

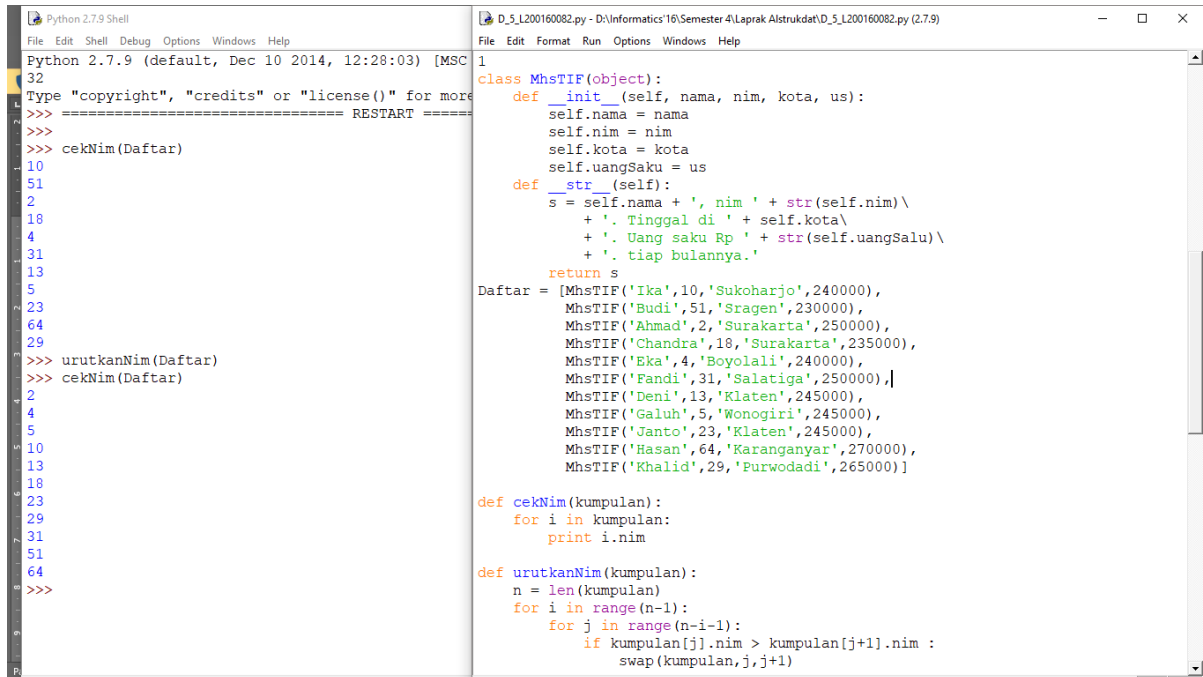
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NIM : L200180059

