

QUIZ DS Monday

1. **Which of the following operations requires traversing a singly linked list?**
 - A) Inserting at the beginning
 - B) Deleting from the beginning
 - C) Accessing the last element
 - D) All of the above
2. **How do you traverse a singly linked list?**
 - A) By following the pointers from one node to the next
 - B) By using an index
 - C) By accessing elements directly
 - D) By using a stack
3. **What should head be initialized to when starting with an empty list?**
 - A) NULL or nullptr
 - B) 0
 - C) -1
 - D) Random memory address
4. **Which C++ code snippet correctly implements the insertion at the beginning of a Singly Linked List, where head is a pointer to the current head, and newNode is the node to be inserted?**
 - A) `head -> next = newNode; head = newNode;`
 - B) `head = newNode; head -> next = head;`
 - C) `newNode -> next = head; head = newNode;`
 - D) `head = newNode; head -> next = nullptr;`
5. **To delete the first node (the head) of a non-empty Singly Linked List in C++, which sequence of actions correctly removes the node and updates the head pointer?**
 - A) `head = head->next; delete head;`
 - B) `Node* temp = head->next; delete head; head = temp;`
 - C) `Node* temp = head; head = head->next; delete temp;`
 - D) `delete head; head = head->next;`