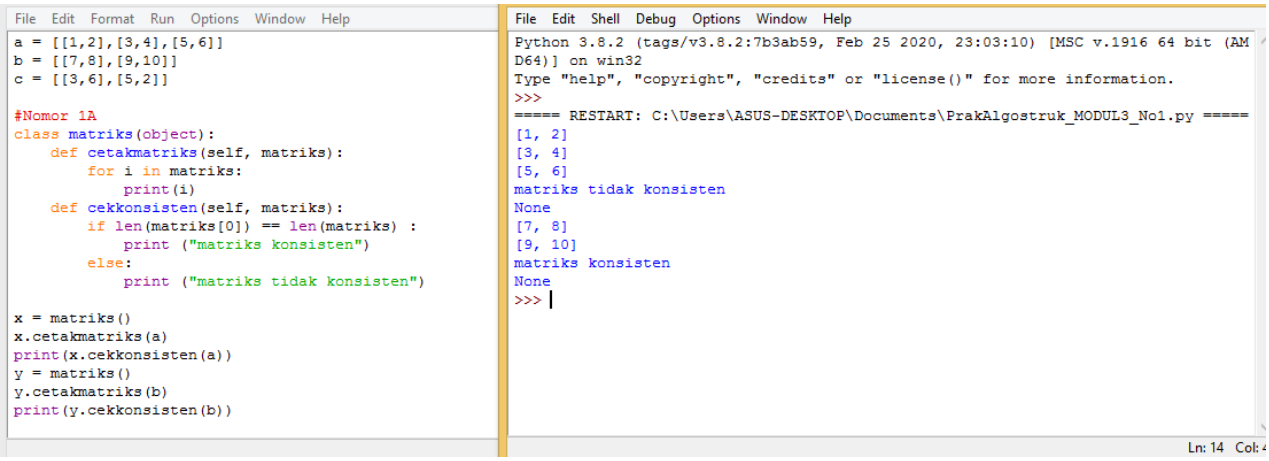
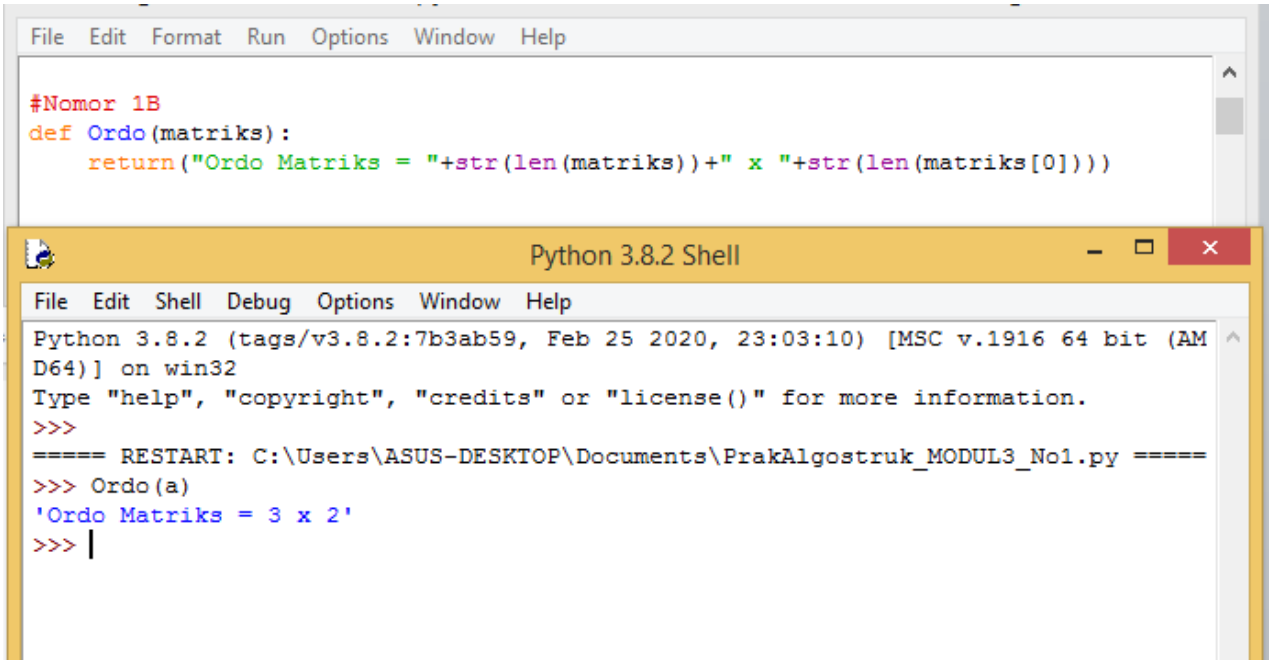
Nama : Anggit Astriani
NIM : L200180111

