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KELAS : A

LATIHAN

```
1 def swap(A,p,q):
                                                      tel)] on win32
      tmp=A[p]
 3
      A[p]=A[q]
 4
      A[q]=tmp
 5
                                                      >>> k=[50,20,70,10]
 6 def cariPosisiTerkecil(A, dariSini, sampaiSini):
                                                     >>> swap(k,1,3)
 7
     posisiTerkecil=dariSini
                                                      >>> k
       for i in range(dariSini+1, sampaiSini):
                                                      [50, 10, 70, 20]
 8
 9
           if A[i] < A[posisiTerkecil]:</pre>
                                                      >>>
              posisiTerkecil=i
10
     return posisiTerkecil
11
12
                                                      >>> j
13 #Latihan 5.1
                                                      3
14 def bubbleSort(a):
                                                      >>>
     n=len(a)
15
16
      for i in range(n-1):
                                                      >>> bubbleSort(a)
17
           for j in range(n-i-1):
                                                      >>> a
18
               if a[j] > a[j+1]:
19
                   swap(a,j,j+1)
                                                      >>>
20
21 #Latihan 5.2
                                                      >>> selectionSort(b)
22 def selectionSort(a):
                                                      >>> b
23
      n=len(a)
24
      for i in range(n-1):
                                                      >>>
25
          indexKecil=cariPosisiTerkecil(a,i,n)
26
           if indexKecil != i:
                                                      >>> insertionSort(c)
27
               swap(a,i,indexKecil)
                                                      >>> c
28
29 #Latihan 5.3
                                                      >>>
30 def insertionSort(a):
31
      n=len(a)
       for i in range(1,n):
32
33
          nilai=a[i]
34
          pos=i
           while pos > 0 and nilai < a[pos-1]:</pre>
35
36
               a[pos]=a[pos-1]
              pos=pos-1
37
38
           a[pos] = nilai
39
```

```
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===== RESTART: C:/Users/ASUS/Download:
>>> a=[18,13,44,25,66,107,78,89]
>>> j=cariPosisiTerkecil(a,2,len(a))
>>> a=[40,10,40,20,90,60]
[10, 20, 40, 40, 60, 90]
>>> b=[30,10,60,20,70,50]
[10, 20, 30, 50, 60, 70]
>>> c=[20,10,90,30,70,50]
[10, 20, 30, 50, 70, 90]
```