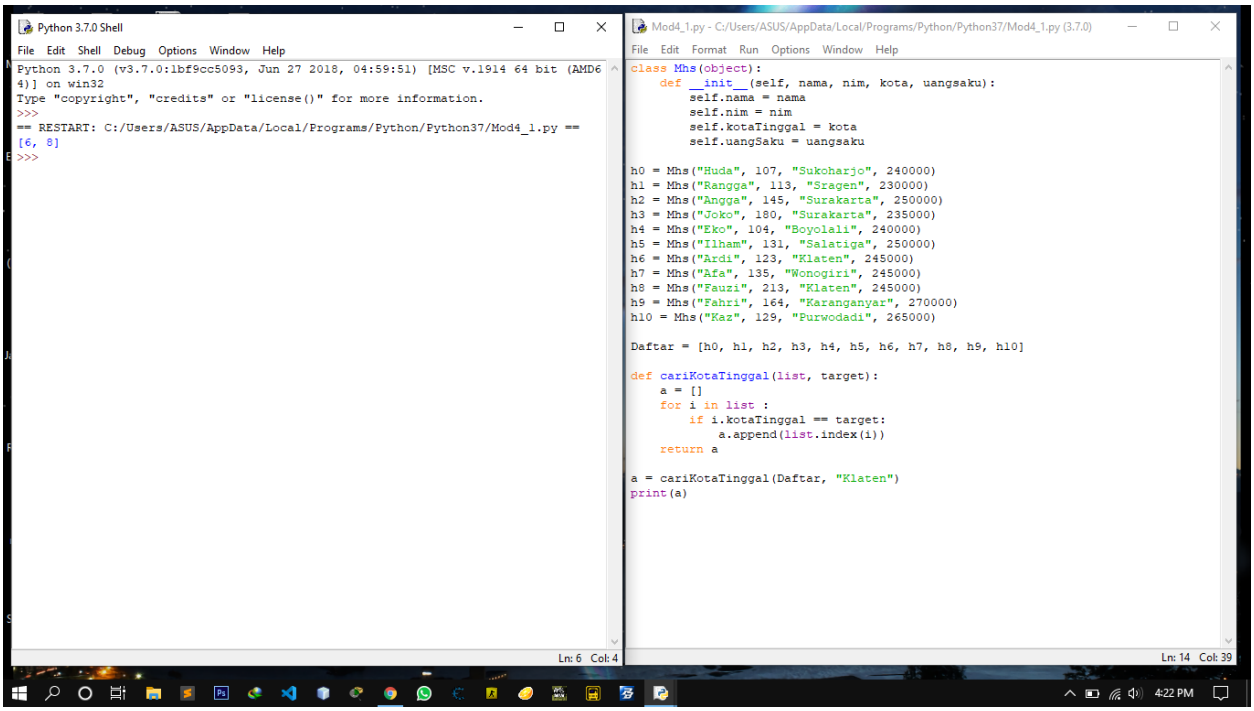
Nama : Alif Al Amin

NIM : L200180082

