

Nama : Kurniawan Andika Wijaya
NIM : L200180115

Latihan Modul 4 Algostruk

```
Python 3.8.2 Shell
Python 3.8.2 (v3.8.2:7b3ab5921f, Feb 24 2020, 17:52:18)
[Clang 6.0 (clang-600.0.57)] on darwin
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
>>> A=[10,51,2,18,2,4,5,6,7]
>>> carilurus(A,2)
True
>>> carilurus(A,1)
False
>>>
```

```
tgs1.py - /Users/ryanandityamanggala/Documents/tgs1.py (3.8.2)
def carilurus(wadah,target):
    n=len(wadah)
    for i in range(n):
        if wadah[i]==target:
            return True
    return False
```

Ln: 11 Col: 4

Ln: 7 Col: 0

```
Python 3.8.2 Shell
Python 3.8.2 (v3.8.2:7b3ab5921f, Feb 24 2020, 17:52:18)
[Clang 6.0 (clang-600.0.57)] on darwin
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
>>> A=[10,51,2,18,2,4,5,6,7]
>>> carilurus(A,2)
True
>>> carilurus(A,1)
False
>>>
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
Traceback (most recent call last):
  File "/Users/ryanandityamanggala/Documents/tgs1.py", line 23, in <module>
    for i in Daftar:
NameError: name 'Daftar' is not defined
>>>
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
ahmadtinggal di Klaten
>>>
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
ahmad tinggal di Klaten
>>>
```

```
tgs1.py - /Users/ryanandityamanggala/Documents/tgs1.py (3.8.2)
##def carilurus(wadah,target):
##    n=len(wadah)
##    for i in range(n):
##        if wadah[i]==target:
##            return True
##    return False
class mhsTi(object):
    def __init__(self,nama,nim,kota,us):
        self.nama=nama
        self.nim=nim
        self.kotaTinggal=kota
        self.uangsaku=us

a1=mhsTi('Taki',12,'Solo',400000)
a2=mhsTi('ciko',10,'Sukoharjo',4500000)
a3=mhsTi('ahmad',11,'Klaten',475000)
a4=mhsTi('zaki',13,'Kra',450000)
a5=mhsTi('putri',14,'Jogja',300000)
a6=mhsTi('malu',15,'Surabaya',600000)
a7=mhsTi('wani',16,'Bandung',1000000)

Daftar=[a1,a2,a3,a4,a5,a6,a7]

target='Klaten'
for i in Daftar:
    if i.kotaTinggal==target:
        print(i.nama+' tinggal di '+target)
```

Ln: 23 Col: 4

Ln: 27 Col: 23

```
Python 3.8.2 Shell
Python 3.8.2 (v3.8.2:7b3ab5921f, Feb 24 2020, 17:52:18)
[Clang 6.0 (clang-600.0.57)] on darwin
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
>>> A=[10,51,2,18,2,4,5,6,7]
>>> cariLurus(A,2)
True
>>> cariLurus(A,1)
False
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
Traceback (most recent call last):
  File "/Users/ryanandityamanggala/Documents/tgs1.py", line 23, in <module>
    for i in Daftar:
NameError: name 'Daftar' is not defined
>>>
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
ahmadtinggal di Klaten
>>>
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
ahmad tinggal di Klaten
>>>
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
>>> A=[10,51,2,18,2,4,5,6,7]
>>> cariTerkecil(A)
10
>>>

Ln: 28 Col: 4
```

```
tgs1.py - /Users/ryanandityamanggala/Documents/tgs1.py (3.8.2)
##def cariLurus(wadah,target):
##    n=len(wadah)
##    for i in range(n):
##        if wadah[i]==target:
##            return True
##    return False
##class mhsTi(object):
##    def __init__(self,nama,nim,kota,us):
##        self.nama=nama
##        self.nim=nim
##        self.kotaTinggal=kota
##        self.uangsaku=us
##
##a1=mhsTi('Taki',12,'Solo',400000)
##a2=mhsTi('ciko',10,'Sukoharjo',4500000)
##a3=mhsTi('ahmad',11,'Klaten',475000)
##a4=mhsTi('zaki',13,'Kra',450000)
##a5=mhsTi('putri',14,'Jogja',300000)
##a6=mhsTi('malu',15,'Surabaya',600000)
##a7=mhsTi('wani',16,'Bandung',1000000)
##
##Daftar=[a1,a2,a3,a4,a5,a6,a7]
##
##target='Klaten'
##for i in Daftar:
##    if i.kotaTinggal==target:
##        print(i.nama+' tinggal di '+target)
##
def cariTerkecil(kumpulan):
    n=len(kumpulan)
    terkecil=kumpulan[0]
    for i in range(1,n):
        if kumpulan[i]<terkecil:
            terkecil=kumpulan[i]
    return terkecil

Ln: 35 Col: 19
```

```
Python 3.8.2 Shell
Python 3.8.2 (v3.8.2:7b3ab5921f, Feb 24 2020, 17:52:18)
[Clang 6.0 (clang-600.0.57)] on darwin
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
>>> A=[10,51,2,18,2,4,5,6,7]
>>> cariLurus(A,2)
True
>>> cariLurus(A,1)
False
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
Traceback (most recent call last):
  File "/Users/ryanandityamanggala/Documents/tgs1.py", line 23, in <module>
    for i in Daftar:
NameError: name 'Daftar' is not defined
>>>
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
ahmadtinggal di Klaten
>>>
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
ahmad tinggal di Klaten
>>>
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
>>> A=[10,51,2,18,2,4,5,6,7]
>>> cariTerkecil(A)
10
>>>
===== RESTART: /Users/ryanandityamanggala/Documents/tgs1.py =====
>>> A=[10,51,2,18,2,4,5,6,7]
>>> binSe(A,2)
True
>>> binSe(A,1)
False
>>>

Ln: 35 Col: 4
```

```
tgs1.py - /Users/ryanandityamanggala/Documents/tgs1.py (3.8.2)
##        self.nim=nim
##        self.kotaTinggal=kota
##        self.uangsaku=us
##
##a1=mhsTi('Taki',12,'Solo',400000)
##a2=mhsTi('ciko',10,'Sukoharjo',4500000)
##a3=mhsTi('ahmad',11,'Klaten',475000)
##a4=mhsTi('zaki',13,'Kra',450000)
##a5=mhsTi('putri',14,'Jogja',300000)
##a6=mhsTi('malu',15,'Surabaya',600000)
##a7=mhsTi('wani',16,'Bandung',1000000)
##
##Daftar=[a1,a2,a3,a4,a5,a6,a7]
##
##target='Klaten'
##for i in Daftar:
##    if i.kotaTinggal==target:
##        print(i.nama+' tinggal di '+target)
##
##def cariTerkecil(kumpulan):
##    n=len(kumpulan)
##    terkecil=kumpulan[0]
##    for i in range(1,n):
##        if kumpulan[i]<terkecil:
##            terkecil=kumpulan[i]
##    return terkecil
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: 31 Col: 16
```