

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



Name:	ID:	Section:

Duration: 30 Minutes

[15 Points]

As an engineer, You're asked to make a system to optimize memory usage in a system. Write a function/method named compressMemory that takes a linked list of memory blocks (each node containing memory size in MB) and compresses consecutive blocks that are s maller than 10MB 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 any driver code or others like Node class, just complete the **compressMemory** function

Sample Input:	Sample Output:
$5 \rightarrow 8 \rightarrow 15 \rightarrow 3 \rightarrow 4 \rightarrow 2 \rightarrow 20 \rightarrow None$	13→15→9→20→None
Explanation: 5+8=13 (merged), 15 (unchanged), 3+4+2=9 (merged), 20 (unchanged)	