



Name: <i>(as it would appear on official course roster)</i>		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. ASSOCIATE EACH QUESTION WITH A SPECIFIC PAGE IN YOUR HOMEWORK AT THE TIME OF SUBMISSION. 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