

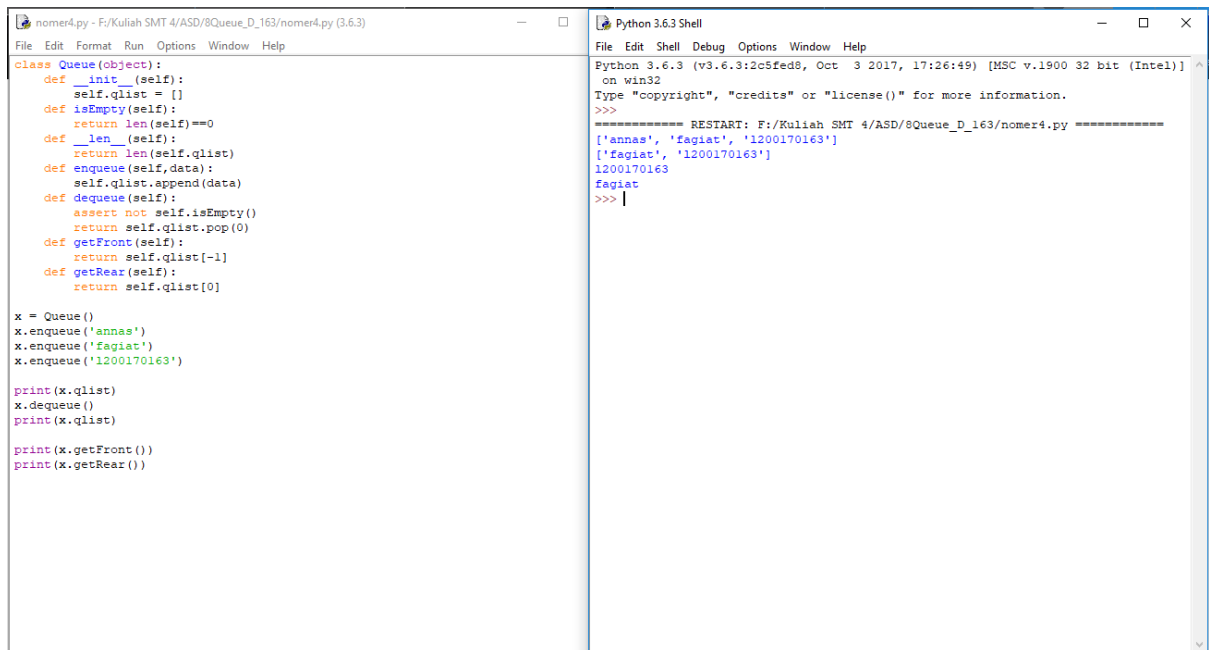
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Kelas : D

Nim : L200170163

LAPORAN PRAKTIKUM  
ALGORTIMA DAN STRUKTUR DATA  
MODUL KE 8 (Queue)

**Nomor 4**



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

x = Queue()
x.enqueue('annas')
x.enqueue('fagiat')
x.enqueue('1200170163')

print(x.qlist)
x.dequeue()
print(x.qlist)

print(x.getFront())
print(x.getRear())
```

```
Python 3.6.3 (v3.6.3:2c5fed8, Oct 3 2017, 17:26:49) [MSC v.1900 32 bit (Intel)]
on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: F:/Kuliah SMT 4/ASD/8Queue_D_163/nomer4.py =====
['annas', 'fagiat', '1200170163']
['fagiat', '1200170163']
1200170163
fagiat
>>> |
```

**Nomor 4 Priority Queue**

```
nomer4pq.py - F:/Kuliah SMT 4/ASD/8Queue_D_163/nomer4pq.py (3.6.3)
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)
    def getFront(self):
        return self.qlist[-1]
    def getRear(self):
        return self.qlist[0]

x = Prior()

x.enqueue('annas', 4)
x.enqueue('fagiat', 5)
x.enqueue('1200170163', 1)

print(x.qlist)
x.dequeue()
print(x.qlist)
```

```
Python 3.6.3 Shell
File Edit Shell Debug Options Window Help
Python 3.6.3 (v3.6.3:2c5fed8, Oct 3 2017, 17:26:49) [MSC v.1900 32 bit (Intel)]
on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: F:/Kuliah SMT 4/ASD/8Queue_D_163/nomer4pq.py =====
[(1, '1200170163'), (4, 'annas'), (5, 'fagiat')]
[(1, '1200170163'), (4, 'annas')]
>>>
```

## Nomer 5

```
nomer5.py - F:/Kuliah SMT 4/ASD/8Queue_D_163/nomer5.py (3.6.3)
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)

x = Prior()

x.enqueue('annas', 4)
x.enqueue('fagiat', 5)
x.enqueue('1200170163', 1)

print(x.qlist)
x.dequeue()
print(x.qlist)
```

```
Python 3.6.3 Shell
File Edit Shell Debug Options Window Help
Python 3.6.3 (v3.6.3:2c5fed8, Oct 3 2017, 17:26:49) [MSC v.1900 32 bit (Intel)]
on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: F:/Kuliah SMT 4/ASD/8Queue_D_163/nomer5.py =====
[(1, '1200170163'), (4, 'annas'), (5, 'fagiat')]
[(1, '1200170163'), (4, 'annas')]
>>>
```

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