

Sekar Andini Khairunnisa

L200180188

G

Nomor 1

```
nomor 1.py - C:\Users\Sekar Andini Khns\Documents\Document Sekar\Sems 4\Prak ASD mo... Python 3.7.0 Shell
File Edit Format Run Options Window Help
class Mhs(object):
    def __init__(self, nama, nim, kota, uangsku):
        self.nama = nama
        self.nim = nim
        self.kotaTinggal = kota
        self.uangSaku = uangsku

h0 = Mhs("Aini", 107, "Sukoharjo", 240000)
h1 = Mhs("Salsa", 113, "Sragen", 230000)
h2 = Mhs("Sekar", 145, "Manado", 250000)
h3 = Mhs("Tyas", 180, "Surakarta", 235000)
h4 = Mhs("Eko", 104, "Boyolali", 240000)
h5 = Mhs("Reza", 131, "Ciamis", 250000)
h6 = Mhs("Denis", 123, "Klaten", 245000)
h7 = Mhs("Udin", 234, "Makassar", 245000)
h8 = Mhs("Dandung", 213, "Klaten", 245000)
h9 = Mhs("Hasna", 164, "banten", 270000)
h10 = Mhs("Kun", 129, "lampung", 265000)

Daftar = [h0, h1, h2, h3, h4, h5, h6, h7, h8, h9, h10]

def cariKotaTinggal(list, target):
    a = []
    for i in list:
        if i.kotaTinggal == target:
            a.append(list.index(i))
    return a

a = cariKotaTinggal(Daftar, "Manado")
print(a)

Python 3.7.0 Shell
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
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>>>
RESTART: C:\Users\Sekar Andini Khns\Documents\Document Sekar\Sems 4\Prak ASD modul 3 & 4\Modul 4\nomor 1.py
[2]
>>> |
```

Nomor 2

```
nomor 2.py - C:\Users\Sekar Andini Khns\Documents\Document Sekar\Sems 4\ Python 3.7.0 Shell
File Edit Format Run Options Window Help
class Mhs(object):
    def __init__(self, nama, nim, kota, uangsku):
        self.nama = nama
        self.nim = nim
        self.kotaTinggal = kota
        self.uangSaku = uangsku

h0 = Mhs("anis", 107, "Sukoharjo", 240000)
h1 = Mhs("Salsa", 113, "Sragen", 230000)
h2 = Mhs("Anggi", 145, "Surakarta", 250000)
h3 = Mhs("Tyas", 180, "Surakarta", 235000)
h4 = Mhs("Eko", 104, "Boyolali", 240000)
h5 = Mhs("radit", 131, "disana", 250000)
h6 = Mhs("Denis", 123, "Klaten", 245000)
h7 = Mhs("Alex", 223, "Labuan bajo", 245000)
h8 = Mhs("Daniel", 213, "Jakarta", 245000)
h9 = Mhs("Hasna", 164, "Karanganyar", 270000)
h10 = Mhs("adi", 129, "anu", 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)

Python 3.7.0 Shell
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
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>>>
RESTART: C:\Users\Sekar Andini Khns\Documents\Document Sekar\Sems 4\Prak ASD modul 3 & 4\Modul 4\nomor 2.py
230000
>>> |
```

Nomor 3

```
nomor 3.py - C:\Users\Sekar Andini Khns\Documents\Document Sekar\Sems 4\Prak ASD
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("Aini", 107, "Sukoharjo", 240000)
h1 = Mhs("Salsa", 113, "Sragen", 230000)
h2 = Mhs("Anggi", 145, "Surakarta", 250000)
h3 = Mhs("Tyas", 180, "Surakarta", 235000)
h4 = Mhs("Eko", 104, "Boyolali", 240000)
h5 = Mhs("Reza", 131, "Salatiga", 250000)
h6 = Mhs("Denis", 123, "Klaten", 245000)
h7 = Mhs("Udin", 234, "Wonogiri", 245000)
h8 = Mhs("Dandung", 213, "Klaten", 245000)
h9 = Mhs("Hasna", 164, "Karanganyar", 270000)
h10 = Mhs("Kun", 129, "Purwodadi", 265000)

Daftar = [h0, h1, h2, h3, h4, h5, h6, h7, h8, h9, h10]

def cariUangSakuTerkecilObject(list):
    temp = [list[0]]
    for i in list[1:]:
        if i.uangSaku < temp[0].uangSaku:
            temp = [i]
        elif i.uangSaku == temp[0].uangSaku:
            temp.append(i)
    return temp

a = cariUangSakuTerkecilObject(Daftar)
print(a)
```

```
Python 3.7.0 Shell
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Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (
4)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\Sekar Andini Khns\Documents\Document Sekar\Sems 4\Prak ASD
dul 3 & 4\Prak ASD modul 3 & 4\Modul 4\nomor 3.py
[<__main__.Mhs object at 0x0000015AAD3FC748>]
>>> |
```

