Modul 4

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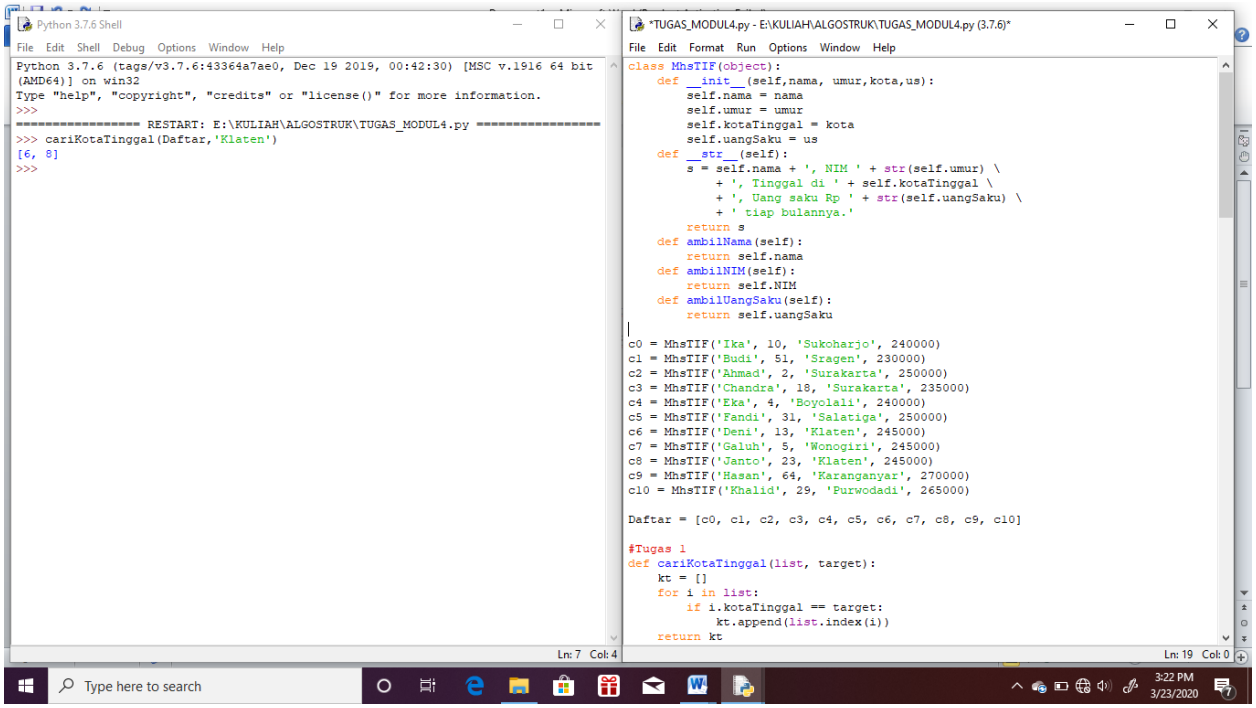
Mata Kuliah : Praktikum Algoritma & Struktur Data

