Assignment Set 5 (Uploaded on September 2, 2014)
Clarification deadline date: September 4, 2014
Submission deadline date: September 8, 2014

Problem 1:
Write a C program that creates a singly linked list
using self
referential structures with the following
functionalities:
(a) add a node at the beginning of the link list;
[10]
(b) add a node at the end of the link list; [15]
(c) ask from the user at which position the node is
to be added,
    and if possible, add the node at the requisite
location; [15]
(d) delete a node from the beginning of the link
list; [10]
(e) delete a node from the end of the link list;
[15]
(f) ask from the user the position of the node to be
deleted,
    and if possible, delete the node from the
requisite location; [15]
(g) prints the linked list [10].

Once the linked list is created, simulate the to-
and-fro walk on
the linked list using link reversal techniques
discussed in the class.
At each step, you have to ask the user whether (s)he
wants to go
back or forward and according to that traverse the
linked list.
Keep provisions of printing the linked list,
whenever the user wants.   [40]

[Marks: 90{(a) to (g)} + 40 + 20 {Good programming

habits} = 150]

Naming conventions for program files. xx is your
roll number:

For Problem 1:
The name of the src file for problem 1 of assignment
5 should be
``cs14xx-assign5-src-prog1.c''.

The name of the app file for problem 1 of assignment
5 should be
``cs14xx-assign5-prog1.c''.

The name of the include file for problem 1 of
assignment 5 should be
``cs14xx-assign5-prog1.h''.

At the top of each of your program files, add the
following. If you are
writing multi-file programs, then each file should
have it.

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Name:
Roll Number:
Date of Submission:
Deadline date:
Program description:
Acknowledgements:

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