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Latihan

```python
1  def swap(A,p,q):
2      tmp=A[p]
3      A[p]=A[q]
4      A[q]=tmp
5
6  def cariPosisiTerkecil(A, dariSini, sampaiSini):
7      posisiTerkecil=dariSini
8      for i in range(dariSini+1, sampaiSini):
9          if A[i] < A[posisiTerkecil]:
10             posisiTerkecil=i
11     return posisiTerkecil
12
13 #Latihan 5.1
14 def bubbleSort(a):
15     n=len(a)
16     for i in range(n-1):
17         for j in range(n-i-1):
18             if a[j] > a[j+1]:
19                 swap(a,j,j+1)
20
21 #Latihan 5.2
22 def selectionSort(a):
23     n=len(a)
24     for i in range(n-1):
25         indexKecil=cariPosisiTerkecil(a,i,n)
26         if indexKecil != i:
27             swap(a,i,indexKecil)
28
29 #Latihan 5.3
30 def insertionSort(a):
31     n=len(a)
32     for i in range(1,n):
33         nilai=a[i]
34         pos=i
35         while pos > 0 and nilai < a[pos-1]:
36             a[pos]=a[pos-1]
37             pos=pos-1
38         a[pos] = nilai
39
```

```
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]
>>> |
```