

Num 1

```
1 |
2 from LinkedDeque import LinkedDeque
3 from LinkedQueue import LinkedQueue
4
5 D = LinkedDeque()
6 D.insert_last(1)
7 D.insert_last(2)
8 D.insert_last(3)
9 D.insert_last(4)
10 D.insert_last(5)
11 D.insert_last(6)
12 D.insert_last(7)
13 D.insert_last(8)
14
15 Q = LinkedQueue()
16
17 Q.enqueue(D.delete_first())
18 Q.enqueue(D.delete_first())
19 Q.enqueue(D.delete_first())
20 Q.enqueue(D.delete_first())
21 #Q[1 2 3 4]
22
23 D.insert_last(Q.dequeue())
24 D.insert_last(Q.dequeue())
25 D.insert_last(Q.dequeue())
26 D.insert_last(Q.dequeue())
27 #D[5 6 7 8]
28 #D[5 6 7 8 1 2 3 4]
29 Q.enqueue(D.delete_first())
30 Q.enqueue(D.delete_last())
31 Q.enqueue(D.delete_first())
32 Q.enqueue(D.delete_first())
33 Q.enqueue(D.delete_first())
```

```

34  #Q[5 4 6 7 8]
35  #D[1 2 3]
36
37  D.insert_last(Q.dequeue())
38  D.insert_last(Q.dequeue())
39  D.insert_last(Q.dequeue())
40  D.insert_last(Q.dequeue())
41  D.insert_last(Q.dequeue())
42  #D[1 2 3 5 4 6 7 8]
43
44  current = D._header._next
45  while current != D._trailer:
46      print(current._element, end=' ')
47      current = current._next

```

```

:
"C:\Program Files\Python312\python.exe" Z:\DSALG01-1DB2\FINALS\LinkedLists\Activity#1.py
1 2 3 5 4 6 7 8
Process finished with exit code 0

```

Num 2

```

1  from LinkedDeque import LinkedDeque
2  from LinkedStack import LinkedStack
3
4  D = LinkedDeque()
5  D.insert_last(1)
6  D.insert_last(2)
7  D.insert_last(3)
8  D.insert_last(4)
9  D.insert_last(5)
10 D.insert_last(6)
11 D.insert_last(7)
12 D.insert_last(8)
13
14 S = LinkedStack()
15 S.push(D.delete_last())
16 S.push(D.delete_last())
17 S.push(D.delete_last())
18
19 D.insert_first(D.delete_last())
20 S.push(D.delete_last())
21 D.insert_last(D.delete_first())
22
23
24 D.insert_last(S.pop())
25 D.insert_last(S.pop())
26 D.insert_last(S.pop())
27 D.insert_last(S.pop())
28
29 current = D._header._next
30 while current != D._trailer:
31     print(current._element, end=' ')
32     current = current._next

```

```

"C:\Program Files\Python312\python.exe" "Z:\DSALG01-1DB2\FINALS\LinkedLists\Activity#1(part2).py"
1 2 3 5 4 6 7 8
Process finished with exit code 0

```