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Description automatically generated**

**School Of Information Technology**

**IT2553**

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| **PEM Group:** | SF2102 |
| **Module:** | DSA |
| **Assignment:** | Tutorial 11 |

1A Solution:

The contents of the queue:

[0]:0 [1]:3 [2]:6 [3]:9 [4]:12 [5]:15

1B Solution:

The contents of the queue:

[0]:6 [1]:9 [2]:12 [3]:15

1C Solution:

The contents of the queue:

[0]:3 [1]:4 [2]:6 [3]:7 [4]:9 [5]:10 [6]:12 [7]:13 [8]:15 [9]:16

1D

Assertion Error:

“Cannot dequeue from an empty queue”

2) On the Python Code

3) Solution:

Solution:

Deque ():

Creates a new empty deque, which is a deque containing

no items.

isEmpty ():

Returns a boolean value indicating whether the deque is

empty.

length ():

Returns the number of items currently in the deque.

enqueue front (item):

Adds the given item to the front of the deque.

enqueue back (item):

Adds the given item to the back of the deque.

dequeue front ():

Removes and returns the front item from the deque. An

item cannot be dequeued from an empty deque.

dequeue back ():

Removes and returns the back item from the deque. An

item cannot be dequeued from an empty deque.