Khumaila Masfarina Yusrifa
L200180198/G
Modul 5

Nomer 1

1.py - C:\Users\Khumaila\Documents\prak algostruk\L200...

File Edit Format Run Options Window Help

```
from kegiatanModul5 import *

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 + ', nim ' + str(self.nim)\
            + '. Tinggal di ' + self.kota\
            + '. Uang saku Rp ' + str(self.uangSalu)\
            + '. tiap bulannya.'
        return s

k0 = MhsTIF("Keisya", 20, "Surakarta", 240000)
k1 = MhsTIF("Nevgy", 31, "Sragen", 230000)
k2 = MhsTIF("Purwanto", 2, "Surakarta", 250000)
k3 = MhsTIF("Calisa", 28, "Surakarta", 235000)
k4 = MhsTIF("Nada", 4, "Boyolali", 240000)
k5 = MhsTIF("Lintang", 41, "Salatiga", 250000)
k6 = MhsTIF("Denis", 13, "Klaten", 245000)
k7 = MhsTIF("Kevin", 15, "Wonogiri", 245000)
k8 = MhsTIF("Alfin", 23, "Klaten", 245000)
k9 = MhsTIF("Khumaila", 64, "Sukoharjo", 270000)
k10 = MhsTIF("Kholid", 59, "Boyolali", 265000)

Daftar = [k0, k1, k2, k3, k4, k5, k6, k7, k8, k9, k10]

def urutkanNim(list):
    NIM = []
    for i in list:
        NIM.append(i.nim)
    insertionSort(NIM)
    return NIM
```

Ln: 22 Col: 34

Python 3.7.4 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 20
19, 20:34:20) [MSC v.1916 64 bit (AMD64)] on wi
n32
Type "help", "copyright", "credits" or "license
()" for more information.
>>>
 RESTART: C:\Users\Khumaila\Documents\prak algo
struk\L200180198_Modul5_G\1.py
>>> urutkanNim(Daftar)
[2, 4, 13, 15, 20, 23, 28, 31, 41, 59, 64]
>>>
```

Ln: 7 Col: 4

Nomer 2

2.py - C:\Users\Khumaila\Documents\prak algostruk

File Edit Format Run Options Window Help

```
from kegiatanModul5 import *

A = [1,2,3,7,8,9]
B = [4,5,6,10,11,12]

def gabungDanUrut(list1, list2):
    C = list1 + list2
    insertionSort(C)
    return C
```

Python 3.7.4 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 20:34:20) [MSC v.1916 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
 RESTART: C:\Users\Khumaila\Documents\prak algostruk\L200180198_Modul5_G\2.py
>>> gabungDanUrut(A,B)
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]
>>>
```

Nomer 3

3.py - C:\Users\Khumaila\Documents\prak algostruk\L200180198_Modul5_G\3.py (3.7.4)

File Edit Format Run Options Window Help

```
from time import time as detak
from random import shuffle as kocok
from kegiatanModul5 import *

k = list(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_bub);ak=detak();print('selection: %g detik' %(ak-aw)
aw=detak();insertionSort(u_bub);ak=detak();print('insertion: %g detik' %(ak-aw)
```

Python 3.7.4 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 20:34:20) [MSC v.1916 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
 RESTART: C:\Users\Khumaila\Documents\prak algostruk\L200180198_Modul5_G\3.py
bubble: 5.28406 detik
selection: 1.70061 detik
insertion: 0.00101447 detik
>>>
```