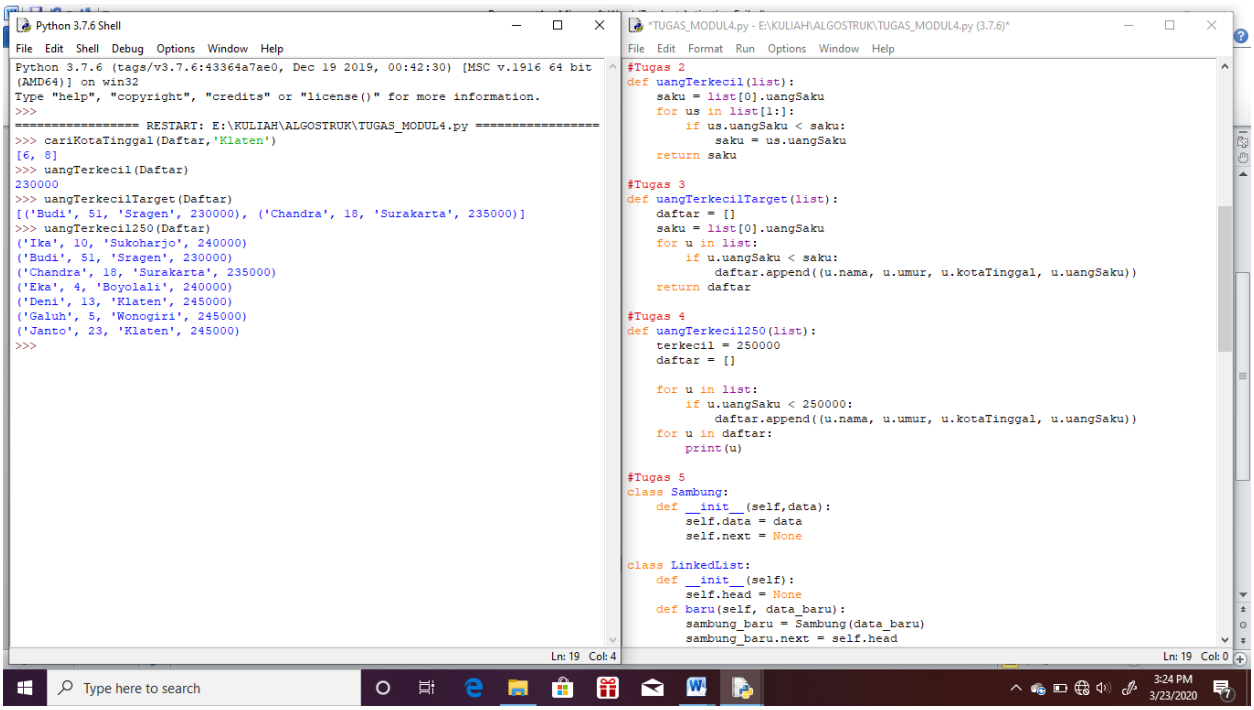
Tanggal Praktikum : 19 Maret 2020

Tugas

No. 1



No. 2, 3, 4


Python 3.7.6 Shell
File Edit Shell Debug Options Window Help
Python 3.7.6 (tags/v3.7.6:43364a7ae0, Dec 19 2019, 00:42:30) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\KULIAH\ALGOSTRUK\TUGAS_MODUL4.py ==========
>>> cariKotaTinggal(Daftar,'Klaten')
[6, 8]
>>> uangTerkecil(Daftar)
230000
>>> uangTerkecilTarget(Daftar)
[('Budi', 51, 'Sragen', 230000), ('Chandra', 18, 'Surakarta', 235000)]
>>> uangTerkecil250(Daftar)
('Ika', 10, 'Sukoharjo', 240000)
('Budi', 51, 'Sragen', 230000)
('Chandra', 18, 'Surakarta', 235000)
('Eka', 4, 'Boyolali', 240000)
('Deni', 13, 'Klaten', 245000)
('Galuh', 5, 'Wonogiri', 245000)
('Janto', 23, 'Klaten', 245000)
>>>
Ln: 19 Col: 4
TUGAS_MODUL4.py - E:\KULIAH\ALGOSTRUK\TUGAS_MODUL4.py (3.7.6)
File Edit Format Run Options Window Help