Kelas : C

Modul 5

1. Tugas 1



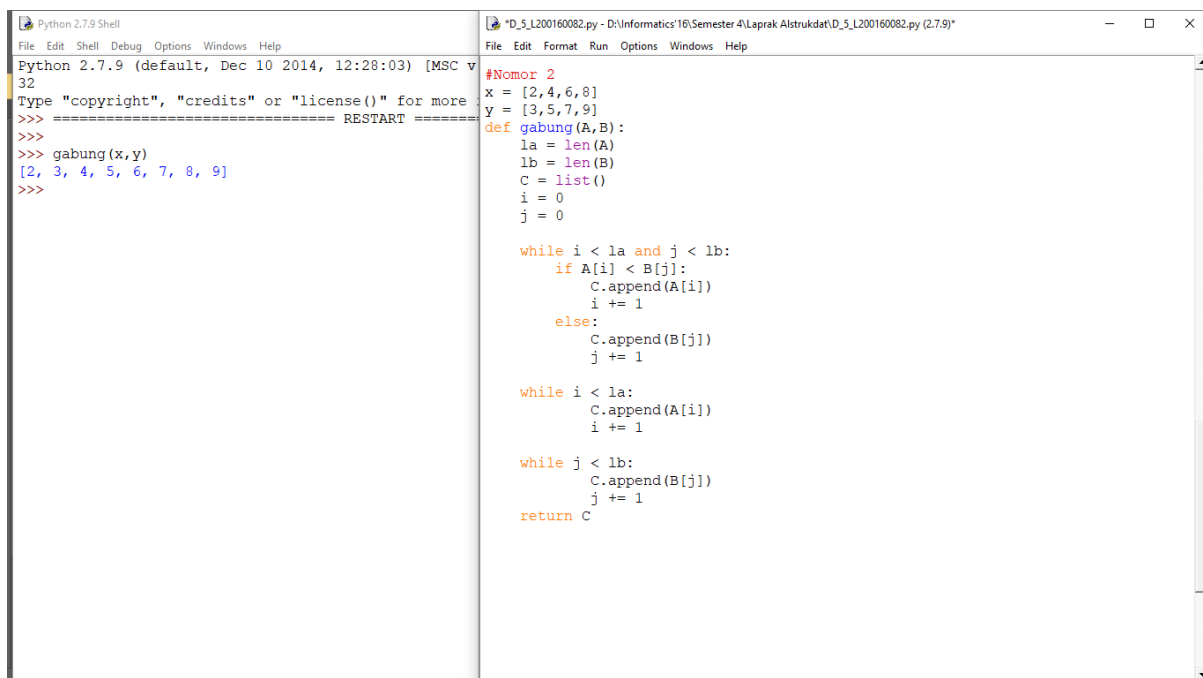
```
Python 2.7.9 Shell
File Edit Shell Debug Options Windows Help
Python 2.7.9 (default, Dec 10 2014, 12:28:03) [MSC v.60959] Shell
Type "copyright", "credits" or "license()" for more
>>> ===== RESTART =====
>>> cekNim(Daftar)
10
51
2
18
4
31
13
5
23
64
29
>>> urutkanNim(Daftar)
>>> cekNim(Daftar)
2
4
5
10
13
18
23
29
31
51
64
>>>

class MhsTIF(object):
    def __init__(self, nama, nim, kota, us):
        self.nama = nama
        self.nim = nim
        self.kota = kota
        self.uangSaku = us
    def __str__(self):
        s = self.nama + ', ' + str(self.nim) + '\n'
        + 'Tinggal di ' + self.kota + '\n'
        + 'Uang saku Rp ' + str(self.uangSaku) + '\n'
        + 'tiap bulannya.'
        return s
Daftar = [MhsTIF('Ika',10,'Sukoharjo',240000),
MhsTIF('Budi',51,'Sragen',230000),
MhsTIF('Ahmad',2,'Surakarta',250000),
MhsTIF('Chandra',18,'Surakarta',235000),
MhsTIF('Eka',4,'Boyolali',240000),
MhsTIF('Fandi',31,'Salatiga',250000),
MhsTIF('Deni',13,'Klaten',245000),
MhsTIF('Galuh',5,'Wonogiri',245000),
MhsTIF('Janto',23,'Klaten',245000),
MhsTIF('Hasan',64,'Karanganyar',270000),
MhsTIF('Khalid',29,'Purwodadi',265000)]

def cekNim(kumpulan):
    for i in kumpulan:
        print i.nim

def urutkanNim(kumpulan):
    n = len(kumpulan)
    for i in range(n-1):
        for j in range(n-i-1):
            if kumpulan[j].nim > kumpulan[j+1].nim:
                swap(kumpulan,j,j+1)
```