## Nomor 4

```
nomor 4.py - C:\Users\Sekar Andini Khns\Documents\Document Sekar\Sems 4\Prak ASD
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("anies", 107, "Sukoharjo", 240000)
h1 = Mhs("Salsa", 113, "Sragen", 230000)
h2 = Mhs("Anggi", 145, "Surakarta", 250000)
h3 = Mhs("Tyas", 180, "Surakarta", 235000)
h4 = Mhs("Emir", 104, "Boyolali", 240000)
h5 = Mhs("Reza", 131, "Salatiga", 250000)
h6 = Mhs("Denisha", 123, "Klaten", 245000)
h7 = Mhs("daniel", 234, "bekasi", 245000)
h8 = Mhs("miwa", 213, "sunter", 245000)
h9 = Mhs("nana", 164, "atas bumi", 270000)
h10 = Mhs("Kun", 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)
```

```
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 (
4)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\Sekar Andini Khns\Documents\Document Sekar\Sems 4\Prak ASD
dul 3 & 4\Prak ASD modul 3 & 4\Modul 4\nomor 4.py
anies
Salsa
Tyas
Emir
Denisha
daniel
miwa
>>> |
```

## Nomor 5

```
No. 5.py - C:\Users\Sekar Andini Khns\Documents\Document Sekar\Sems 4\Modul4\No. 5.py...
File Edit Format Run Options Window Help
class node(object):
    def __init__(self, data, next = None):
        self.data = data
        self.next = next

    def cariLinkedList(self, dicari):
        curNode = self
        while curNode is not None:
            if curNode.next != None:
                if curNode.data != dicari:
                    curNode = curNode.next
                else:
                    print ("Data", dicari, "ada dalam Linked List")
                    break
            elif curNode.next == None:
                print ("Data", dicari, "tidak ada dalam Linked List")
                break

a = node(45)
menu = a
a.next = node(9)
a = a.next
a.next = node(17)
a = a.next
a.next = node(23)

menu.cariLinkedList(9)
menu.cariLinkedList(22)
```

```
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 4] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\Sekar Andini Khns\Documents\Document Sekar\Sems 4\Modul4\No. 5.py
Data 9 ada dalam Linked List
Data 22 tidak ada dalam Linked List
>>> |
```

## Nomor 6

```
nomor 6.py - C:\Users\Sekar Andini Khns\Documents\Document Sekar\Sems 4\Prak ASD modul 3 & 4\Modul 4\nomor 6.py
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

0 = Mhs("Aini", 107, "Sukoharjo", 240000)
1 = Mhs("Salsa", 113, "Sragen", 230000)
2 = Mhs("Anggi", 145, "Surakarta", 250000)
3 = Mhs("Tyas", 180, "Surakarta", 235000)
4 = Mhs("Eko", 104, "Boyolali", 240000)
5 = Mhs("Reza", 131, "Salatiga", 250000)
6 = Mhs("Denis", 123, "Klaten", 245000)
7 = Mhs("Udin", 234, "Wonogiri", 245000)
8 = Mhs("Dandung", 213, "Klaten", 245000)
9 = Mhs("Hasna", 164, "Karanganyar", 270000)
10 = Mhs("Kun", 129, "Purwodadi", 265000)

aftar = [h0, h1, h2, h3, h4, h5, h6, h7, h8, h9, h10]

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

umpulan = [2, 4, 5, 10, 13, 18, 23, 29, 31, 51, 64]
print(binSe(kumpulan, 5))
```

```
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
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>>>
RESTART: C:\Users\Sekar Andini Khns\Documents\Document Sekar\Sems 4\Prak ASD modul 3 & 4\Modul 4\nomor 6.py
2
>>> |
```

## Nomor 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\Sekar Andini Khns\Documents\Document Sekar\Sems 4\Prak ASD modul 3 & 4\Prak ASD modul 3 & 4\Modul 4\nomor 7.py
[3, 4, 5]
>>> |

class Mhs(object):
    def __init__(self, nama, nim, kota, uangsaku):
        self.nama = nama
        self.nim = nim
        self.kotaTinggal = kota
        self.uangSaku = uangsaku

h0 = Mhs("Aini", 107, "Sukoharjo", 240000)
h1 = Mhs("Salsa", 113, "Sragen", 230000)
h2 = Mhs("Anggi", 145, "Surakarta", 250000)
h3 = Mhs("Tyas", 180, "Surakarta", 235000)
h4 = Mhs("Eko", 104, "Boyolali", 240000)
h5 = Mhs("Reza", 131, "Salatiga", 250000)
h6 = Mhs("Denis", 123, "Klaten", 245000)
h7 = Mhs("Udin", 234, "Wonogiri", 245000)
h8 = Mhs("Dandung", 213, "Klaten", 245000)
h9 = Mhs("Hasna", 164, "Karanganyar", 270000)
h10 = Mhs("Kun", 129, "Purwodadi", 265000)

Daftar = [h0, h1, h2, h3, h4, h5, h6, h7, h8, h9, h10]

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
```

Nomor 8

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!!!
"""
```