

CS218 - Data Structures

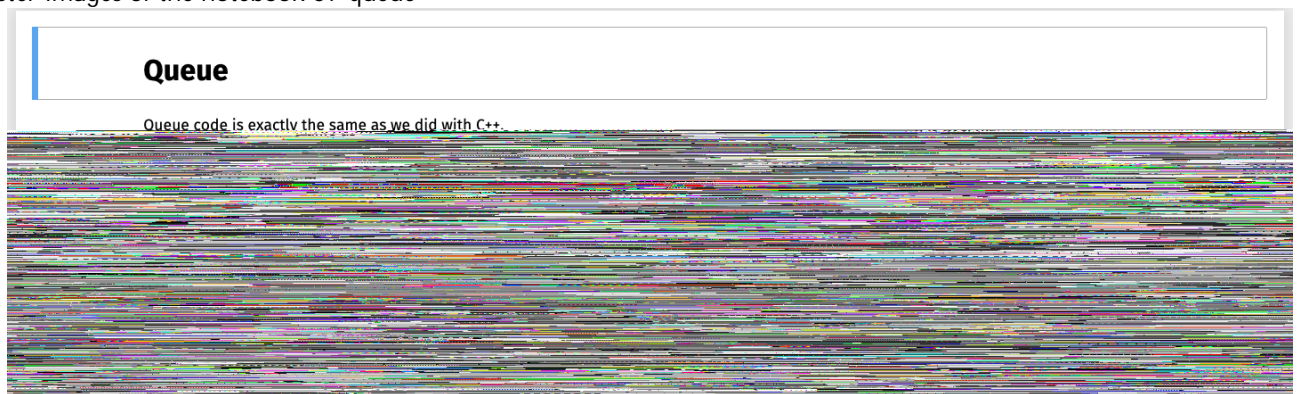
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1 Queue using "Array"

Raster images of the notebook 07-queue



```
In [ ]: def dequeue(self):
        if self.is_empty:
            raise IndexError("Queue empty. Cannot dequeue.")

        ret = self.q[self.o]
        self.o = self._inc(self.o)

        if self.i == self.o:
            self.is_empty = True

        self.is_full = False
        return ret

Queue.dequeue = dequeue

In [ ]: def __str__(self):
        return str(self.q) + " , in: " + str(self.i) + " , out: " + str(self.o)
        Queue.__str__ = __str__
```

```
In [ ]: q = Queue()
        q.enqueue(10)
        q.enqueue(20)
        q.enqueue(30)
        q.enqueue(40)
        q.enqueue(50)
        # q.enqueue(35)

        print(q)

        print(q.dequeue())
        # print(q.dequeue())
```