LAPORAN PRAKTIKUM
ALGORITMA DAN STRUKTUR DATA
MODUL 8

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KELAS D

Nomer 1

Nomer 2

Nomer 3

```
class Stack(object):
    def __init__(self):
        self.items = []

    def isEmpty(self):
        return len(self)==0

    def __len__(self):
        return len(self.items)

    def peek(self):
        assert not self.isEmpty(), "stack kosong, tidak bisa ditrip."
        return self.items[-1]

    def pop(self):
        assert not self.isEmpty(), "stack kosong, tidak bisa di-pop"
        print(self.items.pop(), "popped")
        print("stack sekarang", self.items)

    def push(self, data):
        self.items.append(data)
        print(data, "pushed")
        print("stack sekarang", self.items)

nilai = Stack()
for i in range(18):
    if i % 3 == 0:
        nilai.push(i)
    elif i % 4 == 0:
        nilai.pop()
```

```
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 21:26:53) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: D:/Kuliah/Praktikum Algoritma dan Struktur Data/Modul 5/No3.py ==
0 pushed
stack sekarang [0]
3 pushed
stack sekarang [0, 3]
3 popped
stack sekarang [0]
6 pushed
stack sekarang [0, 6]
6 popped
stack sekarang [0]
9 pushed
stack sekarang [0, 9]
12 pushed
stack sekarang [0, 9, 12]
15 pushed
stack sekarang [0, 9, 12, 15]
>>>
```

Nomer 4

```
class Queue(object):
    def __init__(self):
        self.qlist = []

    def isEmpty(self):
        return len(self) == 0

    def __len__(self):
        return len(self.qlist)

    def enqueue(self, data):
        self.qlist.append(data)

    def dequeue(self):
        assert not self.isEmpty(), "Antrian sedang kosong."
        return self.qlist.pop(0)

    def getFrontMost(self):
        return self.qlist[0]

    def getRearMost(self):
        return self.qlist[len(self.qlist) - 1]

kyu = Queue()
kyu.enqueue(3)
kyu.enqueue(6)
kyu.enqueue(9)
kyu.enqueue(12)
kyu.enqueue(15)
kyu.enqueue(18)

print("Queue :", kyu.qlist)

print("Terdepan :", kyu.getFrontMost())
print("Terbelakang :", kyu.getRearMost())
```

```
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 21:26:53) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: D:/Kuliah/Praktikum Algoritma dan Struktur Data/Modul 5/No4.py ==
Queue : [3, 6, 9, 12, 15, 18]
Terdepan : 3
Terbelakang : 18
>>>
```

Nomer 5