# MODUL 3

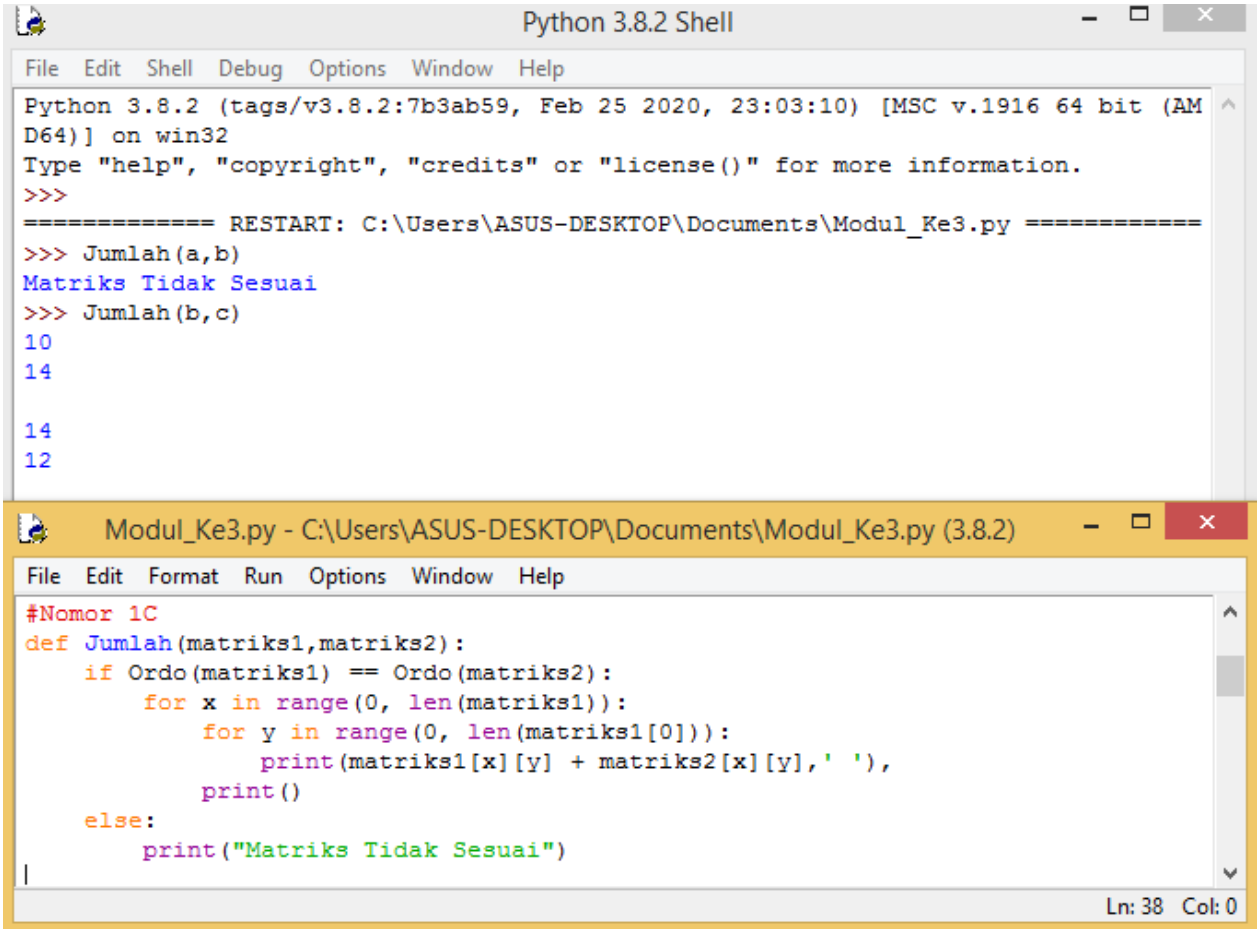
Nomor 1A



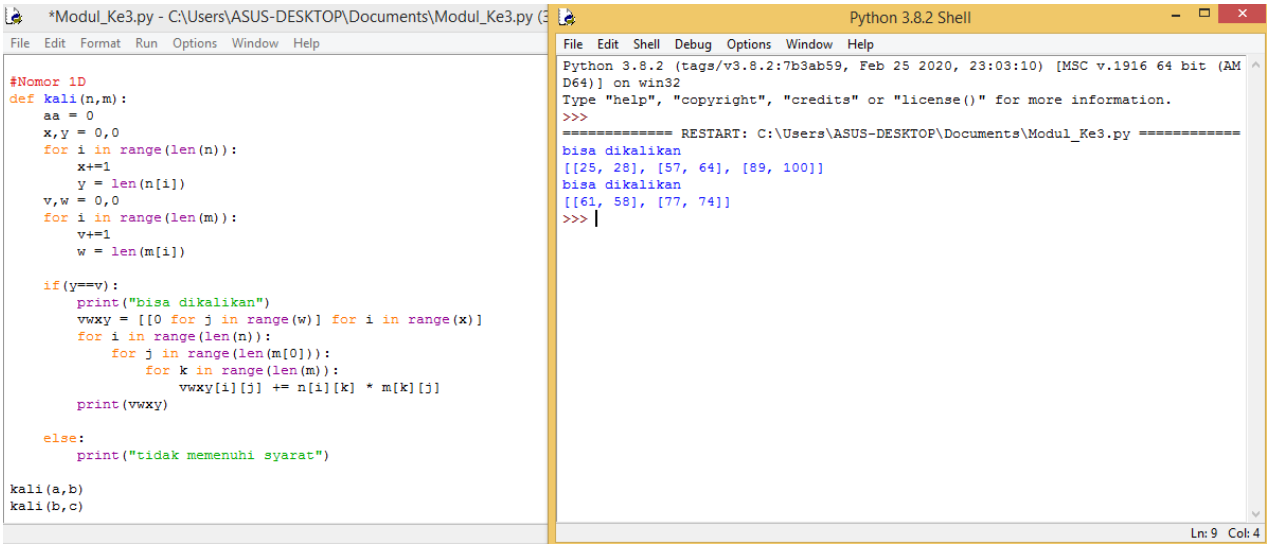

Nomor 1B

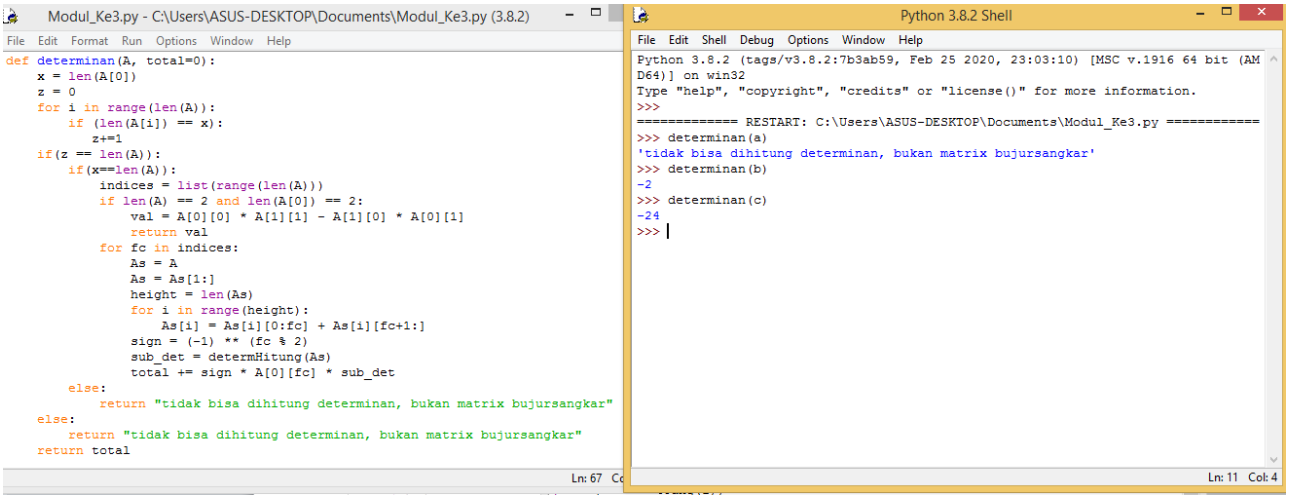


Nomor 1C

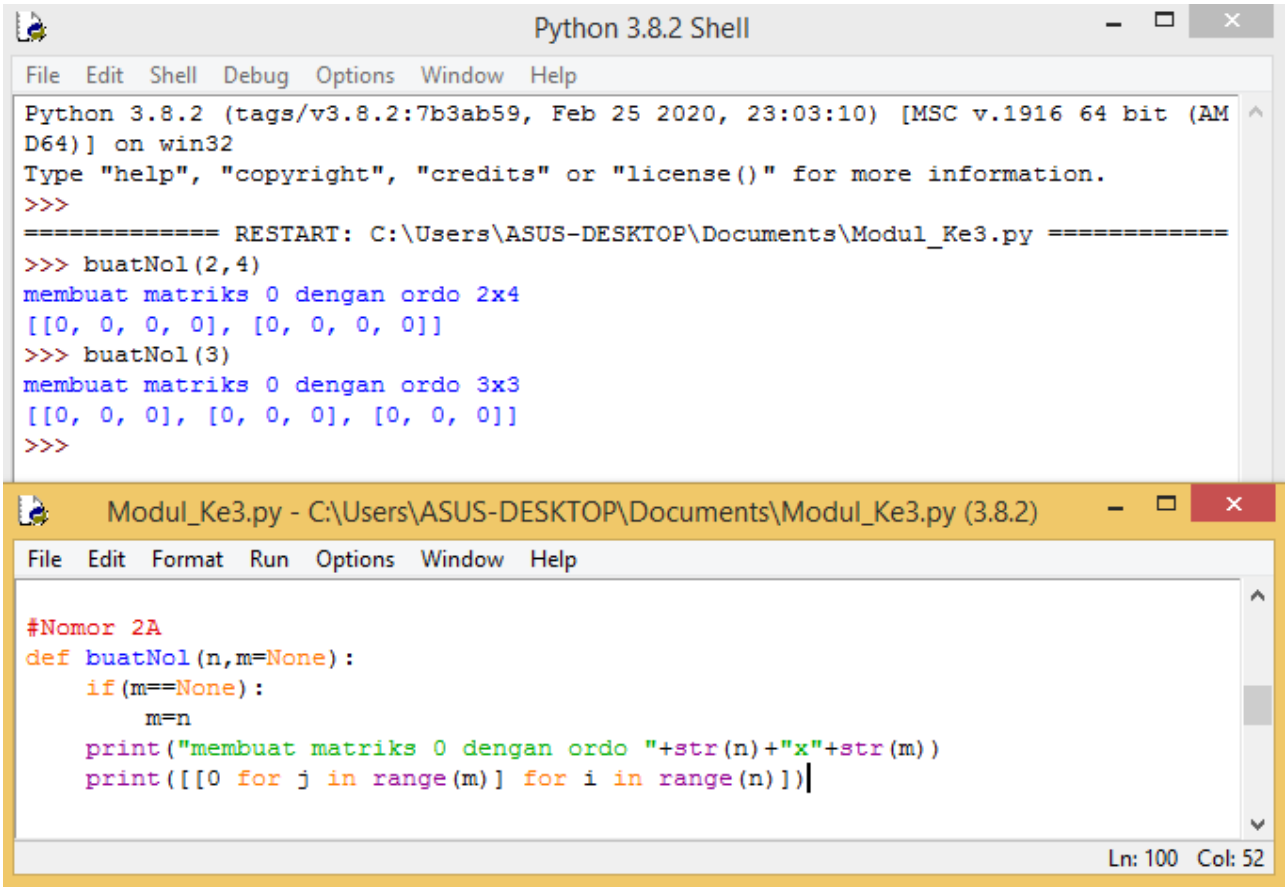



Nomor 1D

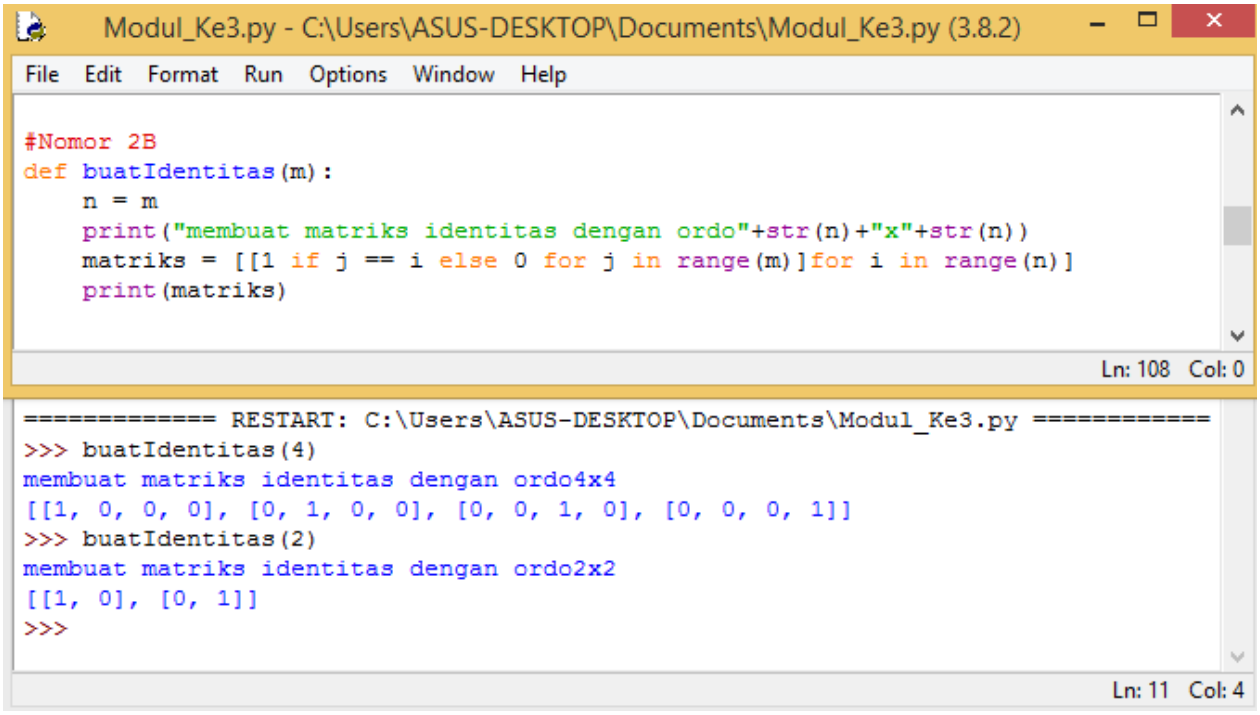



Modul_Ke3.py - C:\Users\ASUS-DESKTOP\Documents\Modul_Ke3.py (3.8.2)
File Edit Format Run Options Window Help
def determinan(A, total=0):
x = len(A[0])
z = 0
for i in range(len(A)):
if (len(A[i]) == x):
z+=1
if(z == len(A)):
if(x==len(A)):
indices = list(range(len(A)))
if len(A) == 2 and len(A[0]) == 2:
val = A[0][0] * A[1][1] - A[1][0] * A[0][1]
return val
for fc in indices:
As = A
As = As[1:]
height = len(As)
for i in range(height):
As[i] = As[i][0:fc] + As[i][fc+1:]
sign = (-1) ** (fc % 2)
sub_det = determHitung(As)
total += sign * A[0][fc] * sub_det
else:
return "tidak bisa dihitung determinan, bukan matrix bujursangkar"
else:
return "tidak bisa dihitung determinan, bukan matrix bujursangkar"
return total
Ln: 67
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\ASUS-DESKTOP\Documents\Modul_Ke3.py ==========
>>> determinan(a)
'tidak bisa dihitung determinan, bukan matrix bujursangkar'
>>> determinan(b)
-2
>>> determinan(c)
-24
>>>
Ln: 11 Col: 4