#Tugas 2
def uangTerkecil(list):
saku = list[0].uangSaku
for us in list[1:]:
if us.uangSaku < saku:
saku = us.uangSaku
return saku
#Tugas 3
def uangTerkecilTarget(list):
daftar = []
saku = list[0].uangSaku
for u in list:
if u.uangSaku < saku:
daftar.append((u.nama, u.umur, u.kotaTinggal, u.uangSaku))
return daftar
#Tugas 4
def uangTerkecil250(list):
terkecil = 250000
daftar = []
for u in list:
if u.uangSaku < 250000:
daftar.append((u.nama, u.umur, u.kotaTinggal, u.uangSaku))
for u in daftar:
print(u)
#Tugas 5
class Sambung:
def __init__(self,data):
self.data = data
self.next = None
class LinkedList:
def __init__(self):
self.head = None
def baru(self, data_baru):
sambung_baru = Sambung(data_baru)
sambung_baru.next = self.head
Ln: 19 Col: 0
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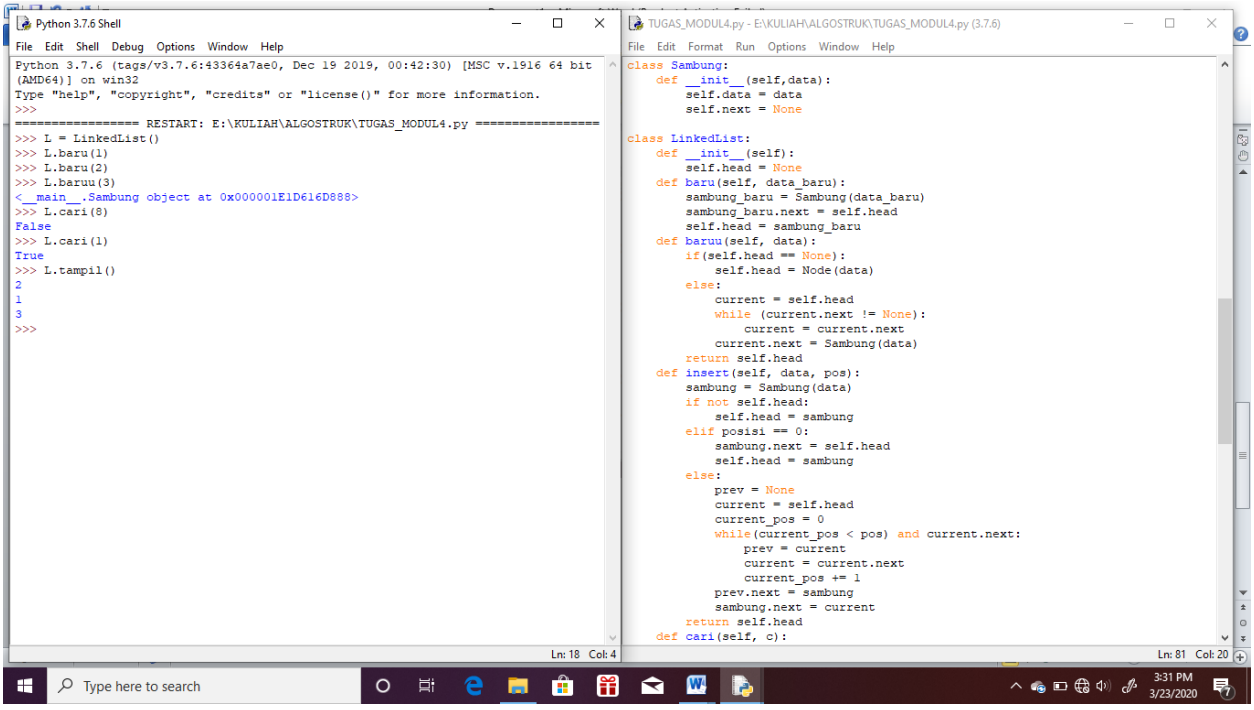
3:24 PM
3/23/2020

