## Data structures and Algorithms LAB – BSDSF21 (Morning and Afternoon)

## Lab 05 - 31-01-2023

The code related to the linked nodes as discussed in class is provided here for your reference. You have to complete the following task related to the linked nodes.

10 each

- 1. To return the **sum** of the values in the nodes in a set of linked nodes.
- 2. To return the **count** of the nodes in a set of linked nodes.
- 3. To correct the **removeNode**, so that it may also remove first node of linked set correctly.
- 4. Somehow make addFrontNode workable.

The recursion in the linked node's structure is implementable in a way that in the recursive calls we send the reference of the linked node(s), and if/when the reference received is <u>None</u>, it is assumed that no more recursive calls are required. Think multiple time on the previous sentence.

Now make a copy of the python code and modify the following functions to work recursively.

10 each

- 5. printLinkedNodes
- 6. addBackNode
- 7. removeNode
- 8. countNodes
- 9. printReverseNodes

Using method (iterative of recursive) of your choice, write code of the following function.

10. sortNodesAscending

\*\*\*\*\*\* The end \*\*\*\*\*\*

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