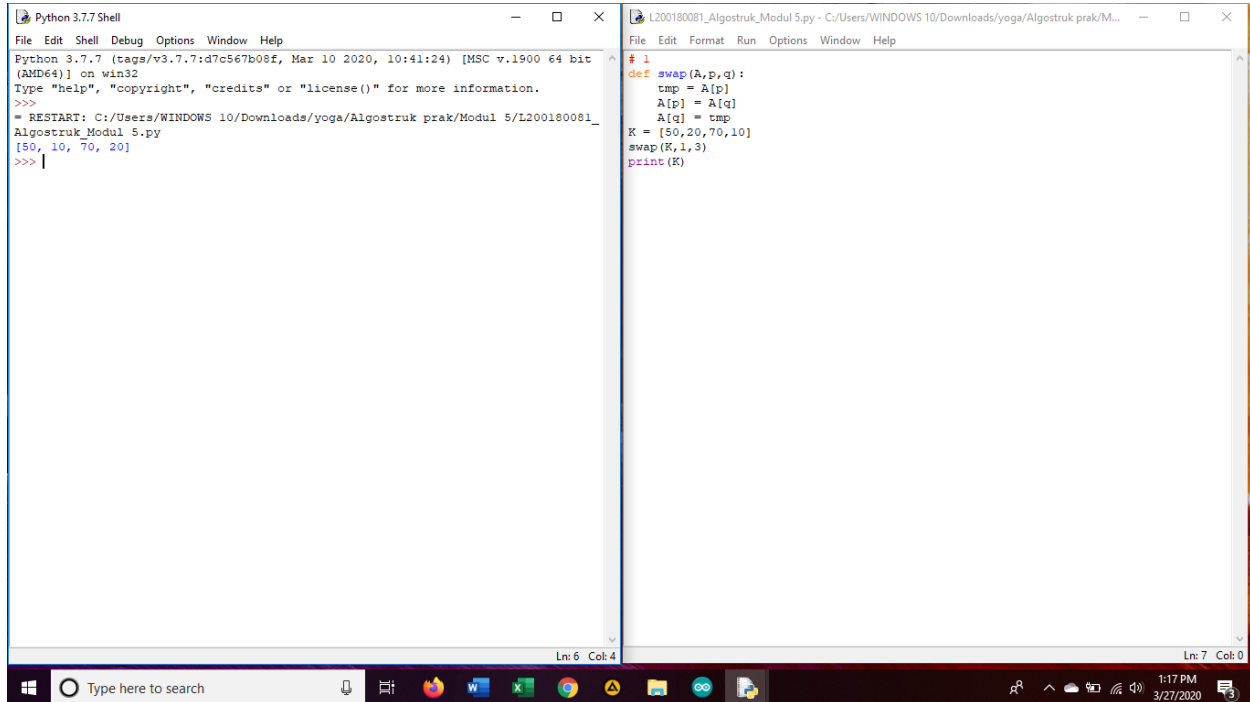


Nama : Aulia Yogatama

NIM : L200180081

Kelas : C

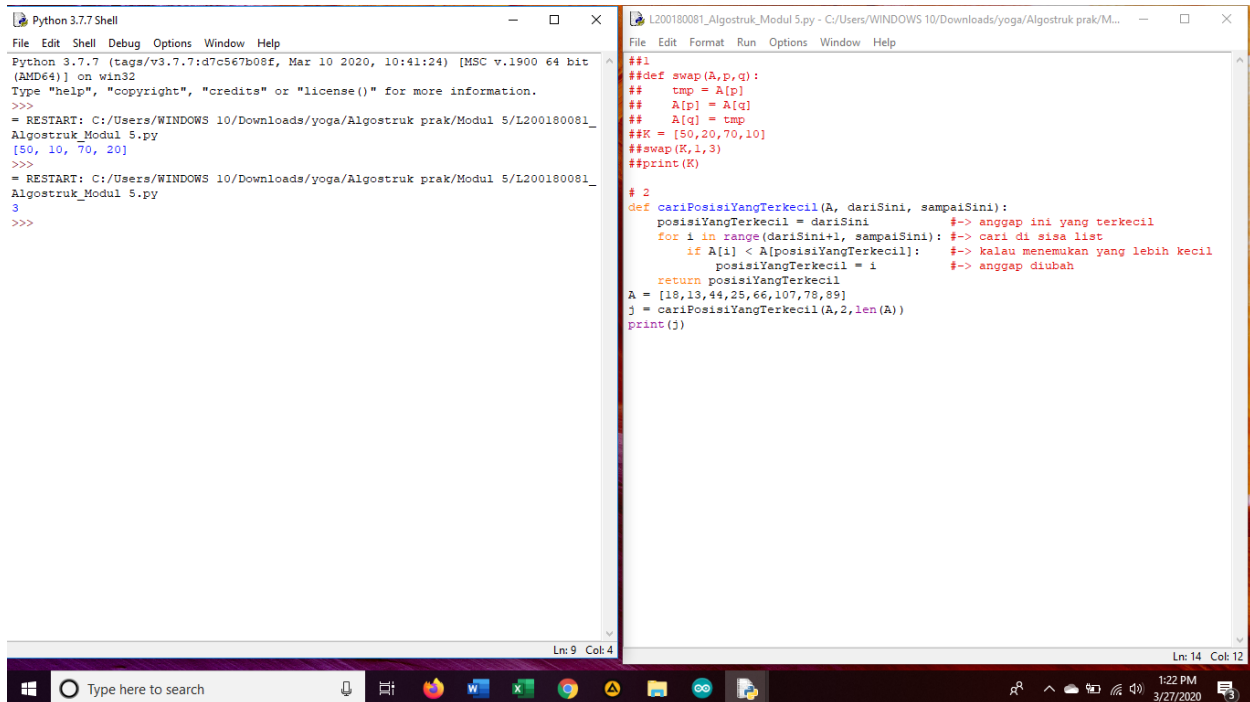


The screenshot shows two windows. The left window is a Python 3.7.7 Shell with the following text:

```
Python 3.7.7 (tags/v3.7.7:d7c567b08f, Mar 10 2020, 10:41:24) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 5/L200180081_
Algostruk_Modul 5.py
[50, 10, 70, 20]
>>> |
```

The right window is a code editor showing the following Python code:

```
# 1
def swap(A,p,q):
    tmp = A[p]
    A[p] = A[q]
    A[q] = tmp
K = [50,20,70,10]
swap(K,1,3)
print(K)
```



The screenshot shows two windows. The left window is a Python 3.7.7 Shell with the following text:

```
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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Algostruk_Modul 5.py
[50, 10, 70, 20]
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= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 5/L200180081_
Algostruk_Modul 5.py
3
>>>
```

The right window is a code editor showing the following Python code:

```
##1
