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Kelas A

LATIHAN

4.1 Linear Search

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Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: E:/TUGAS TUGAS KULIAH/SEMESTER 4/Praktikum Algoritma Struktur data/MODUL-04/Latihan/4.1.py
DUL- 04/Latihan/4.1.py
>>> A = [10, 51, 2, 18, 4, 31, 13, 5, 23, 64, 29]
>>> carilurus(A, 31)
True
>>> carilurus(A, 8)
False
>>>
= RESTART: E:/TUGAS TUGAS KULIAH/SEMESTER 4/Praktikum Algoritma Struktur data/MODUL- 04/Latihan/4.1.py
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```

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4.1.py - E:/TUGAS TUGAS KULIAH/SEMESTER 4/Praktikum Algoritma Struktur data/MODUL-04/Latihan/4.1.py
File Edit Format Run Options Window Help
def carilurus(wadah, target):
    n = len(wadah)
    for i in range(n):
        if wadah[i] == target:
            return True
    return False

class Manusia(object):
    """class manusia dengan inisiasi 'nama'"""
    keadaan = 'lapar'
    def __init__(self, nama):
        self.nama = nama
    def ucapSalam(self):
        print("halo namaku: ", self.nama)
    def makan(self, s):
        print("saya baru saja makan ", s)
        self.keadaan = 'kenyang'
    def olah(self, k):
        print("saya baru saja latihan", k)
        self.keadaan = 'lapar'
    def kali(self, n):
        return n*2

class mahasiswa(Manusia):
    """class mahasiswa yang dibangun dai class Manusia"""
    def __init__(self, nama, NIM, kota, us):
        self.nama = nama
        self.NIM = NIM
        self.kotaTinggal = kota
        self.uang = us
    def __str__(self):
        s = self.nama + ', NIM ' + str(self.NIM) \
            + '. tinggal di ' + self.kotaTinggal \
            + '. uang saku Rp ' + str(self.uang) \
            + '. tiap bulan'
        return s
class MhsTIF(mahasiswa):
    def __init__(self, nama, NIM, kota, us):
        self.nama = nama
        self.NIM = NIM
        self.kotaTinggal = kota
        self.uang = us
```

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4.1.py - E:/TUGAS TUGAS KULIAH/SEMESTER 4/Praktikum Algoritma Struktur data/MODUL-04/Latihan/4.1.py
File Edit Format Run Options Window Help
self.NIM = NIM
self.kotaTinggal = kota
self.uang = us
def __str__(self):
    s = self.nama + ', NIM ' + str(self.NIM) \
        + '. tinggal di ' + self.kotaTinggal \
        + '. uang saku Rp ' + str(self.uang) \
        + '. tiap bulan'
    return s
class MhsTIF(mahasiswa):
    def __init__(self, nama, NIM, kota, us):
        self.nama = nama
        self.NIM = NIM
        self.kotaTinggal = kota
        self.uang = us
    def __str__(self):
        s = self.nama + ', NIM ' + str(self.NIM) \
            + '. tinggal di ' + self.kotaTinggal \
            + '. uang saku Rp ' + str(self.uang) \
            + '. tiap bulan'
        return s
c0 = MhsTIF('Ika', 10, 'Sukoharjo', 240000)
c1 = MhsTIF('Budi', 51, 'Surabaya', 230000)
c2 = MhsTIF('Ahmad', 2, 'Surakarta', 250000)
c3 = MhsTIF('Chandra', 18, 'Surakarta', 235000)
c4 = MhsTIF('Eka', 4, 'Boyolali', 240000)
c5 = MhsTIF('Fendi', 31, 'Salatiga', 250000)
c6 = MhsTIF('Deni', 13, 'Klaten', 245000)
c7 = MhsTIF('Saluh', 5, 'Wonogiri', 245000)
c8 = MhsTIF('Janto', 23, 'Klaten', 245000)
c9 = MhsTIF('Hasan', 64, 'Karanganyar', 270000)
c10 = MhsTIF('Khalid', 29, 'Purwodadi', 265000)
Daftar = [c0, c1, c2, c3, c4, c5, c6, c7, c8, c9, c10]
target = 'Klaten'
for i in Daftar:
    if i.kotaTinggal == target:
        print(i.nama + ' tinggal di ' + target)
```

4.2 Binary Search

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Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (AMD64)] on win32
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>>>
= RESTART: E:/TUGAS TUGAS KULIAH/SEMESTER 4/Praktikum Algoritma Struktur data/Modul 4/Latihan/4.2.py
>>>
```

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4.2.py - E:/TUGAS TUGAS KULIAH/SEMESTER 4/Praktikum Algoritma Struktur data/Modul 4/Latihan/4.2.py
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 True
        elif target < kumpulan[mid]:
            high = mid - 1
        else:
            low = mid + 1
    return False
```

Ln: 5

Ln: 12 Col: 1