CO1107 Algorithm, Data Structure & Advanced Programming - Workshop Week 6

Task 0:

Download LinkedList.py provided, it contains a class node & and class LinkedList and all the functions described during the lecture. Test all the functions before starting Task 1.

Task 1:

Write a function to count the number of nodes in the list:

Task 2:

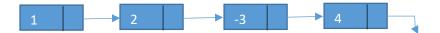
Modify the function *deleteAt*(*self,position*) from the lecture slide, so that it works fine for the situation when the list is empty and also if the invalid position is provided.

Task 3:

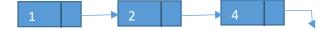
Write a function to delete all the nodes.

Task 4:

Write a function delete_negative to the linked list class so when the list contains numbers, eliminate from the list any node containing a negative element. For example, given the following linked list:



A call to delete_negative() function, would leave the list as:



Task 5:

Write a function to add all the items in a linked list.