NAMA : AHMAD ROZIN

NIM : L200170135

KELAS : D

MODUL 8

Nomor 4

Queue

nomor4_Queue.py - D:\Tugas\Praktikum ASD\Modul8\nomor4_Queue.py (3.7.2)

```
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()
        return self.qlist.pop(0)
    def getFront(self):
        return self.qlist[-1]
    def getRear(self):
        return self.qlist[0]

a = Queue()
a.enqueue('A')
a.enqueue('B')
a.enqueue('C')
a.enqueue('D')
a.enqueue('E')

print(a.qlist)
a.dequeue()
print(a.qlist)

print(a.getFront())
print(a.getRear())
```

Python 3.7.2 Shell

```
Python 3.7.2 (tags/v3.7.2:9a3ffc0492, Dec 23 2018, 23:09:28) [MSC v.1916 64 bit (AMD
64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\Tugas\Praktikum ASD\Modul8\nomor4_Queue.py ==========
['A', 'B', 'C', 'D', 'E']
['B', 'C', 'D', 'E']
E
B
>>>
```

Priority Queue

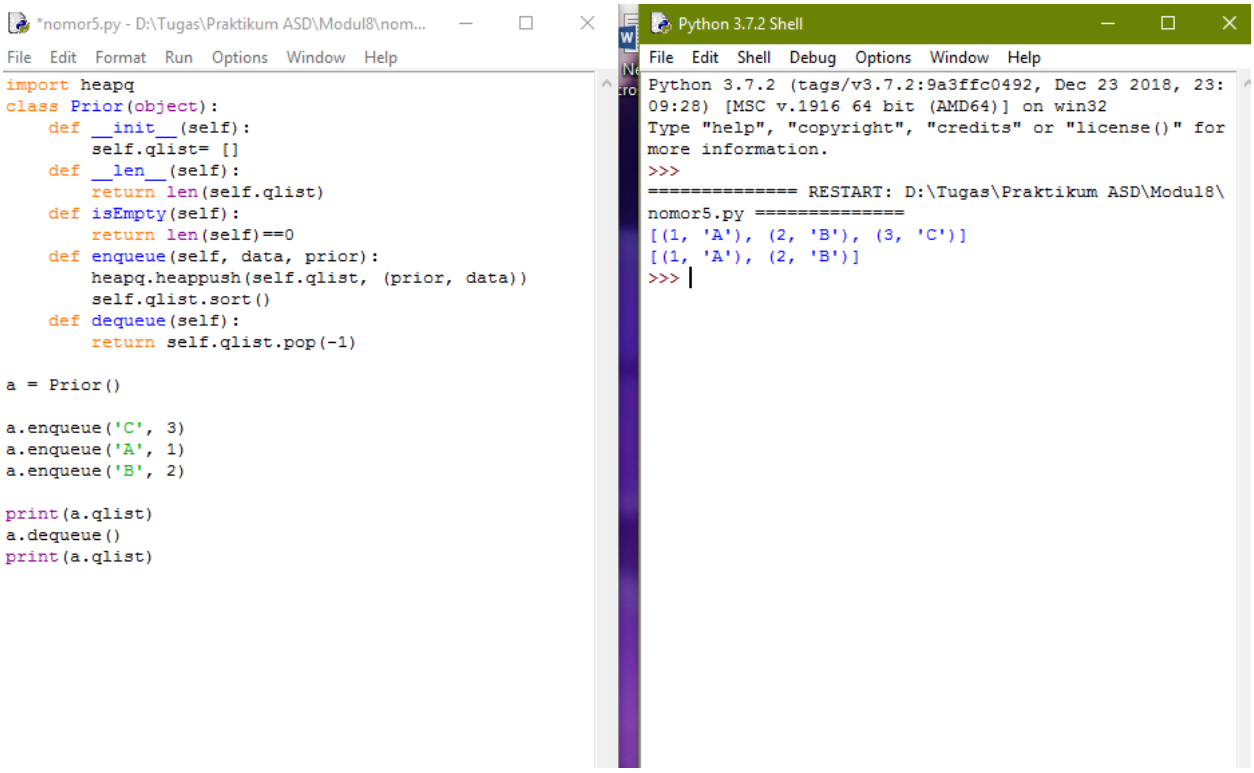
nomor4_priorQueue.py - D:\Tugas\Praktikum ASD\Modul8\nomor4_priorQueue.py (3.7.2)

```
import heapq
class Prior(object):
    def __init__(self):
        self.qlist= []
    def __len__(self):
        return len(self.qlist)
    def isEmpty(self):
        return len(self)==0
    def enqueue(self, data, prior):
        heapq.heappush(self.qlist, (prior, data))
        self.qlist.sort()
    def dequeue(self):
        return self.qlist.pop(-1)
    def getFront(self):
        return self.qlist[-1]
    def getRear(self):
        return self.qlist[0]

a = Prior()

a.enqueue('E', 5)
a.enqueue('A', 1)
a.enqueue('B', 2)
a.enqueue('D', 4)
a.enqueue('C', 3)

print(a.qlist)
a.dequeue()

print(a.qlist)
```

Python 3.7.2 Shell

```
Python 3.7.2 (tags/v3.7.2:9a3ffc0492, Dec 23 2018, 23:09:28) [MSC v.1916 64 bit (AMD
64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
======== RESTART: D:\Tugas\Praktikum ASD\Modul8\nomor4_priorQueue.py ========
[(1, 'A'), (2, 'B'), (3, 'C'), (4, 'D'), (5, 'E')]
[(1, 'A'), (2, 'B'), (3, 'C'), (4, 'D')]
>>>
```

Nomor 5


*nomor5.py - D:\Tugas\Praktikum ASD\Modul8\nom...
File Edit Format Run Options Window Help
import heapq
class Prior(object):
def __init__(self):
self.qlist= []
def __len__(self):
return len(self.qlist)
def isEmpty(self):
return len(self)==0
def enqueue(self, data, prior):
heapq.heappush(self.qlist, (prior, data))
self.qlist.sort()
def dequeue(self):
return self.qlist.pop(-1)
a = Prior()
a.enqueue('C', 3)
a.enqueue('A', 1)
a.enqueue('B', 2)
print(a.qlist)
a.dequeue()
print(a.qlist)
Python 3.7.2 Shell
File Edit Shell Debug Options Window Help
Python 3.7.2 (tags/v3.7.2:9a3ffc0492, Dec 23 2018, 23:09:28) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\Tugas\Praktikum ASD\Modul8\nomor5.py ==========
[(1, 'A'), (2, 'B'), (3, 'C')]
[(1, 'A'), (2, 'B')]
>>>