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NIM : L200180124

MODUL 5

Tugas

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*L200180124_Algostruk_Modul5_Tugas.py - D:\HANIFAH 2018\smt 4\prak agostruk\modul5\L200180124_Algostruk_Modul5_T
File Edit Format Run Options Window Help
#Homor 1
class MhsTIF(object):
    def __init__(self, nama, NIM, kota, us):
        self.nama = nama
        self.NIM = NIM
        self.kotaTinggal = kota
        self.uangSaku = us
    def ambilNama(self):
        return self.nama
    def ambilNIM(self):
        return self.NIM
    def ambilKota(self):
        return self.kota
    def ambilUangSaku(self):
        return self.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', 240000)
c7 = MhsTIF('Galuh',5,'Wonogiri',245000)
c8 = MhsTIF('Jauco',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 swap(A, p, q):
    tmp = A[p]
    A[p] = A[q]
    A[q] = tmp

def nim(daftar):
    for i in daftar:
        print(i.NIM)

def bubblesort(daftar):
    n = len(daftar)
    for i in range(n-1):
        for j in range(n-i-1):
            if daftar[j].NIM > daftar[j+1].NIM:
                swap(daftar, j, j+1)
        print("Pass", i+1, "complete")

Daftar = [c0,c1,c2,c3,c4,c5,c6,c7,c8,c9,c10]
nim(Daftar)
bubblesort(Daftar)
Daftar
[<_main_.MhsTIF object at 0x03EE3910>, <_main_.MhsTIF object at 0x03F2E9B0>,
<_main_.MhsTIF object at 0x03F2E2B0>, <_main_.MhsTIF object at 0x03F2E990>,
<_main_.MhsTIF object at 0x03F2E2D0>, <_main_.MhsTIF object at 0x03F2E9D0>,
<_main_.MhsTIF object at 0x03F2E9F0>, <_main_.MhsTIF object at 0x03F2EA10>,
<_main_.MhsTIF object at 0x03F2EA30>, <_main_.MhsTIF object at 0x03F2EA50>,
<_main_.MhsTIF object at 0x03F2EA70>]
>>> nim(Daftar)
10
4
2
18
51
31
13
5
23
64
29
>>> bubblesort(Daftar)
>>> Daftar
[<_main_.MhsTIF object at 0x03F2E2B0>, <_main_.MhsTIF object at 0x03F2E9B0>,
<_main_.MhsTIF object at 0x03F2EA10>, <_main_.MhsTIF object at 0x03EE3910>,
<_main_.MhsTIF object at 0x03F2E9F0>, <_main_.MhsTIF object at 0x03F2E990>,
<_main_.MhsTIF object at 0x03F2EA30>, <_main_.MhsTIF object at 0x03F2EA70>,
<_main_.MhsTIF object at 0x03F2E9D0>, <_main_.MhsTIF object at 0x03F2E2D0>,
<_main_.MhsTIF object at 0x03F2EA50>]
>>>
RESTART: D:\HANIFAH 2018\smt 4\prak agostruk\modul5\L200180124_Algostruk_Modul5
_Tugas.py
>>> urut(C)
[1, 3, 6, 7, 8, 9, 10, 11, 12, 13, 20, 100]
>>>
```

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"L200180124_Algostruk_Modul5_Tugas.py - D:\HANIFAH 2018\smt 4\prak agostruk\modul5\L200180124_Algostruk_Modul5_T
File Edit Format Run Options Window Help
def bubblesort(daftar):
    n = len(daftar)
    for i in range(n-1):
        for j in range(n-i-1):
            if daftar[j].NIM > daftar[j+1].NIM:
                swap(daftar,j,j+1)

#Nomor 2
X = [1,3,6,10,11,20]
Y = [7,8,9,12,13,100]
C = X + Y

def urut(a):
    n = len(a)
    for i in range(n-1):
        for j in range(n-i-1):
            if a[j] > a[j+1]:
                swap(a,j,j+1)

#Nomor 3
def swap(A,p,q):
    tmp = A[p]
    A[p] = A[q]
    A[q] = tmp

def cariPosisiYangTerkecil(A, dariSini, sampaiSini):
    posisiTerkecil = dariSini
    for i in range(dariSini+1, sampaiSini):
        if A[i] < A[posisiTerkecil]:
            posisiTerkecil = i
    return posisiTerkecil

def bubbleSort(A):
    n = len(A)
    for i in range(n-1):
        for j in range(n-i-1):

Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
File "<p>pyshell#0</p>"; line 1, in <module>
    swap(daftar,1,4)
NameError: name 'swap' is not defined
>>>
RESTART: D:\HANIFAH 2018\smt 4\prak agostruk\modul5\L200180124_Algostruk_Modul5
_Tugas.py
>>> swap(daftar,1,4)
>>> daftar
[<_main_.MhsTIF object at 0x03EE3910>, <_main_.MhsTIF object at 0x03F2E9B0>,
<_main_.MhsTIF object at 0x03F2E2B0>, <_main_.MhsTIF object at 0x03F2E990>,
<_main_.MhsTIF object at 0x03F2E2D0>, <_main_.MhsTIF object at 0x03F2E9D0>,
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>>> nim(daftar)
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>>> bubblesort(daftar)
>>> daftar
[<_main_.MhsTIF object at 0x03F2E2B0>, <_main_.MhsTIF object at 0x03F2E9B0>,
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<_main_.MhsTIF object at 0x03F2EA50>]
>>>
RESTART: D:\HANIFAH 2018\smt 4\prak agostruk\modul5\L200180124_Algostruk_Modul5
_Tugas.py
>>> urut(C)
>>> C
[1, 3, 6, 7, 8, 9, 10, 11, 12, 13, 20, 100]
>>>

Activate Windows
Go to Settings to activate Windows.
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"L200180124_Algostruk_Modul5_Tugas.py - D:\HANIFAH 2018\smt 4\prak agostruk\modul5\L200180124_Algostruk_Modul5_T
File Edit Format Run Options Window Help
    swap(a,j,j+1)

#Nomor 3
def swap(A,p,q):
    tmp = A[p]
    A[p] = A[q]
    A[q] = tmp

def cariPosisiYangTerkecil(A, dariSini, sampaiSini):
    posisiTerkecil = dariSini
    for i in range(dariSini+1, sampaiSini):
        if A[i] < A[posisiTerkecil]:
            posisiTerkecil = i
    return posisiTerkecil

def bubbleSort(A):
    n = len(A)
    for i in range(n-1):
        for j in range(n-i-1):
            if A[j] > A[j+1]:
                swap(A,j,j+1)

def selectionSort(A):
    n = len(A)
    for i in range(n-1):
        indexKecil = cariPosisiYangTerkecil(A, i, n)
        if indexKecil != i:
            swap(A, i, indexKecil)

def insertionSort(A):
    n = len(A)
    for i in range(1,n):
        nilai = A[i]
        pos = i
        while pos > 0 and nilai < A[pos-1]:
            A[pos] = A[pos-1]
            pos = pos-1
        A[pos] = nilai

Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
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>>> bubblesort(daftar)
>>> daftar
[<_main_.MhsTIF object at 0x03F2E2B0>, <_main_.MhsTIF object at 0x03F2E9B0>,
<_main_.MhsTIF object at 0x03F2EA10>, <_main_.MhsTIF object at 0x03EE3910>,
<_main_.MhsTIF object at 0x03F2E9F0>, <_main_.MhsTIF object at 0x03F2E990>,
<_main_.MhsTIF object at 0x03F2EA30>, <_main_.MhsTIF object at 0x03F2EA70>,
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