List .vs. Deque

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Code | N=10000(µs) | N=20000(µs) | N=30000(µs) | TimeComplexity |
| list.pop() | 0.50 | 0.59 | 0.58 | O(1) |
| list.pop(0) | 4.20 | 8.36 | 12.09 | O(N) |
| list.append(1) | 0.43 | 0.45 | 0.46 | O(1) |
| list.insert(0,1) | 6.20 | 11.97 | 17.41 | O(N) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Code | N=10000(µs) | N=20000(µs) | N=30000(µs) | TimeComplexity |
| deque.pop() | 0.41 | 0.47 | 0.51 | O(1) |
| deque.popleft() | 0.39 | 0.51 | 0.47 | O(1) |
| deque.append(1) | 0.42 | 0.48 | 0.50 | O(1) |
| deque.appendleft(1) | 0.38 | 0.47 | 0.51 | O(1) |
| deque[0] | 0.37 | 0.41 | 0.45 | O(1) |
| deque[N-1] | 0.37 | 0.42 | 0.43 | O(1) |
| deque[int(N//2)] | 1.14 | 1.71 | 2.48 | O(N) |