def swap(A,p,q):
    tmp = A[p]
    A[p] = A[q]
    A[q] = tmp
K = [50,20,70,10]
swap(K,1,3)
print(K)

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

```
Python 3.7.7 Shell
File Edit Shell Debug Options Window Help
Python 3.7.7 (tags/v3.7.7:d7c567b08f, Mar 10 2020, 10:41:24) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 5/L200180081_
Algostruk Modul 5.py
[13, 18, 25, 44, 66, 78, 89, 107]
>>>

L200180081_Algostruk_Modul 5.py - C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/M...
File Edit Format Run Options Window Help
#1
def swap(A,p,q):
    tmp = A[p]
    A[p] = A[q]
    A[q] = tmp
    K = [50,20,70,10]
    swap(K,1,3)
    #print(K)

#2
def cariPosisiYangTerkecil(A, dariSini, sampaiSini):
    posisiYangTerkecil = dariSini #-> anggap ini yang terkecil
    for i in range(dariSini+1, sampaiSini): #-> cari di sisa list
        if A[i] < A[posisiYangTerkecil]: #-> kalau menemukan yang lebih kecil
            posisiYangTerkecil = i #-> anggap diubah
    return posisiYangTerkecil
A = [18,13,44,25,66,107,78,89]
j = cariPosisiYangTerkecil(A,2,len(A))
#print(j)

