

## Linked List



1.  
Which of the following statements about linked list data structure is/are TRUE?

- A. Addition and deletion of an item to/from the linked list do not require modification of the existing pointers
- B. The linked list pointers do not provide an efficient way to search an item in the linked list
- C. Linked list pointers always maintain the list in ascending order
- D. The linked list data structure provides an efficient way to find kth element in the list

Answer: B

2.  
struct node  
{  
    int data;  
    struct node \* next;  
}  
typedef struct node NODE; NODE \*ptr;  
Which of the following c code is used to create new node?

- A. ptr=(NODE\*)malloc(sizeof(NODE));
- B. ptr=(NODE\*)malloc(NODE);
- C. ptr=(NODE\*)malloc(sizeof(NODE\*));
- D. ptr=(NODE)malloc(sizeof(NODE));

Answer: A

3.  
Which of the following is false about a doubly linked list?

- A. We can navigate in both the directions
- B. It requires more space than a singly linked list
- C. The insertion and deletion of a node take a bit complex
- D. None of the above

Answer: D

4.  
Which of the following operations is performed more efficiently by doubly linked list than by singly linked list?

- A. Deleting a node whose location is given
- B. Searching of an unsorted list for a given item
- C. Inverting a node after the node with given location
- D. Traversing a list to process each node

Answer: A

5.  
Which of the following application makes use of a circular linked list?

- A. Undo operation in a text editor
- B. Recursive function calls
- C. Allocating CPU to resources
- D. All of the mentioned

Answer: C

6.  
Which of the following is false about a circular linked list?

- A. Every node has a successor
- B. Time complexity of inserting a new node at the head of the list is  $O(1)$
- C. Time complexity for deleting the last node is  $O(n)$
- D. None of the mentioned

Answer: B

7.  
Which of the following is a header list where the last node points back to the header node.

- A. rounded header list
- B. circular header list
- C. common header list
- D. forward header list

Answer: B

8.  
What is the time required in Doubly circular linked list while jumping from head to tail and from tail to head?

- A.  $O(n)$
- B.  $O(1)$
- C.  $O(\log n)$
- D. None of above

Answer: B

9.  
What are application of Circular Doubly linked List?

- A. Managing songs playlist in media player applications.
- B. Managing shopping cart in online shopping.
- C. Operating System resources
- D. Both A and B

Answer: D

10.  
Which of the following is the disadvantage of using Circular doubly linked list?

- A. Extra memory requirement
- B. Traversing
- C. Searching
- D. None of above

Answer: A