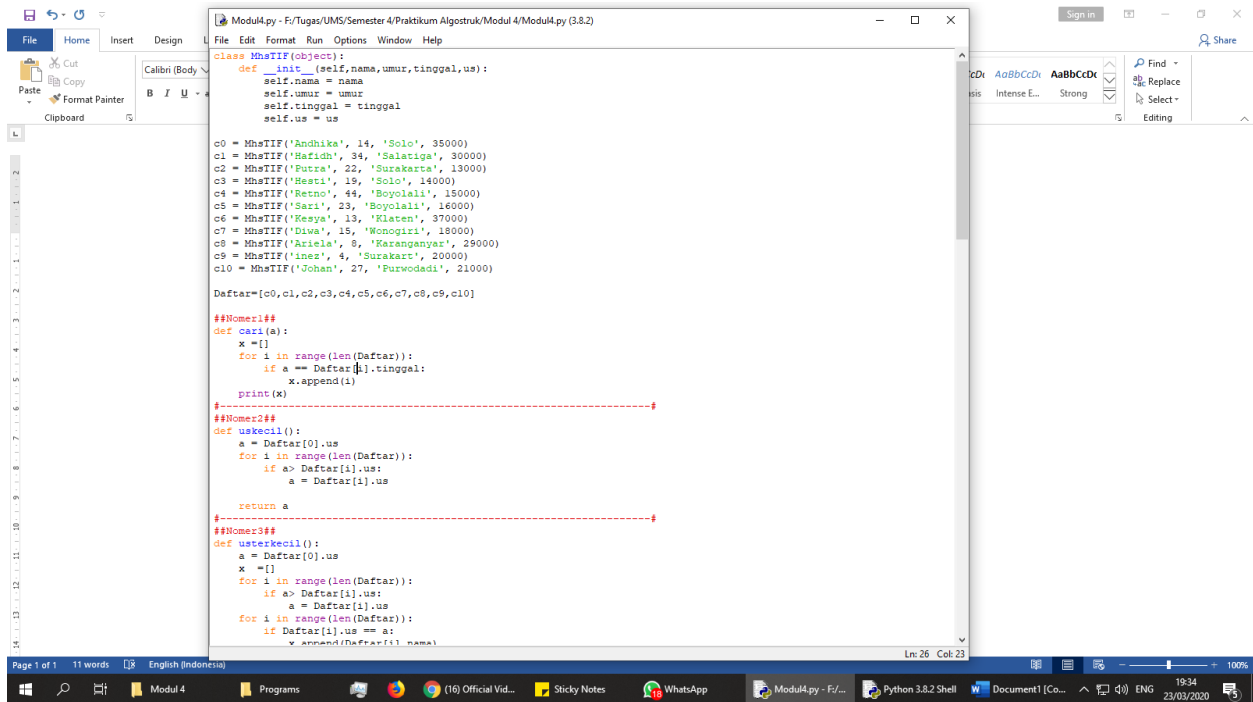


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```
Modul4.py - F:/Tugas/UMS/Semester 4/Praktikum Algoritma/Modul 4/Modul4.py (3.8.2)
File Edit Format Run Options Window Help

class MhsTIF(object):
    def __init__(self, nama, umur, tinggal, us):
        self.nama = nama
        self.umur = umur
        self.tinggal = tinggal
        self.us = us

