

Nama : Aulia Yogatama

NIM : L200180081

Kelas : C

Python 3.7.7 Shell

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Python 3.7.7 (tags/v3.7.7:d7c567b08f, Mar 10 2020, 10:41:24) [MSC v.1900 64 bit (AMD64)] on win32
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>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 4/L200180081_Algostruk_Modul_4_Tugas.py
>>> cari('Solo')
[0, 3]
>>> |

L200180081_Algostruk_Modul_4_Tugas.py - C:/Users/WINDOWS 10/Downloads/yoga/Algostr...
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class MhsTIF(object):
 def __init__(self,nama,umur,tinggal,us):
 self.nama = nama
 self.umur = umur
 self.tinggal = tinggal
 self.us = us

c0 = MhsTIF('Aulia', 14, 'Solo', 35000)
c1 = MhsTIF('Yoga', 34, 'Salatiga', 30000)
c2 = MhsTIF('Tama', 22, 'Surakarta', 13000)
c3 = MhsTIF('Andi', 19, 'Solo', 14000)
c4 = MhsTIF('Budi', 44, 'Boyolali', 15000)
c5 = MhsTIF('Afi', 23, 'Boyolali', 16000)
c6 = MhsTIF('Tata', 13, 'Klaten', 37000)
c7 = MhsTIF('Desta', 15, 'Wonogiri', 18000)
c8 = MhsTIF('Adinda', 8, 'Karanganyar', 29000)
c9 = MhsTIF('Jonaz', 4, 'Surakarta', 20000)
c10 = MhsTIF('Johann', 27, 'Purwodadi', 21000)

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

##Nomer1##
def cari(a):
 x=[]
 for i in range(len(Daftar)):
 if a == Daftar[i].tinggal:
 x.append(i)
 print(x)

Ln: 7 Cok: 4Ln: 149 Cok: 35

Python 3.7.7 Shell

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= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 4/L200180081_Algostruk_Modul_4_Tugas.py
>>> cari('Solo')
[0, 3]
>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 4/L200180081_Algostruk_Modul_4_Tugas.py
>>> uskecil()
13000
>>> |

L200180081_Algostruk_Modul_4_Tugas.py - C:/Users/WINDOWS 10/Downloads/yoga/Algostr...
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class MhsTIF(object):
 def __init__(self,nama,umur,tinggal,us):
 self.nama = nama
 self.umur = umur
 self.tinggal = tinggal
 self.us = us

c0 = MhsTIF('Aulia', 14, 'Solo', 35000)
c1 = MhsTIF('Yoga', 34, 'Salatiga', 30000)
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c4 = MhsTIF('Budi', 44, 'Boyolali', 15000)
c5 = MhsTIF('Afi', 23, 'Boyolali', 16000)
c6 = MhsTIF('Tata', 13, 'Klaten', 37000)
c7 = MhsTIF('Desta', 15, 'Wonogiri', 18000)
c8 = MhsTIF('Adinda', 8, 'Karanganyar', 29000)
c9 = MhsTIF('Jonaz', 4, 'Surakarta', 20000)
c10 = MhsTIF('Johann', 27, 'Purwodadi', 21000)

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

##Nomer1##
def cari(a):
 x=[]
 for i in range(len(Daftar)):
 if a == Daftar[i].tinggal:
 x.append(i)
 print(x)
##Nomer2##
def uskecil():
 a = Daftar[0].us
 for i in range(len(Daftar)):
 if a> Daftar[i].us:
 a = Daftar[i].us

