

1. C
2. C
3. D

1. $O(1)$ $O(n)$

$O(h)$ $O(h)$

~~$O(n^2)$~~ $O(h \log n)$

2. (4) \rightarrow insert here = ~~new node~~ \rightarrow target \rightarrow next

(5) target \rightarrow next

Q1. LIFO

✓ Undo 逆式操作
redo 循環操作

Q2. avoid ~~memory leak~~ \rightarrow Dangling Pointer

2. 只需要 ~~修改指標指向在頭之後~~
~~head 情況下~~ \rightarrow 重連 target 前後節點 (即 $O(1)$)

3. 需要 head 像 prev, next 之外

~~並~~ traversing 逐個所有 Sequential Access

1. B

2. C

3. A B

4. B

$O(n^{\frac{1}{2}})$ $O(1)$

$O(n^2)$ $O(n^2)$

$O(1)$

$O(n^{\frac{1}{2}})$

(5) prev Target.next

(6) Target.next

$O(1)$ $O(\log n)$ $O(n)$ $O(n \log n)$

newNode \rightarrow next = head

head = newNode

head = head \rightarrow next

insert \rightarrow next \leftarrow target \rightarrow next

target \rightarrow next \leftarrow insert

push pop isem isfull

enqueue dequeue isem isfull

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