

## CSE220: Data Structures (Lab) Fall 2024 Lab Quiz - 02

В

Name:	ID:	Section:

**Duration: 30 Minutes** 

## [15 Points]

As a network engineer, you're tasked with developing a system to optimize bandwidth usage in a network. Write a function/method named compressTraffic that takes a linked list representing network traffic (where each node contains the traffic size in KB). T he function should compress consecutive traffic blocks smaller than 100KB by merging them into a single block. The function should return the compressed linked list head.

- You need to modify the given list. [Inplace]
- You do not need to write the driver code or others like Node class, just complete the **compressTraffic** function.

Sample Input:	Sample Output:
$50 \rightarrow 40 \rightarrow 20 \rightarrow 150 \rightarrow 5 \rightarrow 3 \rightarrow 200 \rightarrow None$	$110 \rightarrow 150 \rightarrow 8 \rightarrow 200 \rightarrow None$
Explanation: 50+40+20=110 (merged), 150 (unchanged), 5+3=8 (merged), 200 (unchanged)	