No. 5, 6


Python 3.7.6 Shell
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Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\KULIAH\ALGOSTRUK\TUGAS_MODUL4.py ==========
>>> L = LinkedList()
>>> L.baru(1)
>>> L.baru(2)
>>> L.baruu(3)
<__main__.Sambung object at 0x000001E1D616D888>
>>> L.cari(8)
False
>>> L.cari(1)
True
>>> L.tampil()
2
1
3
>>>
Ln: 18 Col: 4
TUGAS_MODUL4.py - E:\KULIAH\ALGOSTRUK\TUGAS_MODUL4.py (3.7.6)
File Edit Format Run Options Window Help
class Sambung:
def __init__(self,data):
self.data = data
self.next = None
class LinkedList:
def __init__(self):
self.head = None
def baru(self, data_baru):
sambung_baru = Sambung(data_baru)
sambung_baru.next = self.head
self.head = sambung_baru
def baruu(self, data):
if(self.head == None):
self.head = Node(data)
else:
current = self.head
while (current.next != None):
current = current.next
current.next = Sambung(data)
return self.head
def insert(self, data, pos):
sambung = Sambung(data)
if not self.head:
self.head = sambung
elif posisi == 0:
sambung.next = self.head
self.head = sambung
else:
prev = None
current = self.head
current_pos = 0
while(current_pos < pos) and current.next:
prev = current
current = current.next
current_pos += 1
prev.next = sambung
sambung.next = current
return self.head
def cari(self, c):
Ln: 81 Col: 20
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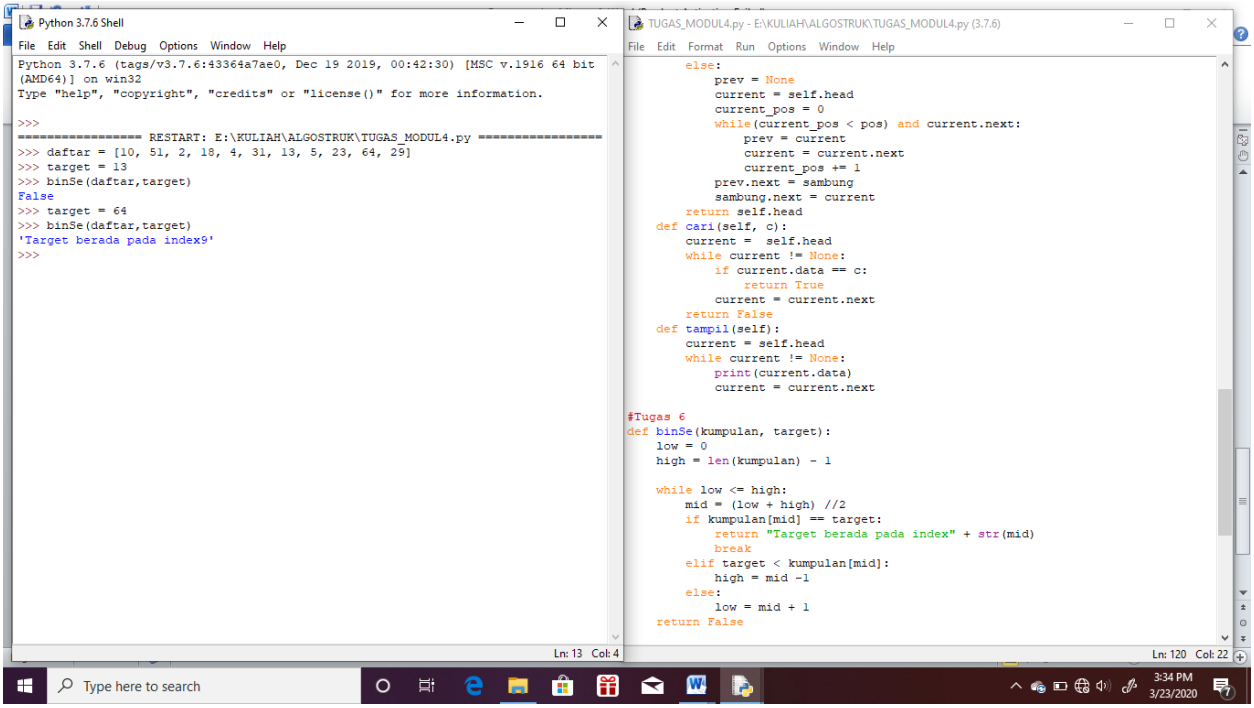
3:31 PM
3/23/2020