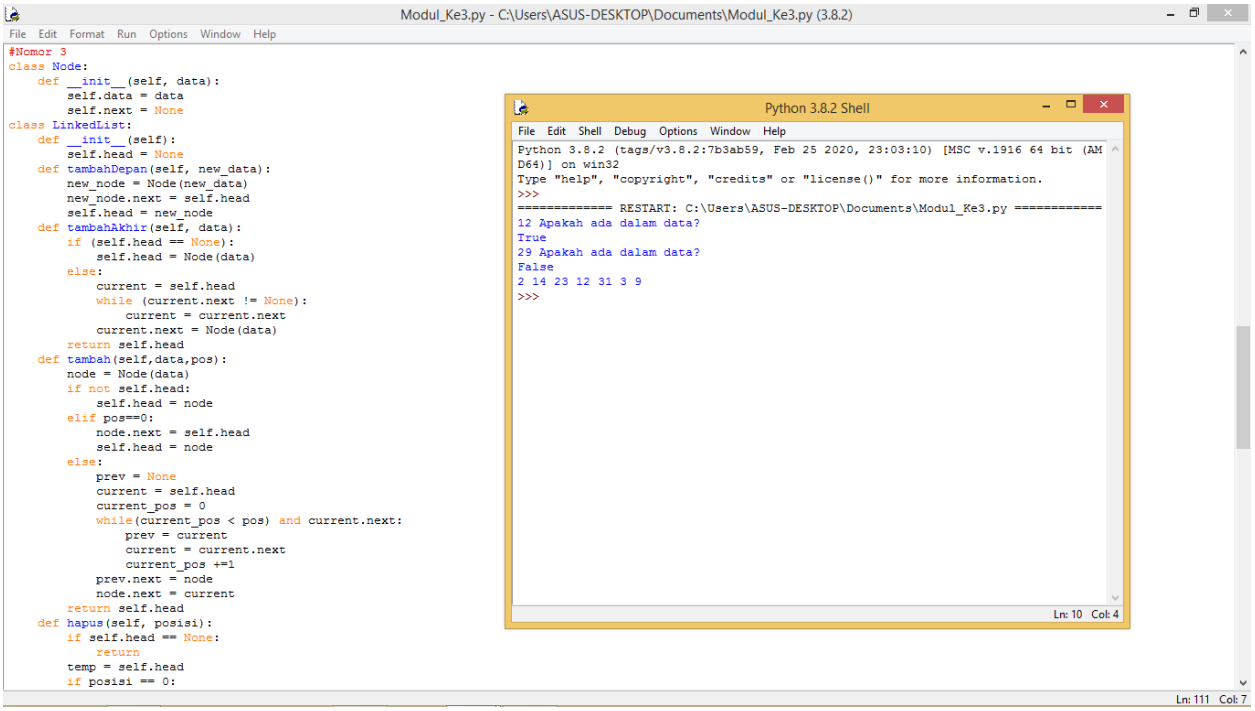
Nomor 2A


Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\ASUS-DESKTOP\Documents\Modul_Ke3.py ==========
>>> buatNol(2,4)
membuat matriks 0 dengan ordo 2x4
[[0, 0, 0, 0], [0, 0, 0, 0]]
>>> buatNol(3)
membuat matriks 0 dengan ordo 3x3
[[0, 0, 0], [0, 0, 0], [0, 0, 0]]
>>>
Modul_Ke3.py - C:\Users\ASUS-DESKTOP\Documents\Modul_Ke3.py (3.8.2)
File Edit Format Run Options Window Help
#Nomor 2A
def buatNol(n,m=None):
if(m==None):
m=n
print("membuat matriks 0 dengan ordo "+str(n)+"x"+str(m))
print([[0 for j in range(m)] for i in range(n)])
Ln: 100 Col: 52

Nomor 2B




Nomor 3



```
            self.head = temp.next
            temp = None
            return
        for i in range(posisi -1 ):
            temp = temp.next
            if temp is None:
                break
        if temp is None:
            return
        if temp.next is None:
            return
        next = temp.next.next
        temp.next = None
        temp.next = next
    def cari(self, x):
        current = self.head
        while current != None:
            if current.data == x:
                print(x, "Apakah ada dalam data?")
                return True
            current = current.next
        print(x, "Apakah ada dalam data?")
        return False

    def display(self):
        current = self.head
        while current is not None:
            print(current.data, end = ' ')
            current = current.next

a = LinkedList()
a.tambahDepan(31)
a.tambahDepan(12)
a.tambahDepan(23)
a.tambahDepan(14)
a.tambahDepan(2)
a.tambahDepan(19)
a.tambahAkhir(9)
a.hapus(0)
a.tambah(3,5)
print(a.cari(12))
print(a.cari(29))
a.display()
```

Ln: 111 Col: 7

