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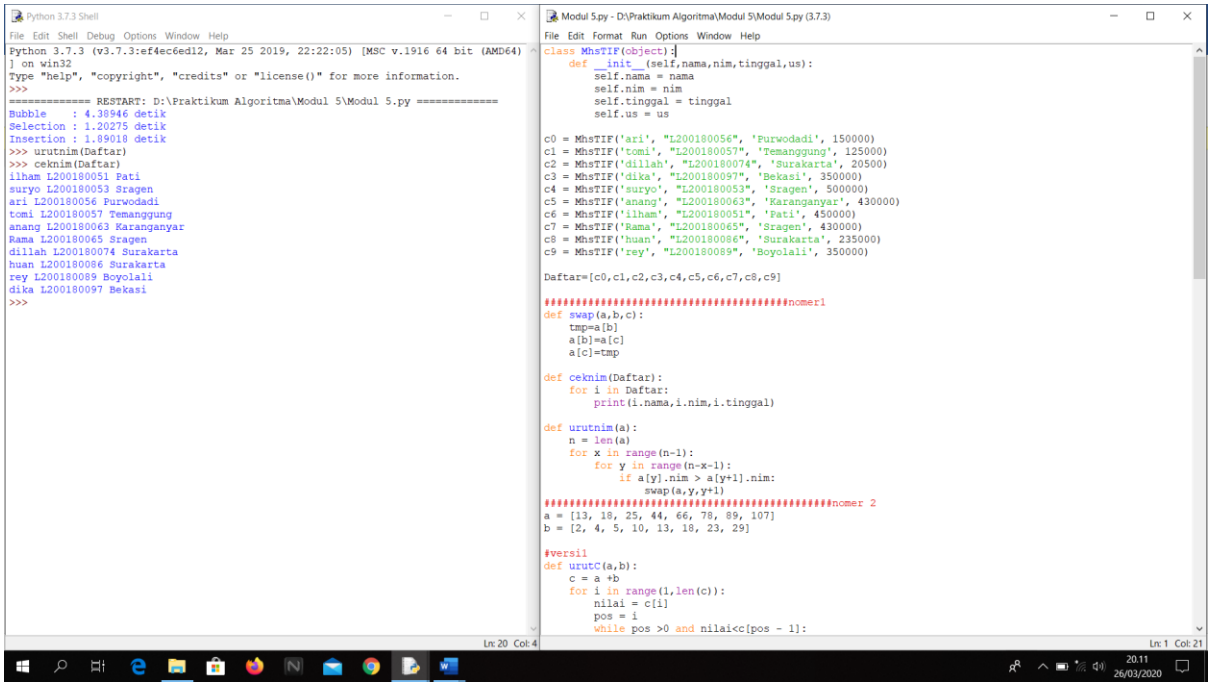
Kelas : C