#3
def bubbleSort(A):
    n = len(A)
    for i in range(n-1): #-> Lakukan operasi gelembung sebanyak n-1
        for j in range(n-i-1): #-> Dorong elemen terbesar ke ujung kanan
            if A[j] > A[j+1]: #-> Jika di kiri lebih besar dari di kanannya,
                swap(A,j,j+1) #> tukar posisi elemen ke j dengan ke j+1
    bubbleSort(A)
    print(A)

Ln: 6 Col: 4

Ln: 7 Col: 0
1:27 PM
3/27/2020
```

```
Python 3.7.7 Shell
File Edit Shell Debug Options Window Help
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 5/L200180081_
Algostruk Modul 5.py
[13, 18, 25, 44, 66, 78, 89, 107]
>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 5/L200180081_
Algostruk Modul 5.py
[10, 20, 50, 70]
>>>

L200180081_Algostruk_Modul 5.py - C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/M...
File Edit Format Run Options Window Help
#1
def swap(A,p,q):
    tmp = A[p]
    A[p] = A[q]
    A[q] = tmp
    K = [50,20,70,10]
    swap(K,1,3)
    #print(K)

#2
def cariPosisiYangTerkecil(A, dariSini, sampaiSini):
    posisiYangTerkecil = dariSini #-> anggap ini yang terkecil
    for i in range(dariSini+1, sampaiSini): #-> cari di sisa list
        if A[i] < A[posisiYangTerkecil]: #-> kalau menemukan yang lebih kecil
            posisiYangTerkecil = i #-> anggap diubah
    return posisiYangTerkecil
A = [18,13,44,25,66,107,78,89]
j = cariPosisiYangTerkecil(A,2,len(A))
#print(j)

#3
def bubbleSort(A):
    n = len(A)
    for i in range(n-1): #-> Lakukan operasi gelembung sebanyak n-1
        for j in range(n-i-1): #-> Dorong elemen terbesar ke ujung kanan
            if A[j] > A[j+1]: #-> Jika di kiri lebih besar dari di kanannya,
                swap(A,j,j+1) #> tukar posisi elemen ke j dengan ke j+1
    bubbleSort(A)
    print(A)

#4
def selectSort(A):
    n = len(A)
    for i in range(n-1):
        indexKecil = cariPosisiYangTerkecil(A, i, n)
        if indexKecil != i:
            swap(A, i, indexKecil)
    selectSort(A)
    print(K)

Ln: 9 Col: 4

Ln: 38 Col: 6
1:29 PM
3/27/2020
```

```
Python 3.7.7 Shell
File Edit Shell Debug Options Window Help
Python 3.7.7 (tags/v3.7.7:d7c567b08f, Mar 10 2020, 10:41:24) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 5/L200180081_
Algostruk Modul 5.py
[13, 18, 25, 44, 66, 78, 89, 107]
>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 5/L200180081_
Algostruk Modul 5.py
[10, 20, 50, 70]
>>>
= RESTART: C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/Modul 5/L200180081_
Algostruk Modul 5.py
[2, 4, 5, 10, 13, 18, 23, 29, 31, 51, 64]
>>>

L200180081_Algostruk_Modul 5.py - C:/Users/WINDOWS 10/Downloads/yoga/Algostruk prak/M...
File Edit Format Run Options Window Help
#--> anggap ukuran
return posisiYangTerkecil
A = [18,13,44,25,66,107,78,89]
j = cariPosisiYangTerkecil(A,2,len(A))
#print(j)

#3
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)
    #bubbleSort(A)
    #print(A)

# 4
def selectSort(A):
    n = len(A)
    for i in range(n-1):
        indexKecil = cariPosisiYangTerkecil(A, i, n)
        if indexKecil != i:
            swap(A, i, indexKecil)
    selectSort(K)
    #print(K)

#5
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
    P=[10,51,2,18,4,31,13,5,23,64,29]
    insertionSort(P)
    print(P)
```