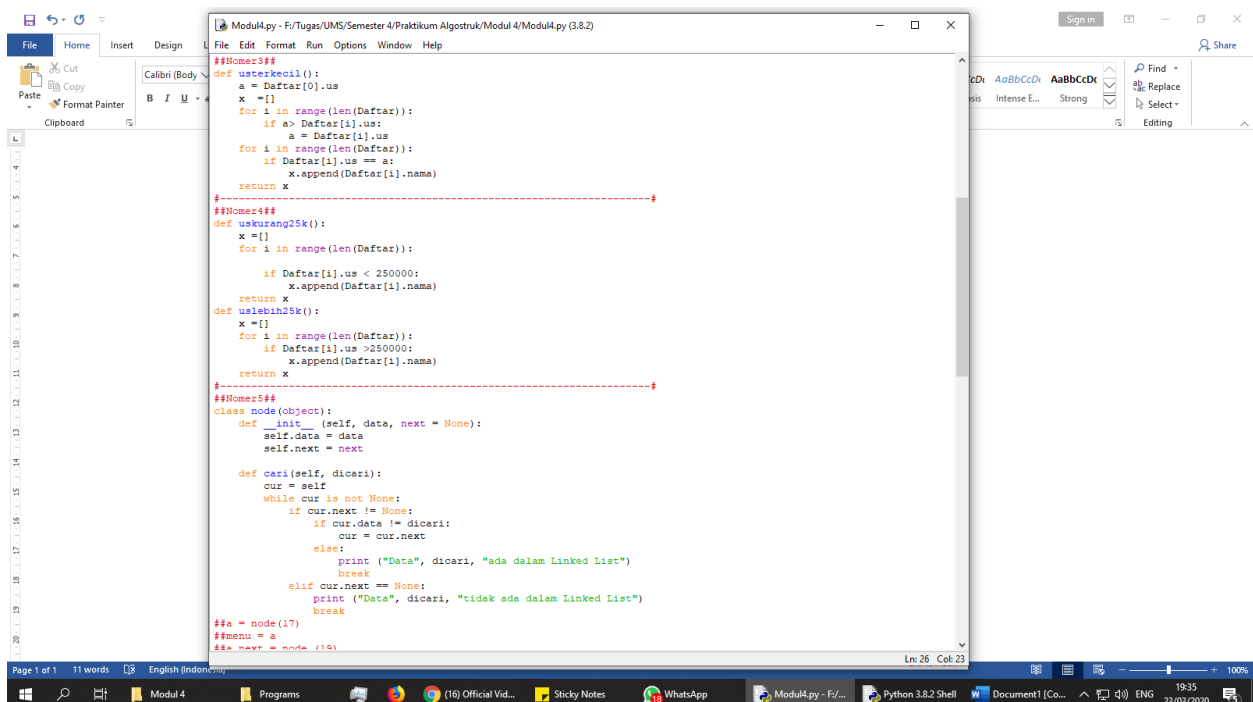
c0 = MhsTIF('Andhika', 14, 'Solo', 35000)
c1 = MhsTIF('Hafidh', 34, 'Salatiga', 30000)
c2 = MhsTIF('Putra', 22, 'Surakarta', 13000)
c3 = MhsTIF('Basti', 19, 'Solo', 14000)
c4 = MhsTIF('Retno', 44, 'Boyolali', 15000)
c5 = MhsTIF('Sari', 23, 'Boyolali', 16000)
c6 = MhsTIF('Keaya', 13, 'Klaten', 37000)
c7 = MhsTIF('Diwa', 15, 'Wonogiri', 18000)
c8 = MhsTIF('Ariela', 6, 'Karanganyar', 29000)
c9 = MhsTIF('Inez', 4, 'Surakarta', 20000)
c10 = MhsTIF('Johan', 27, 'Purwodadi', 21000)

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

##Nomor1##
def cari(a):
    x=[]
    for i in range(len(Daftar)):
        if a == Daftar[i].tinggal:
            x.append(i)
    print(x)

#-----#
##Nomor2##
def uskecil():
    a = Daftar[0].us
    for i in range(len(Daftar)):
        if a > Daftar[i].us:
            a = Daftar[i].us
    return a

#-----#
##Nomor3##
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)
```



```
Modul4.py - F:/Tugas/UMS/Semester 4/Praktikum Algoritma/Modul 4/Modul4.py (3.8.2)
File Edit Format Run Options Window Help

##Nomor3##
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

#-----#
##Nomor4##
def uskurang25k():
    x=[]
    for i in range(len(Daftar)):
        if Daftar[i].us < 25000:
            x.append(Daftar[i].nama)
    return x

def uselebih25k():
    x=[]
    for i in range(len(Daftar)):
        if Daftar[i].us > 25000:
            x.append(Daftar[i].nama)
    return x

#-----#
##Nomor5##
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

##a = node(17)
##menu = a
##next = node(19)
```

```
Modul4.py - F:/Tugas/UMS/Semester 4/Praktikum Algoritma/Modul 4/Modul4.py (3.8.2)
File Edit Format Run Options Window Help
print ("Data", dicari, "ada dalam Linked List")
break
elif cur.next == None:
    print ("Data", dicari, "tidak ada dalam Linked List")
    break
##a = node(17)
##menu = a
##a.next = node (19)
##a = a.next
##a.next = node (45)
##a = a.next
##a.next = node (24)
##a = a.next
##menu.cari(17)
##menu.cari(22)
#-----
##Nomer6##
z = [6,5,4,9,8,3,2,1,44,12,15]
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##
b = [2, 3, 5, 6, 6, 6, 6, 8, 9, 9, 10, 11, 12, 13, 13, 14]
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: 26 Col: 23
```

```
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: F:/Tugas/UMS/Semester 4/Praktikum Algoritma/Modul 4/Modul4.py ====
>>> cari('Boyalali')
[4, 5]
>>> usterkecil()
['Putra']
>>> uskecil()
13000
>>> uskurang25k()
['Andhika', 'Hafidh', 'Putra', 'Hesti', 'Retno', 'Sari', 'Kesya', 'Diwa', 'Ariela', 'inez', 'Johan']
>>> uslebi25k()
[]
>>>
>>> a = node(17)
>>> draf = a
>>> a.next = node(19)
>>> a = a.next
>>> draf.cari(17)
Data 17 ada dalam Linked List
>>> draf.cari(45)
Data 45 tidak ada dalam Linked List
>>>
>>> z = [6,5,4,9,8,3,2,1,44,12,15,16,80]
>>> binse(z,12)
[9]
>>> binse(z,4)
[2]
>>>
>>> x = [2, 3, 5, 6, 6, 6, 6, 8, 9, 9, 10, 11, 12, 13, 13, 14]
>>> binse(x,7)
[]
>>> binse(x,11)
[10]
>>> binse(x,9)
[7, 8]
>>>
>>> print("Nomer 8 saya ngga mudeng mas")
Nomer 8 saya ngga mudeng mas
>>>
Ln: 45 Col: 4
```