
##            + ', Tinggal di ' + self.kotaTinggal \
##            + ', Uang saku Rp ' + str(self.uangSaku) \
##            + ' tiap bulannya.'
##        return s
##    def ambilNama(self):
##        return self.nama
##    def ambilNIM(self):
##        return self.NIM
##    def ambilUangSaku(self):
##        return self.uangSaku
```

```
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===== RESTART: E:/KULIAH/ALGOSTRUK/Modul4.py =====
Deni tinggal di Klaten
Janto tinggal di Klaten
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Modul4.py - E:/KULIAH/ALGOSTRUK/Modul4.py (3.7.6)
File Edit Format Run Options Window Help
43
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        return s
    def ambilNama(self):
        return self.nama
    def ambilNIM(self):
        return self.NIM
    def ambilUangSaku(self):
        return self.uangSaku

class MhsTIF(Mahasiswa):
    """Class MhsTIF yang dibangun dari class Mahasiswa."""
    def katakanPy(self):
        print('Python is cool.')

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

```
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Modul4.py - E:/KULIAH/ALGOSTRUK/Modul4.py (3.7.6)
File Edit Format Run Options Window Help
self.kotaTinggal = kota
self.uangSaku = us
    def __str__(self):
        s = self.nama + ', NIM ' + str(self.NIM) \
            + ', Tinggal di ' + self.kotaTinggal \
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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)
```

```
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>>>
Deni tinggal di Klaten
Janto tinggal di Klaten
>>>
===== RESTART: E:/KULIAH/ALGOSTRUK/Modul4.py =====
>>> b = [10, 51, 2, 18, 4, 31, 13, 5, 23, 64, 29]
>>> cariTerkecil(b)
2
>>> binSe(b,4)
False
>>> binSe(b,10)
False
>>> binSe(b,64)
True
>>>

Modul4.py - E:/KULIAH/ALGOSTRUK/Modul4.py (3.7.6)
File Edit Format Run Options Window Help
##c3 = MhsTIF('Chandra', 18, 'Surakarta', 235000)
##c4 = MhsTIF('Eka', 4, 'Boyolali', 240000)
##c5 = MhsTIF('Fandi', 31, 'Salatiga', 250000)
##c6 = MhsTIF('Deni', 13, 'Klaten', 245000)
##c7 = MhsTIF('Galuh', 5, 'Wonogiri', 245000)
##c8 = MhsTIF('Janto', 23, 'Klaten', 245000)
##c9 = MhsTIF('Hasan', 64, 'Karanganyar', 270000)
##c10 = 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)
##
def cariTerkecil(kumpulan):
    n = len(kumpulan)
    terkecil = kumpulan[0]
    for i in range(1,n):
        if kumpulan[i] < terkecil:
            terkecil = kumpulan[i]
    return terkecil

def binSe(kumpulan, target):
    low = 0
    high = len(kumpulan) - 1
    while low <= high:
        mid = (low + high) // 2
        if kumpulan[mid] == target:
            return True
        elif target < kumpulan[mid]:
            high = mid - 1
        else:
            low = mid + 1
    return False
```