 return a

Ln: 11 Cok: 4Ln: 36 Cok: 12

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Python 3.7.7 Shell
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>>> cari('Solo')
[0, 3]
>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 4/L200180081_Algostruk_Modul_4_Tugas.py
>>> uskecil()
13000
>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 4/L200180081_Algostruk_Modul_4_Tugas.py
>>> usterkecil()
['Tama']
>>>
```

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L200180081_Algostruk_Modul_4_Tugas.py - C:/Users/WINDOWS 10/Downloads/yoga/Algostr...
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c1 = MhsTIF('Yoga', 34, 'Salatiga', 30000)
c2 = MhsTIF('Tama', 22, 'Surakarta', 13000)
c3 = MhsTIF('Andi', 19, 'Solo', 14000)
c4 = MhsTIF('Budi', 44, 'Bojoleali', 15000)
c5 = MhsTIF('Afi', 23, 'Bojoleali', 16000)
c6 = MhsTIF('Tata', 13, 'Klaten', 37000)
c7 = MhsTIF('Desta', 15, 'Wonogiri', 18000)
c8 = MhsTIF('Adinda', 8, 'Karanganyar', 29000)
c9 = MhsTIF('Jonaz', 4, 'Surakarta', 20000)
c10 = MhsTIF('Johann', 27, 'Purwodadi', 21000)

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

##Nomer1##
def cari(a):
    x=[]
    for i in range(len(Daftar)):
        if a == Daftar[i].tinggal:
            x.append(i)
    print(x)

##Nomer2##
def uskecil():
    a = Daftar[0].us
    for i in range(len(Daftar)):
        if a> Daftar[i].us:
            a = Daftar[i].us
    return a

##Nomer3##
def usterkecil():
    a = Daftar[0].us
    x =[]
    for i in range(len(Daftar)):
        if a> Daftar[i].us:
            a = Daftar[i].us
    for i in range(len(Daftar)):
        if Daftar[i].us == a:
            x.append(Daftar[i].nama)
    return x
```

```
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>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 4/L200180081_Algostruk_Modul_4_Tugas.py
>>> uskurang25k()
['Tama', 'Andi', 'Budi', 'Afi', 'Desta', 'Jonaz', 'Johann']
>>>
```

```
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c10 = MhsTIF('Johann', 27, 'Purwodadi', 21000)

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

##Nomer1##
def cari(a):
    x=[]
    for i in range(len(Daftar)):
        if a == Daftar[i].tinggal:
            x.append(i)
    print(x)

##Nomer2##
def uskecil():
    a = Daftar[0].us
    for i in range(len(Daftar)):
        if a> Daftar[i].us:
            a = Daftar[i].us
    return a

##Nomer3##
def usterkecil():
    a = Daftar[0].us
    x =[]
    for i in range(len(Daftar)):
        if a> Daftar[i].us:
            a = Daftar[i].us
    for i in range(len(Daftar)):
        if Daftar[i].us == a:
            x.append(Daftar[i].nama)
    return x

##Nomer4##
def uskurang25k():
    x =[]
    for i in range(len(Daftar)):
        if Daftar[i].us < 25000:
            x.append(Daftar[i].nama)
    return x
```

```
Python 3.7.7 Shell
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>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 4/L200180081_Algostruk_Modul_4_Tugas.py
>>> uskurang25k()
['Tama', 'Andi', 'Budi', 'Afi', 'Desta', 'Jonaz', 'Johann']
>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 4/L200180081_Algostruk_Modul_4_Tugas.py
>>> a = node(17)
>>> draf = a
>>> a.next = node(20)
>>> a = a.next
>>> draf.cari(17)
Data 17 ada dalam Linked List
>>> draf.cari(25)
Data 25 tidak ada dalam Linked List
>>>
```

```
L200180081_Algostruk_Modul_4_Tugas.py - C:/Users/WINDOWS 10/Downloads/yoga/Algostr...
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##Nomer3##
def usterkecil():
    a = Daftar[0].us
    x =[]
    for i in range(len(Daftar)):
        if a> Daftar[i].us:
            a = Daftar[i].us
    for i in range(len(Daftar)):
        if Daftar[i].us == a:
            x.append(Daftar[i].nama)
    return x

##Nomer4##
def uskurang25k():
    x =[]
    for i in range(len(Daftar)):
        if Daftar[i].us < 25000:
            x.append(Daftar[i].nama)
    return x

#Nomer 5#
class node(object):
    def __init__(self, data, next = None):
        self.data = data
        self.next = next

    def cari(self, dicari):
        cur = self
        while cur is not None:
            if cur.next != None:
                if cur.data != dicari:
                    cur = cur.next
            else:
                print ("Data", dicari, "ada dalam Linked List")
                break
        elif cur.next == None:
            print ("Data", dicari, "tidak ada dalam Linked List")
            break
```

```
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Algostruk_Modul_4_Tugas.py
>>> A = [7, 8, 9, 10, 23, 25, 30, 4]
>>> binSe(A, 8)
'target pada indeks ke-1'
>>>

L200180081_Algostruk_Modul_4_Tugas.py - C:/Users/WINDOWS 10/Downloads/yoga/Algostr...
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return x

##Nomer 5##
class node(object):
    def __init__(self, data, next = None):
        self.data = data
        self.next = next

    def cari(self, dicari):
        cur = self
        while cur is not None:
            if cur.next != None:
                if cur.data != dicari:
                    cur = cur.next
            else:
                print ("Data", dicari, "ada dalam Linked List")
                break
        elif cur.next == None:
            print ("Data", dicari, "tidak ada dalam Linked List")
            break

##Nomer6##
def binSe(kumpulan, target):
    low = 0
    high = len(kumpulan)-1

    x=[]
    while low <=high:
        mid =(high + low)//2
        if kumpulan[mid]==target:
            return 'target pada indeks ke-'+str(mid)

        elif target < kumpulan[mid]:
            high = mid -1
        else:
            low = mid+1
    return False

Ln: 8 Col: 4
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>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 4/L200180081_
Algostruk_Modul_4_Tugas.py
>>> A = [7, 8, 9, 10, 23, 25, 30, 4]
>>> binSe(A, 8)
'target pada indeks ke-1'
>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 4/L200180081_
Algostruk_Modul_4_Tugas.py
>>> B = [2, 3, 5, 6, 6, 6, 8, 9, 9, 10, 11, 12, 13, 13, 14]
>>> binse(B, 6)
[3, 4, 5]
>>> binse(B, 13)
[12, 13]
>>> binse(B, 9)
[7, 8]
>>>

L200180081_Algostruk_Modul_4_Tugas.py - C:/Users/WINDOWS 10/Downloads/yoga/Algostr...
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cur = cur.next
else: print ("Data", dicari, "ada dalam Linked List")
break
elif cur.next == None:
    print ("Data", dicari, "tidak ada dalam Linked List")
    break

##Nomer6##
def binSe(kumpulan, target):
    low = 0
    high = len(kumpulan)-1

    x=[]
    while low <=high:
        mid =(high + low)//2
        if kumpulan[mid]==target:
            return 'target pada indeks ke-'+str(mid)

        elif target < kumpulan[mid]:
            high = mid -1
        else:
            low = mid+1
    return False

##Nomer7##
def binse(kumpulan, target):
    low = 0
    high = len(kumpulan)-1
    a = []
    while low <= high:
        if kumpulan [low] == target:
            a.append(low)
            low += 1
        else:
            low += 1
    return a

Ln: 17 Col: 4
```