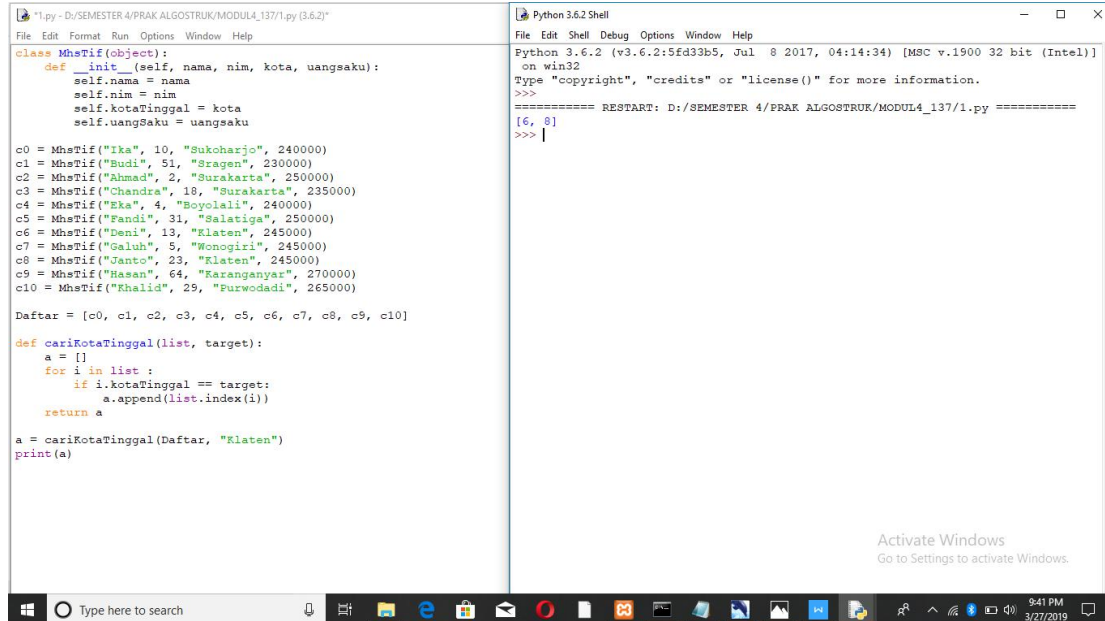


Nama : Rifqi Alwan P
NIM : L200180008
Kelas A

MODUL 4

Nomor 1.



```
1.py - D:/SEMESTER 4/PRAK ALGOSTRUK/MODUL4_137/1.py (3.6.2)
File Edit Format Run Options Window Help

class MhsTif(object):
    def __init__(self, nama, nim, kota, uangsaku):
        self.nama = nama
        self.nim = nim
        self.kotaTinggal = kota
        self.uangSaku = uangsaku

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)

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

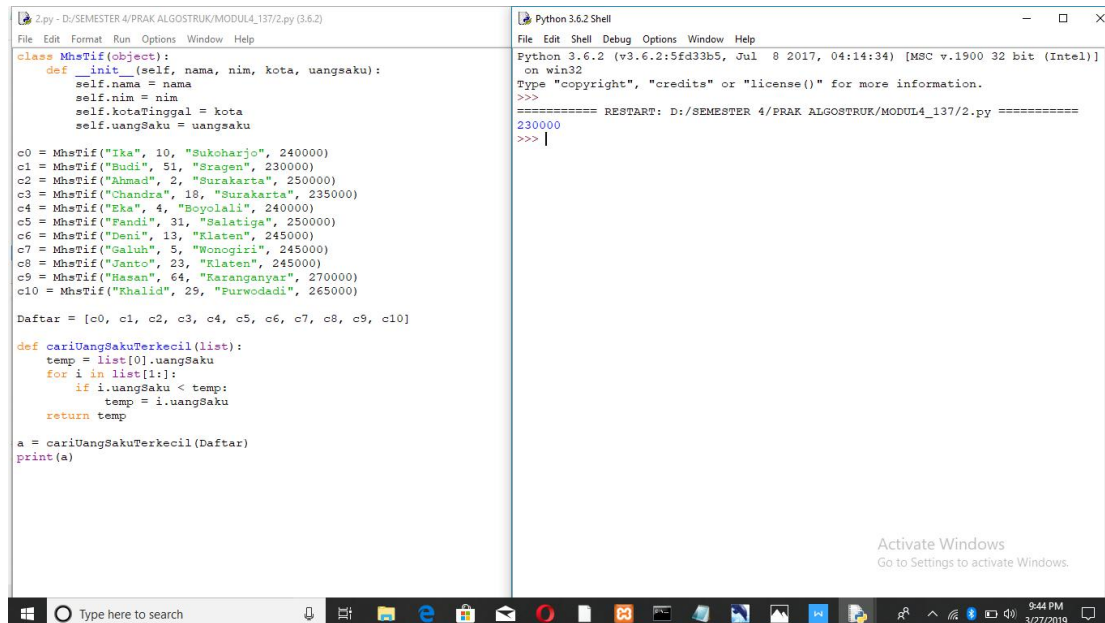
def cariKotaTinggal(list, target):
    a = []
    for i in list:
        if i.kotaTinggal == target:
            a.append(list.index(i))
    return a

a = cariKotaTinggal(Daftar, "Klaten")
print(a)
```

```
Python 3.6.2 Shell
File Edit Shell Debug Options Window Help

Python 3.6.2 (v3.6.2:5fd33b5, Jul 8 2017, 04:14:34) [MSC v.1900 32 bit (Intel)]
on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:/SEMESTER 4/PRAK ALGOSTRUK/MODUL4_137/1.py =====
[6, 8]
>>>
```

Nomor 2.



```
2.py - D:/SEMESTER 4/PRAK ALGOSTRUK/MODUL4_137/2.py (3.6.2)
File Edit Format Run Options Window Help

class MhsTif(object):
    def __init__(self, nama, nim, kota, uangsaku):
        self.nama = nama
        self.nim = nim
        self.kotaTinggal = kota
        self.uangSaku = uangsaku

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)

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

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

a = cariUangSakuTerkecil(Daftar)
print(a)
```

```
Python 3.6.2 Shell
File Edit Shell Debug Options Window Help

Python 3.6.2 (v3.6.2:5fd33b5, Jul 8 2017, 04:14:34) [MSC v.1900 32 bit (Intel)]
on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:/SEMESTER 4/PRAK ALGOSTRUK/MODUL4_137/2.py =====
230000
>>>
```

Nomor 3.

```