Python 3.7.6 Shell
File Edit Shell Debug Options Window Help
Python 3.7.6 (tags/v3.7.6:43364a7ae0, Dec 19 2019, 00:42:30) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\KULIAH\ALGOSTRUK\TUGAS_MODUL4.py ==========
>>> daftar = [10, 51, 2, 18, 4, 31, 13, 5, 23, 64, 29]
>>> target = 13
>>> binSe(daftar,target)
False
>>> target = 64
>>> binSe(daftar,target)
'Target berada pada index9'
>>>
Ln: 13 Col: 4
TUGAS_MODUL4.py - E:\KULIAH\ALGOSTRUK\TUGAS_MODUL4.py (3.7.6)
File Edit Format Run Options Window Help
else:
prev = None
current = self.head
current_pos = 0
while(current_pos < pos) and current.next:
prev = current
current = current.next
current_pos += 1
prev.next = sambung
sambung.next = current
return self.head
def cari(self, c):
current = self.head
while current != None:
if current.data == c:
return True
current = current.next
return False
def tampil(self):
current = self.head
while current != None:
print(current.data)
current = current.next
#Tugas 6
def binSe(kumpulan, target):
low = 0
high = len(kumpulan) - 1
while low <= high:
mid = (low + high) //2
if kumpulan[mid] == target:
return "Target berada pada index" + str(mid)
break
elif target < kumpulan[mid]:
high = mid -1
else:
low = mid + 1
return False
Ln: 120 Col: 22
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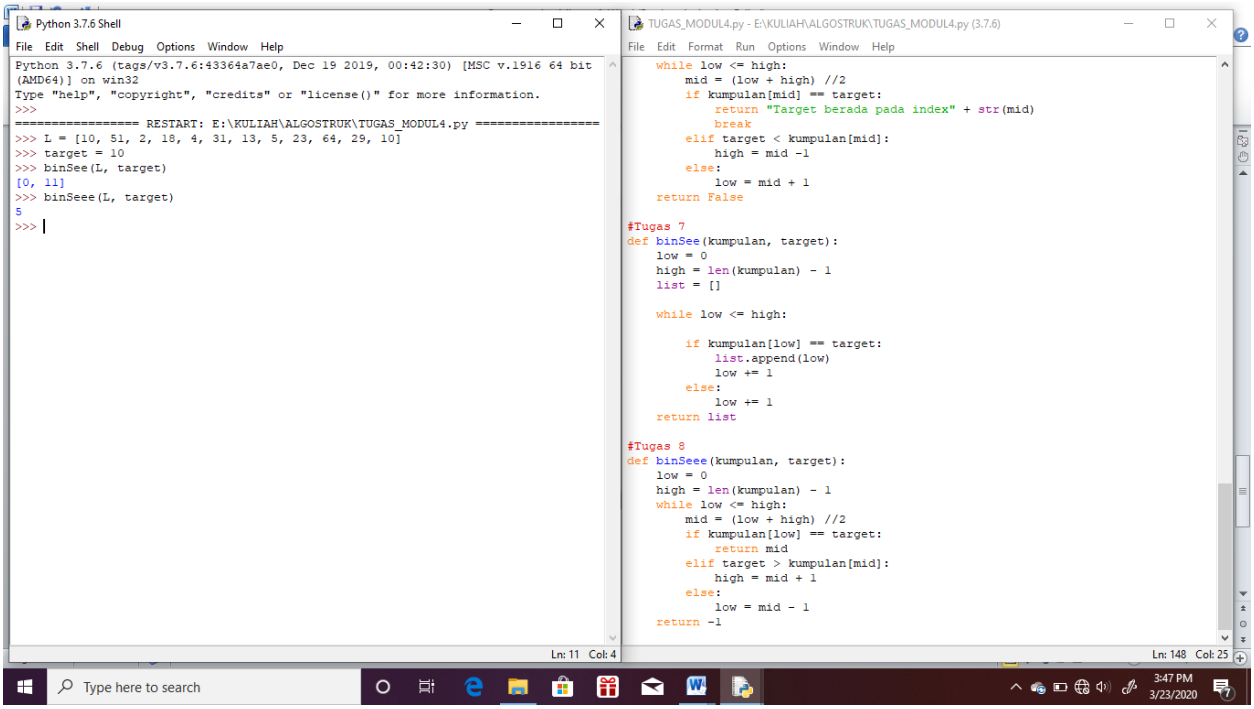
3/23/2020

No. 7, 8


Python 3.7.6 Shell
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Python 3.7.6 (tags/v3.7.6:43364a7ae0, Dec 19 2019, 00:42:30) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\KULIAH\ALGOSTRUK\TUGAS_MODUL4.py ==========
>>> L = [10, 51, 2, 18, 4, 31, 13, 5, 23, 64, 29, 10]
>>> target = 10
>>> binSee(L, target)
[0, 11]
>>> binSeee(L, target)
5
>>>
Ln: 11 Col: 4
TUGAS_MODUL4.py - E:\KULIAH\ALGOSTRUK\TUGAS_MODUL4.py (3.7.6)
File Edit Format Run Options Window Help
while low <= high:
mid = (low + high) //2
if kumpulan[mid] == target:
return "Target berada pada index" + str(mid)
break
elif target < kumpulan[mid]:
high = mid -1
else:
low = mid + 1
return False
#Tugas 7
def binSee(kumpulan, target):
low = 0
high = len(kumpulan) - 1
list = []
while low <= high:
if kumpulan[low] == target:
list.append(low)
low += 1
else:
low += 1
return list
#Tugas 8
def binSeee(kumpulan, target):
low = 0
high = len(kumpulan) - 1
while low <= high:
mid = (low + high) //2
if kumpulan[low] == target:
return mid
elif target > kumpulan[mid]:
high = mid + 1
else:
low = mid - 1
return -1
Ln: 148 Col: 25
Type here to search
3:47 PM
3/23/2020