**SOAL:**

1. Buatlah program lengkap dari semua algoritma dan function di atas dalam bentuk menu untuk menambah data, melihat data, dan menghapus data!
2. Buatlah function tambahan yang berguna untuk mencari data yang ada dalam linked list baik secara ber-Head maupun ber-Head dan Tail!
3. Buatlah function untuk menghapus data tertentu dalam linked list!
4. Buatlah penyisipan node setelah atau sebelum data tertentu

**JAWABAN**:

print('========================')

print('Nama : Febro Herdyanto')

print('NIM : 312010043')

print('Kelas : TI.20.B.1')

print('Task : Single Linked List Circular')

print('========================')

class Node:

def \_\_init\_\_(self, initdata):

self.data = initdata

self.next = None

def getData(self):

return self.data

def getNext(self):

return self.next

def setData(self, newdata):

self.data = newdata

def setNext(self, newnext):

self.next = newnext

class Unorderedlist:

def \_\_init\_\_(self):

self.head = None

def show(self):

current = self.head

print('Head ->', end='')

while current != None:

print(current.getData(), end='->')

current = current.getNext()

print('None')

def isEmpty(self):

return self.head == None

def add(self, item):

temp = Node(item)

temp.setNext(self.head)

self.head = temp

def size(self):

current = self.head

count = 0

while current != None:

count += 1

current = current.getNext()

return count

def search(self, item):

current = self.head

found = False

while current != None and not found:

if current.getData() == item:

found = True

else:

current = current.getNext()

return found

def remove(self, item):

current = self.head

previous = None

found = False

while not found:

if current.getData() == item:

found = True

else:

previous = current

current = current.getNext()

if previous == None:

self.head = current.getNext()

else:

previous.setNext(current.getNext())

mylist = Unorderedlist()

mylist.add(31)

mylist.add(20)

mylist.add(41)

mylist.show()

def remove(self, item):

current = self.head

previous = None

found = False

while not found:

if current.getData() == item:

found = True

else:

previous = current

current = current.getNext()

if previous == None:

self.head = current.getNext()

else:

previous.setNext(current.getNext())

mylist = Unorderedlist()

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Text

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