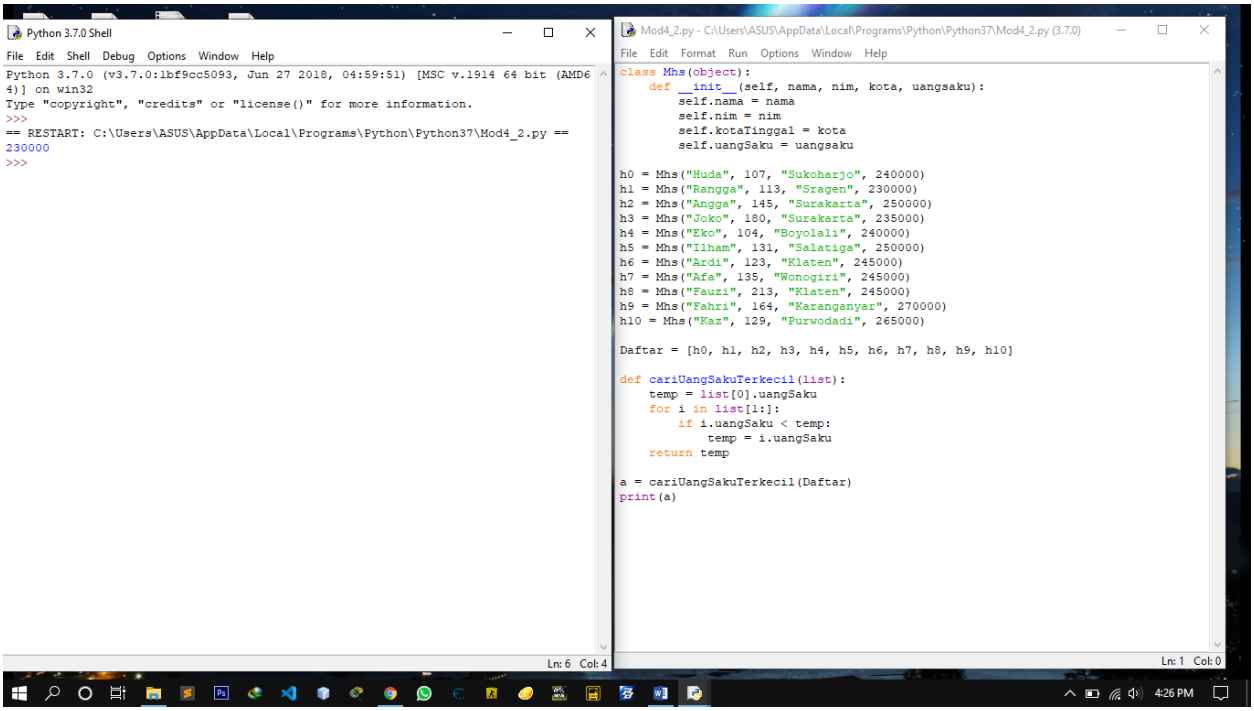
Kelas : C

Tugas Modul 4

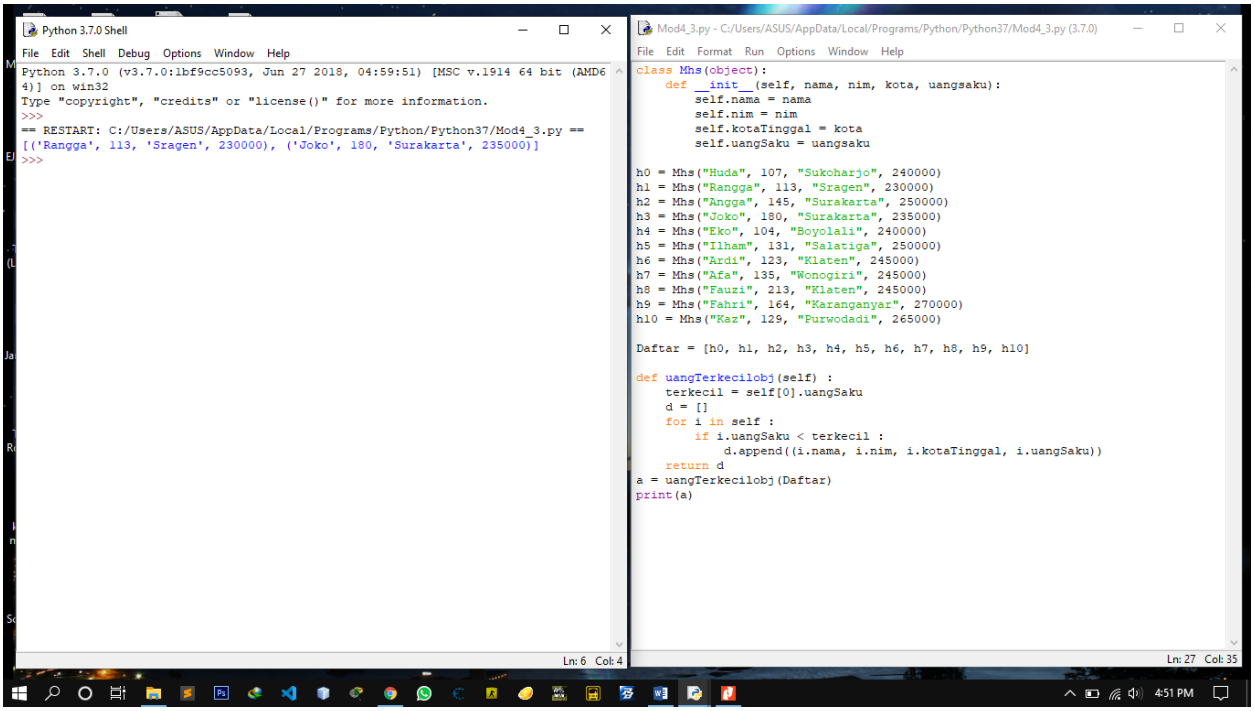
1.



