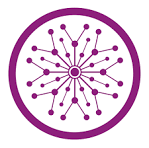
**Superior University**

**Lab no: 5**



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**Subject:** DSA (Lab)

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# **Task**

**Linked lists (Display Nodes):**

In this code create two classes, in Node class declare roll in integer, name as string and next pointer as class-name Node. In linked list class declare head pointer as NULL, create data function to take input from user, create insert-at-head function to place new-Node at first and update head, create insert-at-last function to move head to the last and add new-Node to the last, create insert-at-position function to add new-Node to any valid position, display function to display all node, display-center-node function to display middle node,

while (temp != NULL) {

        temp = temp->next;

        count++;

    }

This code calculates the size of linked list, then iterate another loop till count/2 to find the middle node. Then if the iteration equal to the count/2 only then display the node,

        if ( i == middle) {

            cout << "Middle Node = " << middleNode->roll << "\t" << middleNode->name << "\n";

            break;

}. This calculated the middle Node

**Output:**

