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Modul 8 Queue
Laporan Praktikum - Algoritma dan Struktur Data

4. Menulis metode untuk mengetahui item yang paling depan tanpa menghapusnya dan item yang paling belakang tanpa menghapusnya (Class Queue).

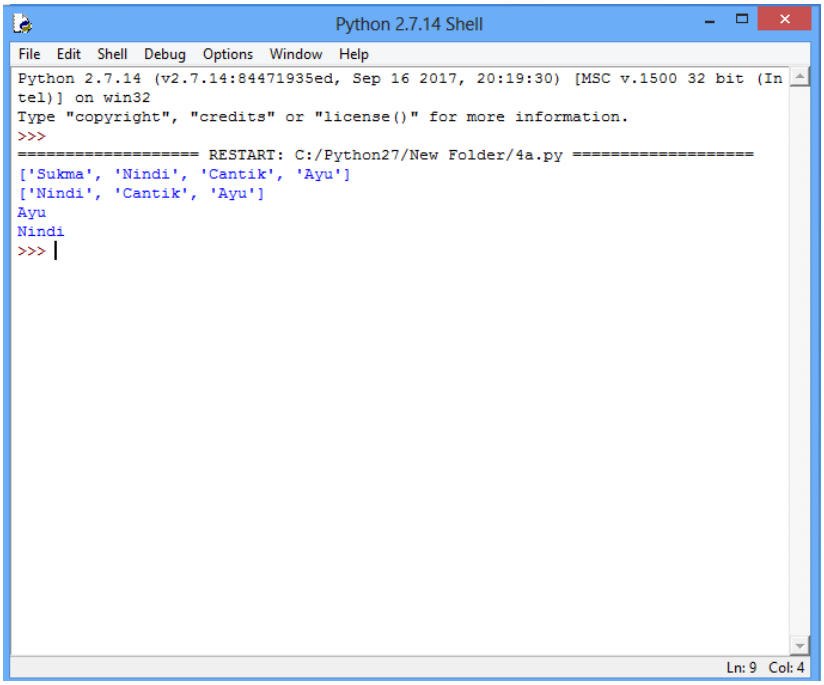
```
class Queue(object):
    def __init__(self):
        self.qlist = []
    def isEmpty(self):
        return len(self)==0
    def __len__(self):
        return len(self.qlist)
    def enqueue(self,data):
        self.qlist.append(data)
    def dequeue(self):
        assert not self.isEmpty()
        return self.qlist.pop(0)
    def getFront(self):
        return self.qlist[-1]
    def getRear(self):
        return self.qlist[0]

a = Queue()
a.enqueue('Sukma')
a.enqueue('Nindi')
a.enqueue('Cantik')
a.enqueue('Ayu')

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

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

Hasil Run



Menulis metode untuk mengetahui item yang paling depan tanpa menghapusnya dan item yang paling belakang tanpa menghapusnya (Class PriorityQueue).

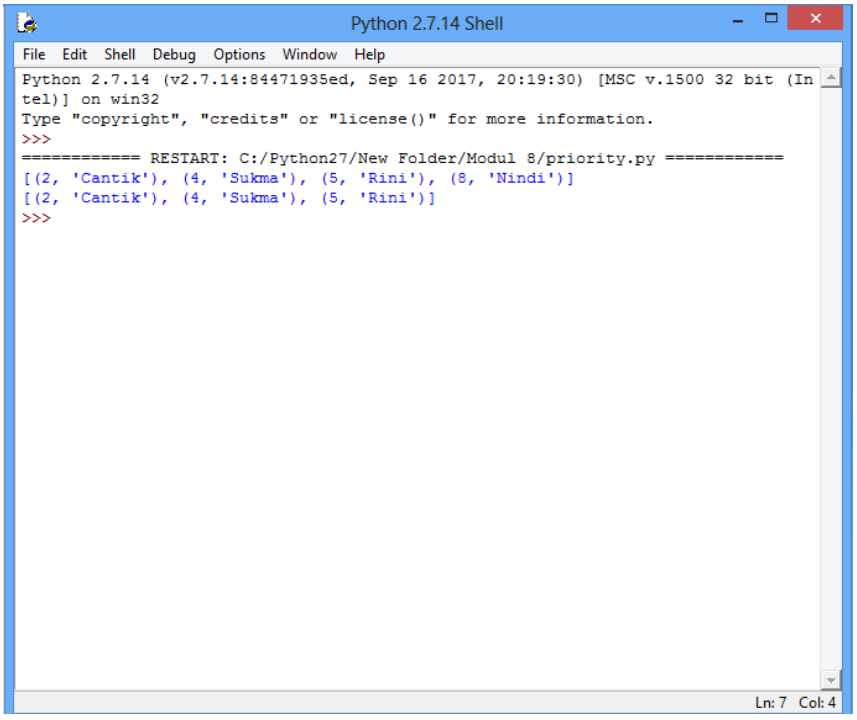
```
import heapq
class PriorityQueue(object):
    def __init__(self):
        self.qlist= []
    def __len__(self):
        return len(self.qlist)
    def isEmpty(self):
        return len(self)==0
    def enqueue(self, data, prior):
        heapq.heappush(self.qlist, (prior, data))
        self.qlist.sort()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

a = PriorityQueue()

a.enqueue('Sukma', 4)
a.enqueue('Nindi', 8)
a.enqueue('Cantik', 2)
a.enqueue('Rini', 5)

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

Hasil Run



5. Menulis metode dequeue() pada class priority

```
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('Sukma', 4)
a.enqueue('Nindi', 8)
a.enqueue('Cantik', 2)
a.enqueue('Rini', 5)

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

Hasil Run