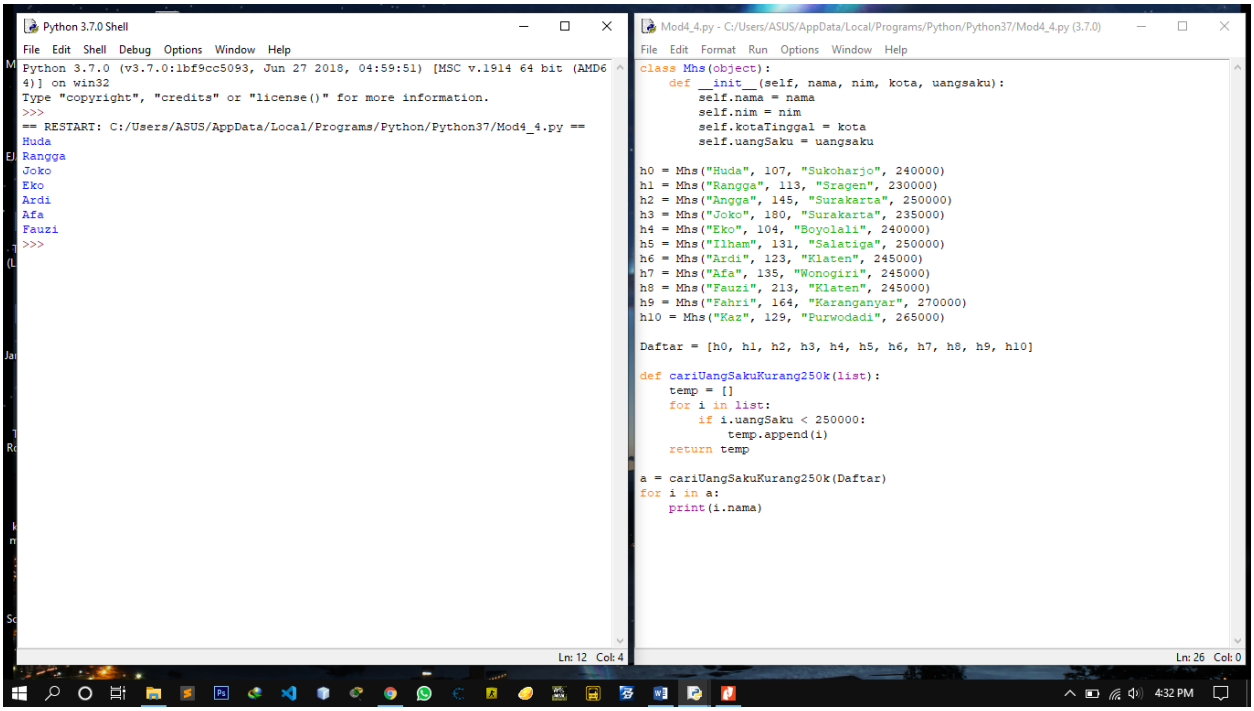
2.


Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:\Users\ASUS\AppData\Local\Programs\Python\Python37\Mod4_2.py ==
230000
>>>
Ln: 6 Col: 4
Mod4_2.py - C:\Users\ASUS\AppData\Local\Programs\Python\Python37\Mod4_2.py (3.7.0)
File Edit Format Run Options Window Help
class Mhs(object):
def __init__(self, nama, nim, kota, uangsaku):
self.nama = nama
self.nim = nim
self.kotaTinggal = kota
self.uangSaku = uangsaku
h0 = Mhs("Huda", 107, "Sukoharjo", 240000)
h1 = Mhs("Rangga", 113, "Sragen", 230000)
h2 = Mhs("Angga", 145, "Surakarta", 250000)
h3 = Mhs("Joko", 180, "Surakarta", 235000)
h4 = Mhs("Eko", 104, "Boyolali", 240000)
h5 = Mhs("Ilham", 131, "Salatiga", 250000)
h6 = Mhs("Ardi", 123, "Klaten", 245000)
h7 = Mhs("Afa", 135, "Wonogiri", 245000)
h8 = Mhs("Fauzi", 213, "Klaten", 245000)
h9 = Mhs("Fahri", 164, "Karanganyar", 270000)
h10 = Mhs("Kaz", 129, "Purwodadi", 265000)
Daftar = [h0, h1, h2, h3, h4, h5, h6, h7, h8, h9, h10]
def cariUangSakuTerkecil(list):
temp = list[0].uangSaku
for i in list[1:]:
if i.uangSaku < temp:
temp = i.uangSaku
return temp
a = cariUangSakuTerkecil(Daftar)
print(a)
Ln: 1 Col: 0
4:26 PM

