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COP3530
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Sparse Matrix

Testing:

STEP 1

newly implemented chain class had to be tested.

| Test | Result | Pass/Fail |
|---|--|-----------|
| inserting into empty chain | inserts element | P |
| inserting at beginning | inserts element at beginning | P |
| inserting at end | inserts element at end | P |
| inserting in middle | inserts element in middle | P |
| inserting too far (needs to be able to-because sparse matrix) | inserts element in correct position, increasing in column number | P |
| printing | prints correctly the column and element | P |
| getting size | gets correct size | P |

STEP 2

sparse matrix function-read and print need to be tested.

| Test | Result | Pass/Fail |
|---|--|-----------|
| takes in matrix in correct format | it prints out prompts the same way as in the example, and reads everything in same order | P |
| creates sparse matrix | it did, and this was seen when printed out | P |
| creates sparse matrix with no non-zero values | prints out empty matrix | P |
| trying to take in element with column too large for indicated sparse matrix | prints out appropriate error messages and allows you to enter again | P |
| trying to take in too many elements (more than one per column) | prints out appropriate error message and allows you to enter again | P |
| trying to insert into a negative column | prints out appropriate error message and allows you to enter again | P |

STEP 3

sparse matrix function-mask needs to be tested.

| Test | Result | Pass/Fail |
|-------------------------------|------------------------------|-----------|
| use test case given | outputs same result as given | P |
| try all empty sparse matrices | outputs empty c matrix | P |