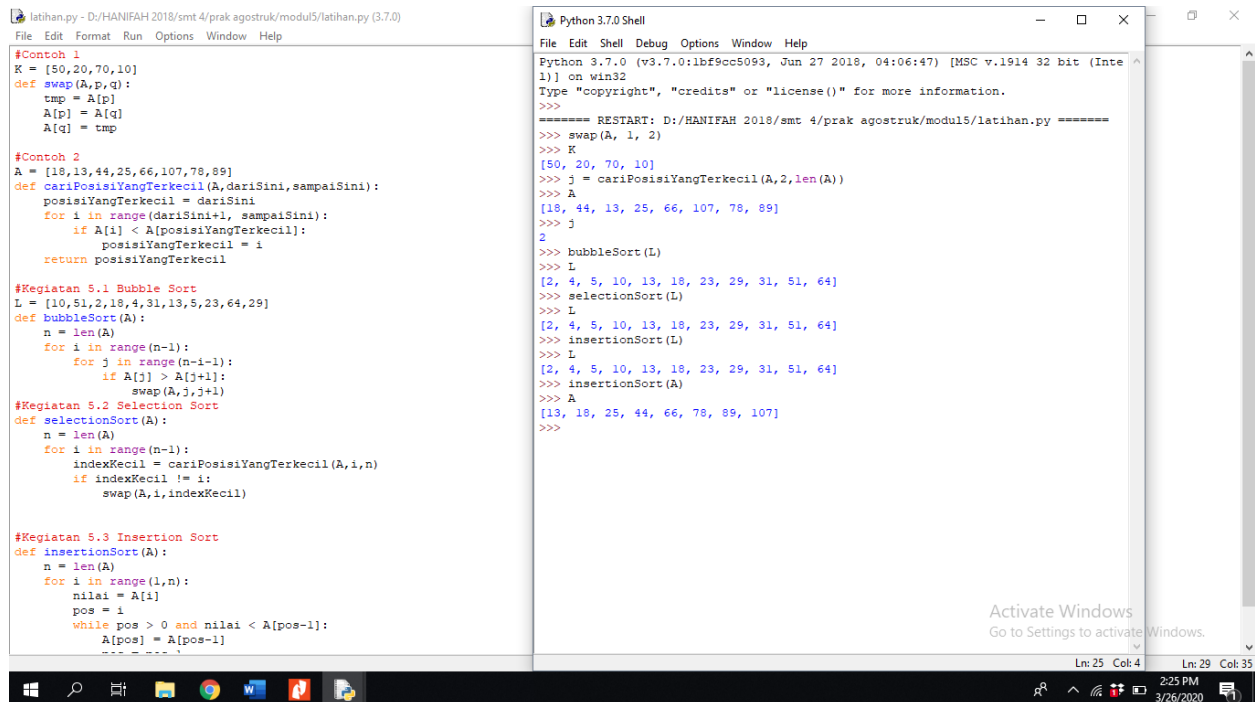


Nama : Hanifah Elvira Sukma Dewi

NIM : L200180124

Modul 5

Latihan



```
latihan.py - D:/HANIFAH 2018/smt 4/prak agostruk/modul5/latihan.py (3.7.0)
File Edit Format Run Options Window Help

#Contoh 1
K = [50,20,70,10]
def swap(A,p,q):
    tmp = A[p]
    A[p] = A[q]
    A[q] = tmp

#Contoh 2
A = [18,13,44,25,66,107,78,89]
def cariPosisiYangTerkecil(A,dariSini,sampaiSini):
    posisiYangTerkecil = dariSini
    for i in range(dariSini+1, sampaiSini):
        if A[i] < A[posisiYangTerkecil]:
            posisiYangTerkecil = i
    return posisiYangTerkecil

#Kegiatan 5.1 Bubble Sort
L = [10,51,2,18,4,31,13,5,23,64,29]
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)

#Kegiatan 5.2 Selection Sort
def selectionSort(A):
    n = len(A)
    for i in range(n-1):
        indexKecil = cariPosisiYangTerkecil(A,i,n)
        if indexKecil != i:
            swap(A,i,indexKecil)

#Kegiatan 5.3 Insertion Sort
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

Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:06:47) [MSC v.1914 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:/HANIFAH 2018/smt 4/prak agostruk/modul5/latihan.py =====
>>> swap(A, 1, 2)
>>> K
[50, 20, 70, 10]
>>> j = cariPosisiYangTerkecil(A,2,len(A))
>>> A
[18, 44, 13, 25, 66, 107, 78, 89]
>>> j
2
>>> bubbleSort(L)
>>> L
[2, 4, 5, 10, 13, 18, 23, 29, 31, 51, 64]
>>> selectionSort(L)
>>> L
[2, 4, 5, 10, 13, 18, 23, 29, 31, 51, 64]
>>> insertionSort(L)
>>> L
[2, 4, 5, 10, 13, 18, 23, 29, 31, 51, 64]
>>> insertionSort(A)
>>> A
[13, 18, 25, 44, 66, 78, 89, 107]
>>>
```

latihan.py - D:/HANIFAH 2018/smt 4/prak agostruk/modul5/latihan.py (3.7.0)

File Edit Format Run Options Window Help

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def swap(p,q):
    tmp = A[p]
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#Contoh 2
A = [18,13,44,25,66,107,78,89]
def cariPosisiYangTerkecil(A,dariSini,sampaiSini):
    posisiYangTerkecil = dariSini
    for i in range(dariSini+1, sampaiSini):
        if A[i] < A[posisiYangTerkecil]:
            posisiYangTerkecil = i
    return posisiYangTerkecil

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            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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>>> A
[18, 44, 13, 25, 66, 107, 78, 89]
>>> j
2
>>> bubbleSort(L)
>>> L
[2, 4, 5, 10, 13, 18, 23, 29, 31, 51, 64]
>>> selectionSort(L)
>>> L
[2, 4, 5, 10, 13, 18, 23, 29, 31, 51, 64]
>>> insertionSort(L)
>>> L
[2, 4, 5, 10, 13, 18, 23, 29, 31, 51, 64]
>>> insertionSort(A)
>>> A
[13, 18, 25, 44, 66, 78, 89, 107]
>>>
```

Activate Windows
Go to Settings to activate Windows.

Ln: 25 Col: 4 Ln: 29 Col: 35