2. Tugas 2



```
Python 2.7.9 Shell
File Edit Shell Debug Options Windows Help
Python 2.7.9 (default, Dec 10 2014, 12:28:03) [MSC v.60959] Shell
Type "copyright", "credits" or "license()" for more
>>> ===== RESTART =====
>>> gabung(x,y)
[2, 3, 4, 5, 6, 7, 8, 9]
>>>

#Nomor 2
x = [2,4,6,8]
y = [3,5,7,9]
def gabung(A,B):
    la = len(A)
    lb = len(B)
    C = list()
    i = 0
    j = 0

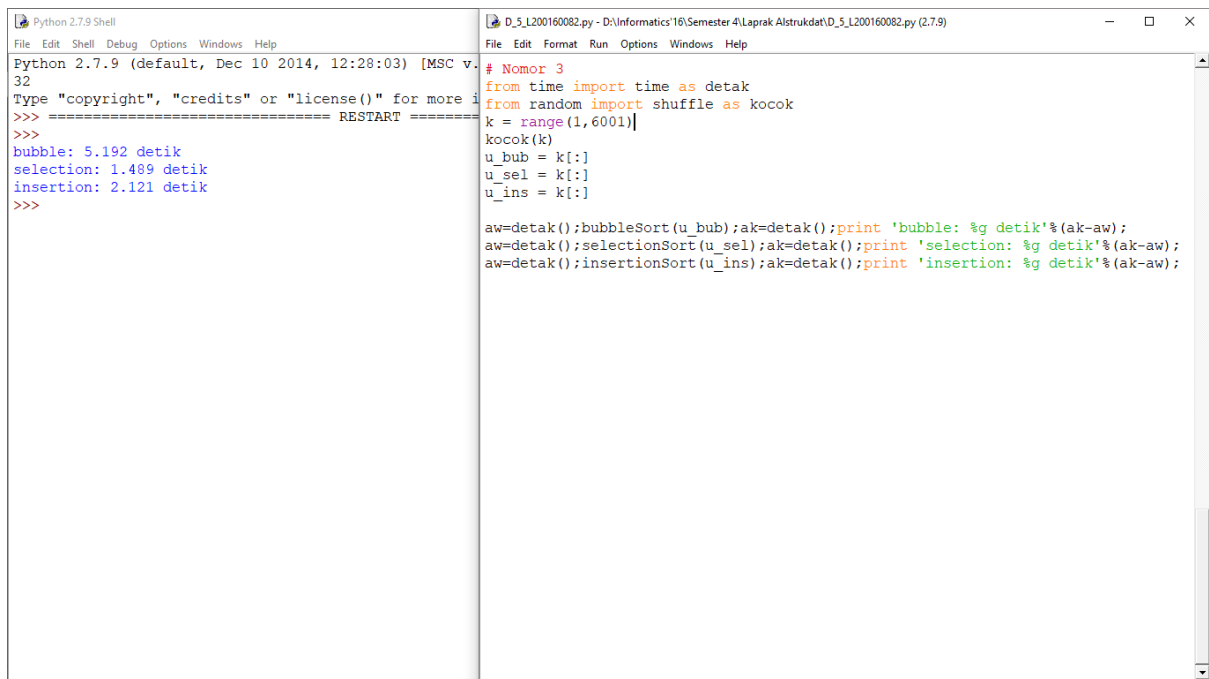
    while i < la and j < lb:
        if A[i] < B[j]:
            C.append(A[i])
            i += 1
        else:
            C.append(B[j])
            j += 1

    while i < la:
        C.append(A[i])
        i += 1

    while j < lb:
        C.append(B[j])
        j += 1

    return C
```

3. Tugas 3



The image shows a screenshot of a Python 2.7.9 Shell and a Python script editor. The shell window on the left displays the output of a program, showing execution times for bubble, selection, and insertion sorts. The script editor on the right shows the source code for the program, which includes a function to generate a random list and three functions to perform different sorting algorithms, each with a timing mechanism.

```
Python 2.7.9 Shell
File Edit Shell Debug Options Windows Help
Python 2.7.9 (default, Dec 10 2014, 12:28:03) [MSC v.
32
Type "copyright", "credits" or "license()" for more i
>>> ===== RESTART =====
>>>
bubble: 5.192 detik
selection: 1.489 detik
insertion: 2.121 detik
>>>
```

```
D:\5_L200160082.py - D:\Informatics\16\Semester 4\Lapra...
File Edit Format Run Options Windows Help
# Nomor 3
from time import time as detik
from random import shuffle as kocok
k = range(1,6001)
kocok(k)
u_bub = k[:]
u_sel = k[:]
u_ins = k[:]

aw=detak();bubbleSort(u_bub);ak=detak();print 'bubble: %g detik'%(ak-aw);
aw=detak();selectionSort(u_sel);ak=detak();print 'selection: %g detik'%(ak-aw);
aw=detak();insertionSort(u_ins);ak=detak();print 'insertion: %g detik'%(ak-aw);
```