## MODUL 5

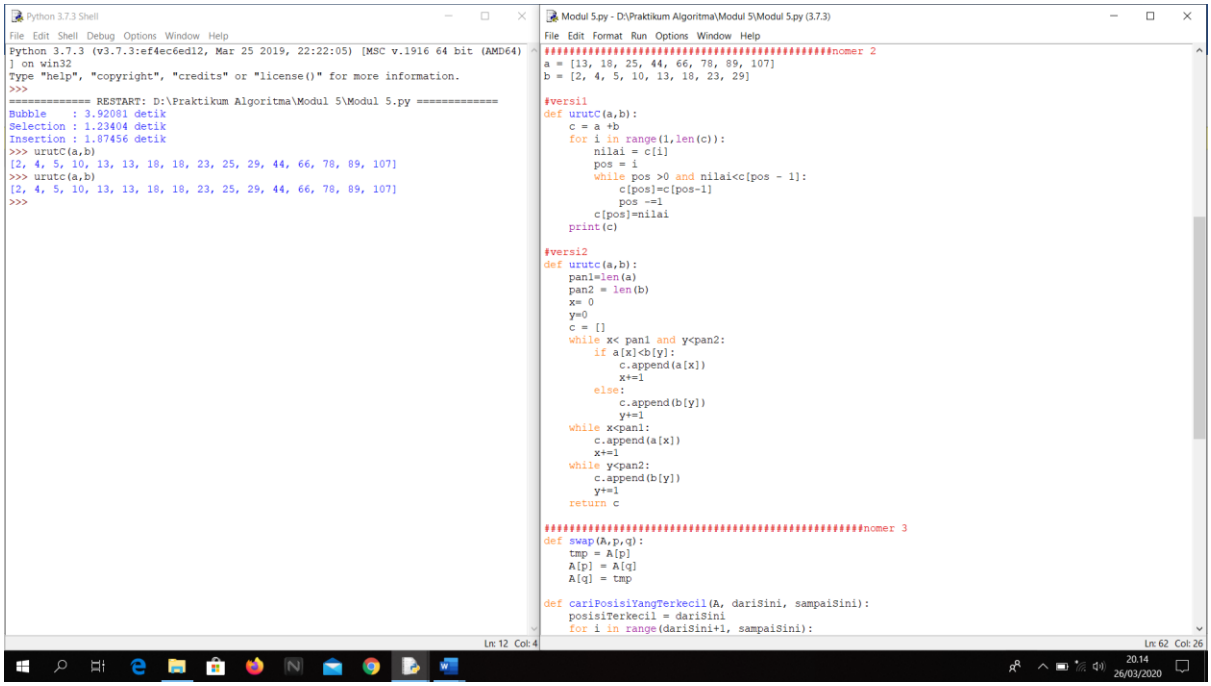
1. Mengurutkan daftar MhsTIF berdasarkan NIM



```
Python 3.7.3 Shell
File  Edit  Shell  Debug  Options  Window  Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 22:22:05) [MSC v.1916 64 bit (AMD64)
] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\Praktikum Algoritma\Modul 5\Modul 5.py ==========
Bubble     : 4.38946 detik
Selection : 1.20275 detik
Insertion : 1.89018 detik
>>> urutnim(Daftar)
>>> ceknim(Daftar)
ilham L200180051 Pati
suryo L200180053 Sragen
ari L200180056 Purwodadi
tomi L200180057 Temanggung
anang L200180063 Karanganyar
Rama L200180065 Sragen
dillah L200180074 Surakarta
huan L200180086 Surakarta
rey L200180089 Boyolali
dika L200180097 Bekasi
>>>
```

```
Modul 5.py - D:\Praktikum Algoritma\Modul 5\Modul 5.py (3.7.3)
File  Edit  Format  Run  Options  Window  Help
class MhsTIF(object):
    def __init__(self,nama,nim,tinggal,us):
        self.nama = nama
        self.nim = nim
        self.tinggal = tinggal
        self.us = us

c0 = MhsTIF('ari', "L200180056", 'Purwodadi', 150000)
c1 = MhsTIF('tomi', "L200180057", 'Temanggung', 125000)
c2 = MhsTIF('dillah', "L200180074", 'Surakarta', 20500)
c3 = MhsTIF('dika', "L200180097", 'Bekasi', 350000)
c4 = MhsTIF('suryo', "L200180053", 'Sragen', 500000)
c5 = MhsTIF('anang', "L200180063", 'Karanganyar', 430000)
c6 = MhsTIF('ilham', "L200180051", 'Pati', 450000)
c7 = MhsTIF('Rama', "L200180065", 'Sragen', 430000)
c8 = MhsTIF('huan', "L200180086", 'Surakarta', 235000)
c9 = MhsTIF('rey', "L200180089", 'Boyolali', 350000)

Daftar=[c0,c1,c2,c3,c4,c5,c6,c7,c8,c9]

####################################nomer1
def swap(a,b,c):
    tmp=a[b]
    a[b]=a[c]
    a[c]=tmp

def ceknim(Daftar):
    for i in Daftar:
        print(i.nama,i.nim,i.tinggal)

def urutnim(a):
    n = len(a)
    for x in range(n-1):
        for y in range(n-x-1):
            if a[y].nim > a[y+1].nim:
                swap(a,y,y+1)
##########################################nomer 2
a = [13, 18, 25, 44, 66, 78, 89, 107]
b = [2, 4, 5, 10, 13, 18, 23, 29]

#versi1
def urutC(a,b):
    c = a +b
    for i in range(1,len(c)):
        nilai = c[i]
        pos = i
        while pos >0 and nilai<c[pos - 1]:
```

2. Penggabungan array a dan b menjadi array c dan urutkan.




3. Membandingkan lebih cepat mana bubble,selection atau insertion.