3.py - D:/SEMESTER 4/PRAK ALGOSTRUK/MODUL4_137/3.py (3.6.2)
File Edit Format Run Options Window Help

class MhsTif(object):
    def __init__(self, nama, nim, kota, uangSaku):
        self.nama = nama
        self.nim = nim
        self.kotaTinggal = kota
        self.uangSaku = uangSaku

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)

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

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

a = cariUangSakuTerkecilObject(Daftar)
print(a)
```

```
Python 3.6.2 Shell
File Edit Shell Debug Options Window Help

Python 3.6.2 (v3.6.2:5fd33b5, Jul 8 2017, 04:14:34) [MSC v.1900 32 bit (Intel)]
on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:/SEMESTER 4/PRAK ALGOSTRUK/MODUL4_137/3.py =====
[< main __MhsTif object at 0x02D42390>]
>>>
```

Activate Windows
Go to Settings to activate Windows.

Nomor 4.

```
4.py - D:/SEMESTER 4/PRAK ALGOSTRUK/MODUL4_137/4.py (3.6.2)
File Edit Format Run Options Window Help

class MhsTif(object):
    def __init__(self, nama, nim, kota, uangSaku):
        self.nama = nama
        self.nim = nim
        self.kotaTinggal = kota
        self.uangSaku = uangSaku

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)

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

def cariUangSakuKurang250k(list):
    temp = []
    for i in list:
        if i.uangSaku < 250000:
            temp.append(i)
    return temp

a = cariUangSakuKurang250k(Daftar)
for i in a:
    print(i.nama)
```

```
Python 3.6.2 Shell
File Edit Shell Debug Options Window Help

Python 3.6.2 (v3.6.2:5fd33b5, Jul 8 2017, 04:14:34) [MSC v.1900 32 bit (Intel)]
on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:/SEMESTER 4/PRAK ALGOSTRUK/MODUL4_137/4.py =====
Ika
Budi
Chandra
Eka
Deni
Galuh
Janto
>>>
```

Activate Windows
Go to Settings to activate Windows.