## Nomor 4

Modul_Ke3.py - C:\Users\ASUS-DESKTOP\Documents\Modul_Ke3.py (3.8.2)

File Edit Format Run Options Window Help

```
#Nomor 4
class Node:
    def __init__(self, data):
        self.data = data
        self.prev = None
class DoublyLinkedList:
    def __init__(self):
        self.head = None
    def awal(self, new_data):
        print("menambah pada awal", new_data)
        new_node = Node(new_data)
        new_node.next = self.head
        if self.head is not None:
            self.head.prev = new_node
        self.head = new_node
    def akhir(self, new_data):
        print("menambah pada akhir", new_data)
        new_node = Node(new_data)
        new_node.next = None
        if self.head is None:
            new_node.prev = None
            self.head = new_node
            return
        last = self.head
        while(last.next is not None):
            last = last.next
        last.next = new_node
        new_node.prev = last
        return
    def printList(self, node):
        print("\nDari Depan :")
        while(node is not None):
            print(" % d" %(node.data))
            last = node
            node = node.next
        print("\nDari Belakang :")
        while(last is not None):
            print(" % d" %(last.data))
            last = last.prev

b = DoublyLinkedList()
b.awal(8)
b.awal(1)
b.akhir(7)
b.akhir(3)
b.printList(b.head)
```

Ln: 225 Col: 32

Python 3.8.2 Shell

File Edit Shell Debug Options Window Help

```
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============ RESTART: C:\Users\ASUS-DESKTOP\Documents\Modul_Ke3.py ============
menambah pada awal 8
menambah pada awal 1
menambah pada akhir 7
menambah pada akhir 3

Dari Depan :
  1
  8
  7
  3

Dari Belakang :
  3
  7
  8
  1
>>>
```

Ln: 21 Col: 4