

National University Of Computer and Emerging Sciences



CL2001 – Data Structure Lab Quiz # 01

Note: Carefully read the following instructions.

- Plagiarism will not be tolerated!!
- Variable name should be meaning ful.
- Use comments wherever applicable.

Problem: 1 | Odd Even Linked List

Given a doubly linked list, group all the nodes with odd indices together followed by the nodes with even indices.

Please note here we are talking about the node number and not the value in the nodes.

The first node is considered odd, and the second node is even, and so on.

Example 1

Given: $2 \Leftrightarrow 1 \Leftrightarrow 3 \Leftrightarrow 5 \Leftrightarrow 6 \Leftrightarrow 4 \Leftrightarrow 7$

Return: $2 \Leftrightarrow 3 \Leftrightarrow 6 \Leftrightarrow 7 \Leftrightarrow 1 \Leftrightarrow 5 \Leftrightarrow 4$

Example 2

Given: $1 \Leftrightarrow 2 \Leftrightarrow 3 \Leftrightarrow 4 \Leftrightarrow 5$

Return: $1 \Leftrightarrow 3 \Leftrightarrow 5 \Leftrightarrow 2 \Leftrightarrow 4$