Nomor 5.

```
5.py - D:/SEMESTER 4/PRAK ALGOSTRUK/MODUL4_137/5.py (3.6.2)
File Edit Format Run Options Window Help

class MhsTif(object):
    def __init__(self, nama, nim, kota, uangsaku):
        self.nama = nama
        self.nim = nim
        self.kotaTinggal = kota
        self.uangSaku = uangsaku

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)

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

def cariLinkedList(head, target):
    temp = head
    while temp.data != None:
        if temp.data == target:
            return temp
        return temp
    return -1

|
```

Activate Windows
Go to Settings to activate Windows.

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9:47 PM
3/27/2019

Nomor 6.

```
6.py - D:/SEMESTER 4/PRAK ALGOSTRUK/MODUL4_137/6.py (3.6.2)
File Edit Format Run Options Window Help

class MhsTif(object):
    def __init__(self, nama, nim, kota, uangsaku):
        self.nama = nama
        self.nim = nim
        self.kotaTinggal = kota
        self.uangSaku = uangsaku

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)

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

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

kumpulan = [2, 4, 5, 10, 13, 18, 23, 29, 31, 51, 64]
print(binSe(kumpulan, 5))
```

```
Python 3.6.2 Shell
File Edit Shell Debug Options Window Help
Python 3.6.2 (v3.6.2:5fd33b5, Jul 8 2017, 04:14:34) [MSC v.1900 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:/SEMESTER 4/PRAK ALGOSTRUK/MODUL4_137/6.py =====
2
>>> |
```

Activate Windows
Go to Settings to activate Windows.

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9:48 PM
3/27/2019

Nomor 7.

```
7.py - D:/SEMESTER 4/PRAK ALGOSTRUK/MODUL4_137/7.py (3.6.2)
File Edit Format Run Options Window Help

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)

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

def binSeMass(kumpulan, target):
    temp = []
    low = 0
    high = len(kumpulan)-1
    while low <= high :
        mid = (high+low)//2
        if kumpulan[mid] == target:
            midKiri = mid-1
            while kumpulan[midKiri] == target:
                temp.append(midKiri)
                midKiri = midKiri-1
            temp.append(mid)
            midKanan = mid+1
            while kumpulan[midKanan] == target:
                temp.append(midKanan)
                midKanan = midKanan+1
            return temp
        elif target < kumpulan[mid]:
            high = mid-1
        else:
            low = mid+1
    return False

kumpulan = [2, 4, 5, 6, 6, 6, 8, 9, 9, 10, 11, 12, 13, 13, 14]
print(binSeMass(kumpulan, 6))

Python 3.6.2 Shell
File Edit Shell Debug Options Window Help
Python 3.6.2 (v3.6.2:5fd33b5, Jul 8 2017, 04:14:34) [MSC v.1900 32 bit (Intel)]
on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:/SEMESTER 4/PRAK ALGOSTRUK/MODUL4_137/7.py =====
>>> [3, 4, 5]
>>> |

Activate Windows
Go to Settings to activate Windows.
```

Nomor 8.

```
8.py - D:/SEMESTER 4/PRAK ALGOSTRUK/MODUL4_137/8.py (3.6.2)
File Edit Format Run Options Window Help

class MhsTif(object):
    def __init__(self, nama, nim, kota, uangaku):
        self.nama = nama
        self.nim = nim
        self.kotaTinggal = kota
        self.uangSaku = uangaku

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)

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

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

Activate Windows
Go to Settings to activate Windows.
```