

Banu Wisnu Murti

L200180133

LATIHAN MODUL 4

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Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/Banu Wisnu/Documents/NetBeansProjects/modul4/1.py =====
Traceback (most recent call last):
  File "C:/Users/Banu Wisnu/Documents/NetBeansProjects/modul4/1.py", line 1, in <module>
    if target in arrayTempatYangDicari:
NameError: name 'target' is not defined
>>>
===== RESTART: C:/Users/Banu Wisnu/Documents/NetBeansProjects/modul4/1.py =====
>>> A = [10, 51, 2, 18, 4, 31, 13, 5, 23, 64, 29]
>>> cariLurus(A,31)
True
>>> cariLurus(A,8)
False
>>> |

1.py - C:/Users/Banu Wisnu/Documents/NetBeansProjects/modul4/1.py (3.8.2)
File Edit Format Run Options Window Help
##if target in arrayTempatYangDicari:
    ##print ("targetnya terdapat di array itu.")
#else :
    ##print ("targetnya tidak terdapat di array itu")

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

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>>>
===== RESTART: C:/Users/Banu Wisnu/Documents/NetBeansProjects/modul4/1.py =====
Deni tinggal di Klaten
Janto tinggal di Klaten
>>>

1.py - C:/Users/Banu Wisnu/Documents/NetBeansProjects/modul4/1.py (3.8.2)
File Edit Format Run Options Window Help
##if target in arrayTempatYangDicari:
    ##print ("targetnya terdapat di array itu.")
#else :
    ##print ("targetnya tidak terdapat di array itu")

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

class MhsTIF():
    def __init__(self,nama,NIM,kota,us):
        self.nama = nama
        self.NIM = NIM
        self.kotaTinggal = kota
        self.uangSaku = us

c0 = MhsTIF('Ika', 10, 'Sukoharjo', 240000)
c1 = MhsTIF('Budi', 51, 'Sragen', 230000)
c2 = MhsTIF('Ahmad', 2, 'Surakarta', 235000)
c3 = MhsTIF('Chandra', 18, 'Surakarta', 240000)
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)

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Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Banu Wisnu\Documents\NetBeansProjects\modul4\1.py =====
>>> cariTerkecil()
270000
>>>
```

```
1.py - C:\Users\Banu Wisnu\Documents\NetBeansProjects\modul4\1.py (3.8.2)
File Edit Format Run Options Window Help
return False
class MhsTIF():
    def __init__(self, nama, NIM, kota, us):
        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

c0 = MhsTIF('Ika', 10, 'Sukoharjo', 240000)
c1 = MhsTIF('Budi', 51, 'Sragen', 230000)
c2 = MhsTIF('Ahmad', 2, 'Surakarta', 235000)
c3 = MhsTIF('Chandra', 18, 'Surakarta', 240000)
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():
    terkecil = Daftar[0].uangSaku
    for i in range(len(Daftar)):
        if terkecil > Daftar[i].uangSaku:
            terkecil = Daftar[i].uangSaku
    return terkecil
```

```
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>>>
===== RESTART: C:\Users\Banu Wisnu\Documents\NetBeansProjects\modul4\1.py =====
>>> cariTerkecil()
270000
>>>
===== RESTART: C:\Users\Banu Wisnu\Documents\NetBeansProjects\modul4\1.py =====
>>> cariTerkecil2()
['Hasan']
>>>
```

```
1.py - C:\Users\Banu Wisnu\Documents\NetBeansProjects\modul4\1.py (3.8.2)
File Edit Format Run Options Window Help
def _str_(self):
    s = self.nama + ' NIM ' + str(self.NIM) \
        + ' tinggal di ' + self.kotaTinggal \
        + ' Uang saku Rp ' + str(self.uangSaku) \
        + ' tiap bulannya.'
    return s

c0 = MhsTIF('Ika', 10, 'Sukoharjo', 240000)
c1 = MhsTIF('Budi', 51, 'Sragen', 230000)
c2 = MhsTIF('Ahmad', 2, 'Surakarta', 235000)
c3 = MhsTIF('Chandra', 18, 'Surakarta', 240000)
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():
    terkecil = Daftar[0].uangSaku
    for i in range(len(Daftar)):
        if terkecil > Daftar[i].uangSaku:
            terkecil = Daftar[i].uangSaku
    return terkecil

def cariTerkecil2():
    terkecil = Daftar[0].uangSaku
    x = []
    a = cariTerkecil
    for i in range(len(Daftar)):
        if terkecil > Daftar[i].uangSaku:
            terkecil = Daftar[i].uangSaku
    for i in range(len(Daftar)):
        if Daftar[i].uangSaku == terkecil:
            x.append(Daftar[i].nama)
    return x
```

