**CSE220: Data Structures (Lab)**

**Fall 2024**

**Lab Quiz - 02**

**Duration: 30 Minutes**

| **Name:** | **ID:** | **Section:** |
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### [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 smaller 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→8→15→3→4→2→20→None | 13→15→9→20→None |
| Explanation: 5+8=13 (merged), 15 (unchanged), 3+4+2=9 (merged), 20 (unchanged) | |