CSCI 41 Computer Programming Methodology II

**Assignment 6**

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Write a program that defines a node as following:

struct Node

{

int score;

Node \*next;

};

and includes following functions:

Node \*createList(Node \*list, int n);

Above function creates a linked list with n nodes in it.

void displayList(Node \*list);

Above function displays all the scores stored in a linked list.

Node \*findNode(Node \*list, int n);

Above function returns a pointer that points to the nth node in a linked list.

int getLength(Node \*list);

Above function returns the number of nodes in a linked list.

Node \*removeNode(Node \*list, int n);

Above function removes the nth node from a linked list.

Node \*insertNode(Node \*list, in n);

Above function insert a new node into a linked list before the nth node.

Node \*copyList(Node \*list);

Above function returns a pointer that points to new linked list that has the copies of the scores stored in the linked list “list”.

Node \*sortList(Node \*list);

Above function sorts the scores stored in a linked list in ascending order.

int main();

Above function is the main() function of the program that is mainly for testing if all the functions are working correctly.