```
Python 3.8.2 Shell
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>>>
===== RESTART: C:\Users\Banu Wisnu\Documents\NetBeansProjects\modul4\1.py =====
>>> cariTerkecil()
270000
>>>
===== RESTART: C:\Users\Banu Wisnu\Documents\NetBeansProjects\modul4\1.py =====
>>> cariTerkecil2()
['Hasan']
>>>
===== RESTART: C:\Users\Banu Wisnu\Documents\NetBeansProjects\modul4\1.py =====
>>> cariKurang25()
['Ika', 'Budi', 'Ahmad', 'Chandra', 'Eka', 'Deni', 'Galuh', 'Janto']
>>>
===== RESTART: C:\Users\Banu Wisnu\Documents\NetBeansProjects\modul4\1.py =====
>>> carilebih25()
['Hasan', 'Khalid']
>>>

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1.py - C:\Users\Banu Wisnu\Documents\NetBeansProjects\modul4\1.py (3.8.2)
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===== RESTART: C:\Users\Banu Wisnu\Documents\NetBeansProjects\modul4\1.py (3.8.2) =====
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():
    terkecil = Daftar[0].uangSaku
    for i in range(len(Daftar)):
        if terkecil < Daftar[i].uangSaku:
            terkecil = Daftar[i].uangSaku
    return terkecil

def cariTerkecil2():
    terkecil = Daftar[0].uangSaku
    x = []
    a = cariTerkecil
    for i in range(len(Daftar)):
        if terkecil < Daftar[i].uangSaku:
            terkecil = Daftar[i].uangSaku
    for i in range(len(Daftar)):
        if Daftar[i].uangSaku == terkecil:
            x.append(Daftar[i].nama)
    return x

def cariKurang25():
    a = 250000
    x = []
    for i in range(len(Daftar)):
        if Daftar[i].uangSaku < a:
            x.append(Daftar[i].nama)
    return x

def carilebih25():
    a = 250000
    x = []
    for i in range(len(Daftar)):
        if Daftar[i].uangSaku > a:
            x.append(Daftar[i].nama)
    return x

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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\suko\AppData\Local\Programs\Python\Python37-32\modul4_no6 - 7
.py
>>> binSe(2)
'Target pada indeks 0'
>>> binSe(6)
'Target pada indeks 2'
>>>
>>>
>>>
>>> binSe2(2)
[0]
>>> binSe2(6)
[3, 4, 5]
>>> binSe2(9)
[7, 8]
>>>

Python 3.7.2 Shell
File Edit Format Run Options Window Help
A = [2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22]

#No. 6
def binSe(target):
    low = 0
    high = len(A)

    while low < high:
        mid = (high + low) // 2
        if A[mid] == target:
            return "Target pada indeks " + str(mid)
        elif target < A[mid]:
            high = mid - 1
        else:
            low = mid + 1
    return False

#No. 7
B = [2, 3, 5, 6, 6, 6, 8, 9, 9, 10, 11, 12, 13, 13, 14]
def binSe2(target):
    low = 0
    high = len(B)
    x = []

    while low < high:
        if B[low] == target:
            x.append(low)
            low+=1
        else:
            low+=1
    return x
```

```
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\suko\AppData\Local\Programs\Python\Python37-32\modul4_no6 - 7
.py
>>> binSe(2)
'Target pada indeks 0'
>>> binSe(6)
'Target pada indeks 2'
>>>
>>>
>>>
>>> binSe2(2)
[0]
>>> binSe2(6)
[3, 4, 5]
>>> binSe2(9)
[7, 8]
>>>

Python 3.7.2 Shell
File Edit Format Run Options Window Help
A = [2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22]

#No. 6
def binSe(target):
    low = 0
    high = len(A)

    while low < high:
        mid = (high + low) // 2
        if A[mid] == target:
            return "Target pada indeks " + str(mid)
        elif target < A[mid]:
            high = mid - 1
        else:
            low = mid + 1
    return False

#No. 7
B = [2, 3, 5, 6, 6, 6, 8, 9, 9, 10, 11, 12, 13, 13, 14]
def binSe2(target):
    low = 0
    high = len(B)
    x = []

    while low < high:
        if B[low] == target:
            x.append(low)
            low+=1
        else:
            low+=1
    return x
```