Latihan

```
def swap(A,p,q):
    tmp=A[p]
    A[p]=A[q]
    A[q]=tmp

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

#Latihan 5.1
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)

#Latihan 5.2
def selectionSort(a):
    n=len(a)
    for i in range(n-1):
        indexKecil=cariPosisiTerkecil(a,i,n)
        if indexKecil != i:
            swap(a,i,indexKecil)

#Latihan 5.3
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

```

```
tel)] on win32
Type "copyright", "credits" or "licens
>>>
===== RESTART: C:/Users/ASUS/Downloads
>>> k=[50,20,70,10]
>>> swap(k,1,3)
>>> k
[50, 10, 70, 20]
>>>
>>> a=[18,13,44,25,66,107,78,89]
>>> j=cariPosisiTerkecil(a,2,len(a))
>>> j
3
>>>
>>> a=[40,10,40,20,90,60]
>>> bubbleSort(a)
>>> a
[10, 20, 40, 40, 60, 90]
>>>
>>> b=[30,10,60,20,70,50]
>>> selectionSort(b)
>>> b
[10, 20, 30, 50, 60, 70]
>>>
>>> c=[20,10,90,30,70,50]
>>> insertionSort(c)
>>> c
[10, 20, 30, 50, 70, 90]
>>>
```