**PLACEMENT PREPARATION - 2021**

**AIM - SUPERDREAM**

**Important Linked List Questions:**

1. **Tortoise and Hare algorithm(using slow and fast pointers)**

* Finding out the middle element

Link:<https://www.geeksforgeeks.org/write-a-c-function-to-print-the-middle-of-the-linked-list/>

* Detecting and Removing Cycle

Link: <https://www.geeksforgeeks.org/detect-and-remove-loop-in-a-linked-list/>

* Finding out the first node of the cycle

Link: <https://www.geeksforgeeks.org/find-first-node-of-loop-in-a-linked-list/>

**Note:** Go through the below link to see why this algorithm actually works the way it does..(asked in interviews)

<https://www.youtube.com/watch?v=-YiQZi3mLq0>

1. **Reversing linked list**

* Reversal of linked list

Link:<https://www.geeksforgeeks.org/reverse-a-linked-list/>

* Reverse given linked list in groups of size k

Link:<https://www.geeksforgeeks.org/reverse-a-list-in-groups-of-given-size/>

1. **Merge Algorithm on Linked List**

* Merge two sorted linked lists

             Link: <https://www.geeksforgeeks.org/merge-two-sorted-linked-lists/>

* Merge Sort on Linked List

              Link: <https://www.geeksforgeeks.org/merge-sort-for-linked-list/>

1. **Miscellaneous Questions**

* Delete a node without head pointer

Link:<https://www.geeksforgeeks.org/delete-a-node-from-linked-list-without-head-pointer/>

* Delete Nth node from end

Link:<https://www.geeksforgeeks.org/delete-nth-node-from-the-end-of-the-given-linked-list/>

* Delete N nodes after M nodes of a Linked List

Link:<https://www.geeksforgeeks.org/delete-n-nodes-after-m-nodes-of-a-linked-list/>

**Note**:

* Do all these questions related to linked lists. These questions should be enough to prepare you for the interviews(for linked lists).
* These questions should be attempted only after you are done with the basic operations on Linked List like traversal, insertion of a node, deletion of a node and counting total number of nodes.