

Name:

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Section:

## 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;