

Name: (as it would appear on official course roster)		section
Email address:	@uemail.ucsb.edu	
Optional: name you wish to be called if different from name above.		
Optional: name of "homework buddy" (leaving this blank signifies "I worked alone")		

1

h08

CS16 F19

h08: Chapter 13 Linked lists

ready?	assigned	due	points
true	Mon 11/11 11:00AM	Sat 11/16 11:59PM	20

You may collaborate on this homework with AT MOST one person, an optional "homework buddy".

UPLOAD A PDF OF YOUR ANSWERS TO GRADESCOPE BEFORE THE DUE DATE. There is NO MAKEUP for missed assignments;

Read Chapter 13, section 13.1 (pages 740- 759).

PLEASE MARK YOUR HOMEWORK CLEARLY, REGARDLESS OF IF YOU WRITE IT OUT IN INK OR PENCIL!

1.(2 pts) Consider the 'head' variable on page 741. What is the value of head for an empty list?

2.(6 pts) Assume you are given a pointer to the head of an existing list (named head). The nodes of the linked-list are of type struct Node (as defined on display 13.7 on page 754). Write a for-loop to iterate through the list and print the data of every other element of the list (starting with the first element).

Please:

- No Staples.
- No Paperclips.
- No folded down corners.

3.(2 pts) In the implementation of a linked list in lab07, why does struct Node contain a pointer member variable of type Node *?

2

h08

CS16 F19

4.(10 pts) Define a struct Node to represent a node in a double linked-list that stores a string as data. Write a function to insert a node to the head of the linked list. The function takes two arguments: a pointer to the first node in the double linked list and a string value. It should create a new node with the given value to the head of the double linked list.

3

h08

CS16 F19