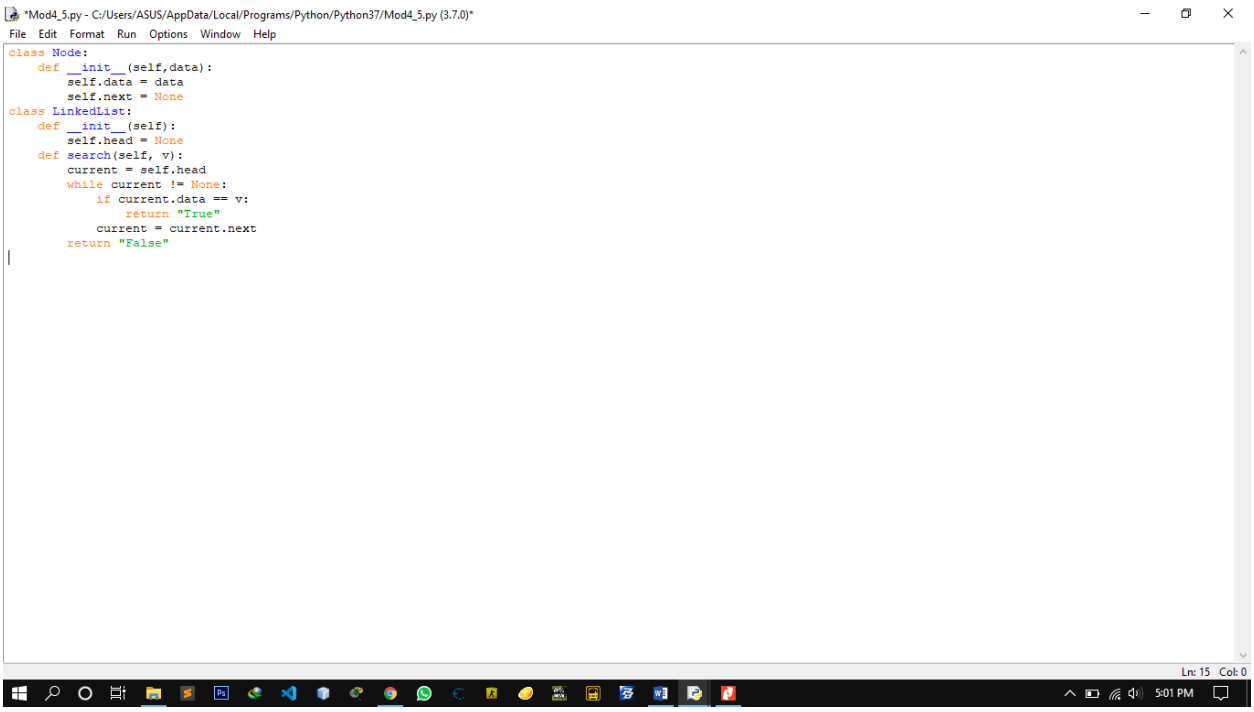
3.


Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/ASUS/AppData/Local/Programs/Python/Python37/Mod4_3.py ==
[('Rangga', 113, 'Sragen', 230000), ('Joko', 180, 'Surakarta', 235000)]
>>>
Ln: 6 Col: 4
Mod4_3.py - C:/Users/ASUS/AppData/Local/Programs/Python/Python37/Mod4_3.py (3.7.0)
File Edit Format Run Options Window Help
class Mhs(object):
def __init__(self, nama, nim, kota, uangsaku):
self.nama = nama
self.nim = nim
self.kotaTinggal = kota
self.uangSaku = uangsaku
h0 = Mhs("Huda", 107, "Sukoharjo", 240000)
h1 = Mhs("Rangga", 113, "Sragen", 230000)
h2 = Mhs("Angga", 145, "Surakarta", 250000)
h3 = Mhs("Joko", 180, "Surakarta", 235000)
h4 = Mhs("Eko", 104, "Boyolali", 240000)
h5 = Mhs("Ilham", 131, "Salatiga", 250000)
h6 = Mhs("Ardi", 123, "Klaten", 245000)
h7 = Mhs("Afa", 135, "Wonogiri", 245000)
h8 = Mhs("Fauzi", 213, "Klaten", 245000)
h9 = Mhs("Fahri", 164, "Karanganyar", 270000)
h10 = Mhs("Kaz", 129, "Purwodadi", 265000)
Daftar = [h0, h1, h2, h3, h4, h5, h6, h7, h8, h9, h10]
def uangTerkecilobj(self) :
terkecil = self[0].uangSaku
d = []
for i in self :
if i.uangSaku < terkecil :
d.append((i.nama, i.nim, i.kotaTinggal, i.uangSaku))
return d
a = uangTerkecilobj(Daftar)
print(a)
Ln: 27 Col: 35
4:51 PM

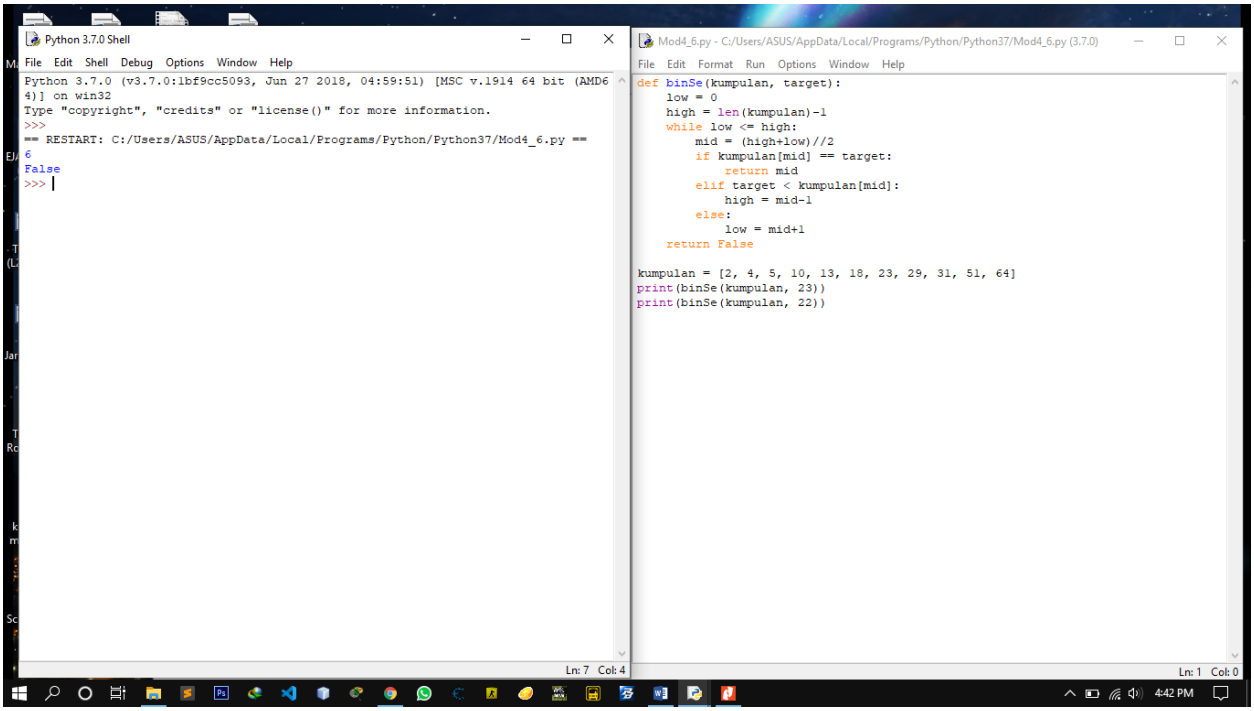
4.


Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/ASUS/AppData/Local/Programs/Python/Python37/Mod4_4.py ==
Huda
Rangga
Joko
Eko
Ardi
Afa
Fauzi
>>>
Ln: 12 Col: 4
Mod4_4.py - C:/Users/ASUS/AppData/Local/Programs/Python/Python37/Mod4_4.py (3.7.0)
File Edit Format Run Options Window Help
class Mhs(object):
def __init__(self, nama, nim, kota, uangsaku):
self.nama = nama
self.nim = nim
self.kotaTinggal = kota
self.uangSaku = uangsaku
h0 = Mhs("Huda", 107, "Sukoharjo", 240000)
h1 = Mhs("Rangga", 113, "Sragen", 230000)
h2 = Mhs("Angga", 145, "Surakarta", 250000)
h3 = Mhs("Joko", 180, "Surakarta", 235000)
h4 = Mhs("Eko", 104, "Boyolali", 240000)
h5 = Mhs("Ilham", 131, "Salatiga", 250000)
h6 = Mhs("Ardi", 123, "Klaten", 245000)
h7 = Mhs("Afa", 135, "Wonogiri", 245000)
h8 = Mhs("Fauzi", 213, "Klaten", 245000)
h9 = Mhs("Fahri", 164, "Karanganyar", 270000)
h10 = Mhs("Kaz", 129, "Purwodadi", 265000)
Daftar = [h0, h1, h2, h3, h4, h5, h6, h7, h8, h9, h10]
def cariUangSakuKurang250k(list):
temp = []
for i in list:
if i.uangSaku < 250000:
temp.append(i)
return temp
a = cariUangSakuKurang250k(Daftar)
for i in a:
print(i.nama)
Ln: 26 Col: 0
4:32 PM

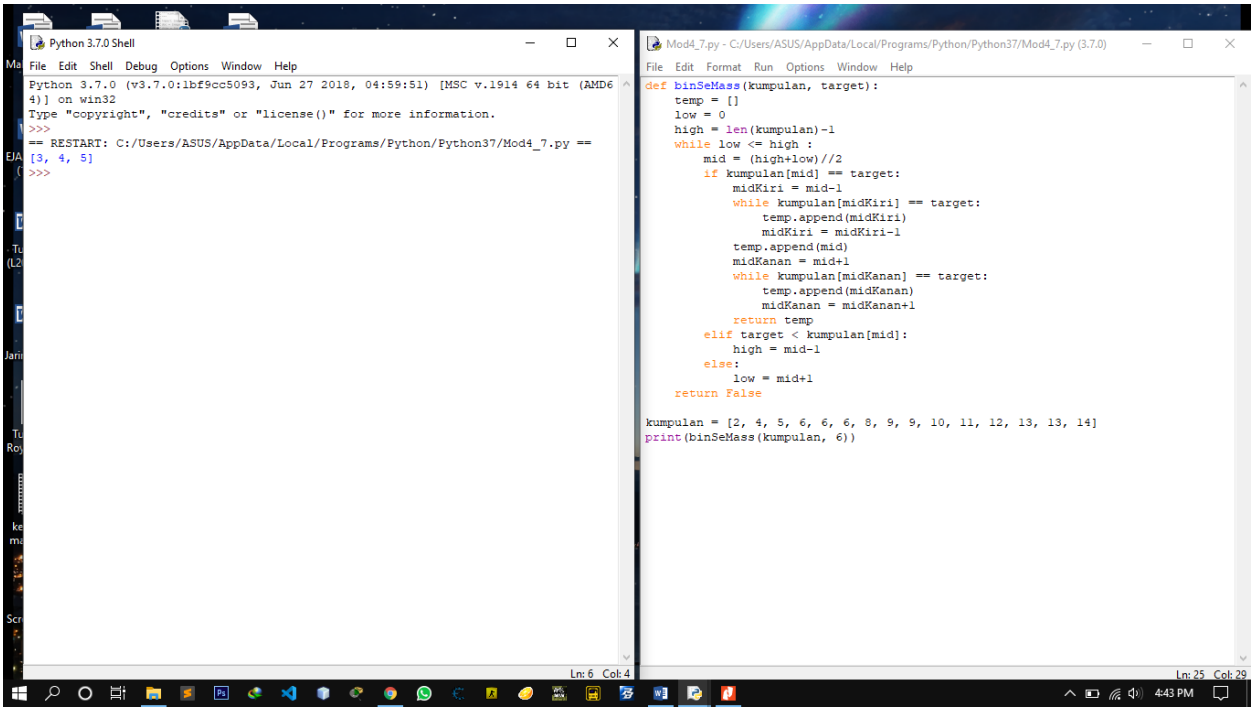
5.


