## LAB EXERCISE 5

Q.1 Given a linked list with integer values, write a method to print data in alternate nodes.

## **Example:**

Input: 1 -> 8 -> 3 -> 10 -> 17 -> 22 -> 29 -> 42

Output: 1 -> 3 -> 17 -> 29

Input: 10 -> 17 -> 33 -> 38 -> 73

Output: 10 -> 33 -> 73

Q.2 Given a Linked List and a number n, write a function that returns the value at the n'th node from end of the Linked List.

Q.3 How to remove duplicate nodes in an unsorted linked list?

Write a program to remove all duplicate nodes from an unsorted linked list in Java. For example, if the linked list is 22->21->22->31->41->23->21 then your program should convert the list to 22->21->31->41->23.

Q.4 Write a Join(head1, head2) function which takes two lists A and B. Join the linked list B at the end of the linked list A. The Join() function

Input: head1: 5->7->9

head2: 4->6->8

Output: 5->7->9->4->6->8

Input: head1: 1->3->5->7

head2: 2->4

Output: 1->3->5->7->2->4