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Assignment 3

```
Please enter the size of the vector:
8
Please enter the elements of the vector :
1
2
3
1
5
1
7
1
The vector before inserting any elements
1
2
3
1
5
1
7
1
Please enter the first and the second element:
1
10
The vector after inserting 10 after 1:
1
10
2
3
1
10
5
1
10
7
1
10
```

As we can see, this is the output of our code that aims to implement vectors and linked list topics. The code started by asking the size of the vector, then I entered 8, then it started to ask me to enter the elements of the vector. I inserted the elements, and then I added a for loop that print another time the elements I have inserted to see the vector before any changes occurred. Then it asked what is the first element that it will be inserted the second element after it, and I said the first is 1 and the second is 6. And here comes the role of the function insert after that every time it sees 1, it must insert 6 after it. I have put four ones in the vector, so we can see that after every 1, it has inserted 6 after it. In the main function, I have created object of type class linked list, which I have used a source as a reference to my class attributes listed below, then I started to call the function that counts the occurrence of the values if they are repeated, but unfortunately there was a problem in the while loop, as it has assumed that the head is equal to null which makes it an infinite loop. I think the logical of the function is almost right, and I don't know why he assumed something like this, also the function that returns the sum of the nodes is right, but as there was an infinite loop, it didn't continue and didn't respond to the function call by the object created at the end of the main, consequently didn't output the sum. Also, I added 3 functions that can add a note, delete it and print all the elements of the linked list. I believe that the logical of my code is right and all the functions make sense, but unfortunately this while loop has stopped the code to continue to show the results of the function that count the occurrence and count the sum of the nodes.

Here is the link of the site used as a reference: Program to implement Singly Linked List in C++ using classhttps://www.geeksforgeeks.org › program-to-implemen...