Mod4_5.py - C:/Users/ASUS/AppData/Local/Programs/Python/Python37/Mod4_5.py (3.7.0)
File Edit Format Run Options Window Help
class Node:
def __init__(self,data):
self.data = data
self.next = None
class LinkedList:
def __init__(self):
self.head = None
def search(self, v):
current = self.head
while current != None:
if current.data == v:
return "True"
current = current.next
return "False"
Ln: 15 Col: 0
5:01 PM

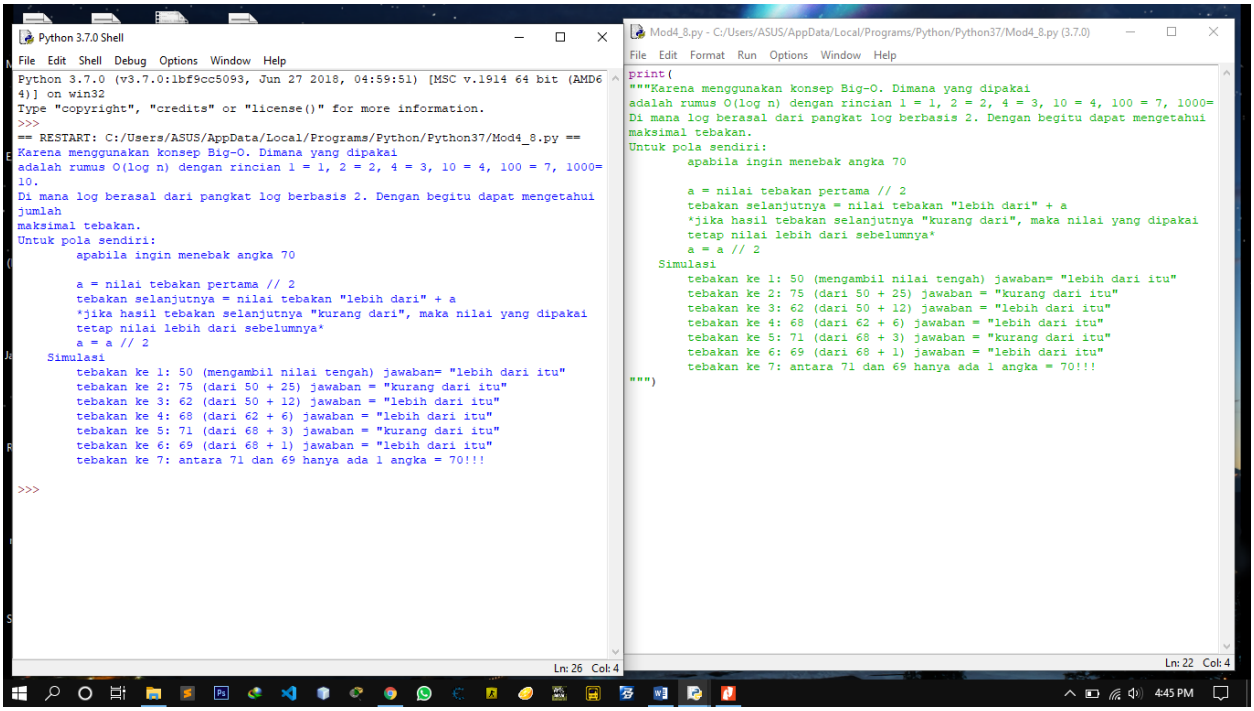
6.


Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/ASUS/AppData/Local/Programs/Python/Python37/Mod4_6.py ==
6
False
>>>
Ln: 7 Col: 4
Mod4_6.py - C:/Users/ASUS/AppData/Local/Programs/Python/Python37/Mod4_6.py (3.7.0)
File Edit Format Run Options Window Help
def binSe(kumpulan, target):
low = 0
high = len(kumpulan)-1
while low <= high:
mid = (high+low)//2
if kumpulan[mid] == target:
return mid
elif target < kumpulan[mid]:
high = mid-1
else:
low = mid+1
return False
kumpulan = [2, 4, 5, 10, 13, 18, 23, 29, 31, 51, 64]
print(binSe(kumpulan, 23))
print(binSe(kumpulan, 22))
Ln: 1 Col: 0
4:42 PM

7.


Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/ASUS/AppData/Local/Programs/Python/Python37/Mod4_7.py ==
[3, 4, 5]
>>>
Ln: 6 Col: 4
Mod4_7.py - C:/Users/ASUS/AppData/Local/Programs/Python/Python37/Mod4_7.py (3.7.0)
File Edit Format Run Options Window Help
def binSeMass(kumpulan, target):
temp = []
low = 0
high = len(kumpulan)-1
while low <= high :
mid = (high+low)//2
if kumpulan[mid] == target:
midKiri = mid-1
while kumpulan[midKiri] == target:
temp.append(midKiri)
midKiri = midKiri-1
temp.append(mid)
midKanan = mid+1
while kumpulan[midKanan] == target:
temp.append(midKanan)
midKanan = midKanan+1
return temp
elif target < kumpulan[mid]:
high = mid-1
else:
low = mid+1
return False
kumpulan = [2, 4, 5, 6, 6, 6, 8, 9, 9, 10, 11, 12, 13, 13, 14]
print(binSeMass(kumpulan, 6))
Ln: 25 Col: 29
4:43 PM

8.


Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/ASUS/AppData/Local/Programs/Python/Python37/Mod4_8.py ==
Karena menggunakan konsep Big-O. Dimana yang dipakai
adalah rumus O(log n) dengan rincian 1 = 1, 2 = 2, 4 = 3, 10 = 4, 100 = 7, 1000=10.
Di mana log berasal dari pangkat log berbasis 2. Dengan begitu dapat mengetahui jumlah
maksimal tebakan.
Untuk pola sendiri:
apabila ingin menebak angka 70
a = nilai tebakan pertama // 2
tebakan selanjutnya = nilai tebakan "lebih dari" + a
*jika hasil tebakan selanjutnya "kurang dari", maka nilai yang dipakai
tetap nilai lebih dari sebelumnya*
a = a // 2
Simulasi
tebakan ke 1: 50 (mengambil nilai tengah) jawaban= "lebih dari itu"
tebakan ke 2: 75 (dari 50 + 25) jawaban = "kurang dari itu"
tebakan ke 3: 62 (dari 50 + 12) jawaban = "lebih dari itu"
tebakan ke 4: 68 (dari 62 + 6) jawaban = "lebih dari itu"
tebakan ke 5: 71 (dari 68 + 3) jawaban = "kurang dari itu"
tebakan ke 6: 69 (dari 68 + 1) jawaban = "lebih dari itu"
tebakan ke 7: antara 71 dan 69 hanya ada 1 angka = 70!!!
>>>
Ln: 26 Col: 4
Mod4_8.py - C:/Users/ASUS/AppData/Local/Programs/Python/Python37/Mod4_8.py (3.7.0)
File Edit Format Run Options Window Help
print(
"""Karena menggunakan konsep Big-O. Dimana yang dipakai
adalah rumus O(log n) dengan rincian 1 = 1, 2 = 2, 4 = 3, 10 = 4, 100 = 7, 1000=
Di mana log berasal dari pangkat log berbasis 2. Dengan begitu dapat mengetahui
maksimal tebakan.
Untuk pola sendiri:
apabila ingin menebak angka 70
a = nilai tebakan pertama // 2
tebakan selanjutnya = nilai tebakan "lebih dari" + a
*jika hasil tebakan selanjutnya "kurang dari", maka nilai yang dipakai
tetap nilai lebih dari sebelumnya*
a = a // 2
Simulasi
tebakan ke 1: 50 (mengambil nilai tengah) jawaban= "lebih dari itu"
tebakan ke 2: 75 (dari 50 + 25) jawaban = "kurang dari itu"
tebakan ke 3: 62 (dari 50 + 12) jawaban = "lebih dari itu"
tebakan ke 4: 68 (dari 62 + 6) jawaban = "lebih dari itu"
tebakan ke 5: 71 (dari 68 + 3) jawaban = "kurang dari itu"
tebakan ke 6: 69 (dari 68 + 1) jawaban = "lebih dari itu"
tebakan ke 7: antara 71 dan 69 hanya ada 1 angka = 70!!!
""")
Ln: 22 Col: 4
4:45 PM