## Hana Shalaby 900223042

## CS 2 Assignment 4 Report

```
hanaa@hana MINGW64 ~/source/repos/cs 2/assignment-4-master (master)
$ ./a
Please enter the number of integers:
3
Please enter 3 integers:
1
2
1
Enter the first value:
1
Enter the second value:
2
The modified linked list is: 1 occurs 2 times
2 occurs 3 times
The sum of all the integers: 8
```

This is the final output from my second trial for this assignment. The program takes a value n from the user and creates a vector of that size. It asks the user to enter the values they want. Then it asks for a first value and a second value. It inserts the second value after each occurrence of the first value in the vector. Then it converts the vector into a linked list and skips the repetitions for each value and prints the number of occurrences it has. Then it calculates the sum of the values including all of their occurrences.

My first trial gave me errors that I had trouble fixing so I decided to start over from a working version of the program and cloning it into a new repo. have submitted two GitHub repo links to show the progress I had before encountering those errors.

```
hanaa@hana MINGW64 ~/source/repos/cs 2/assignment-4-master (master)
$ ./a
Please enter the number of integers:
3
Please enter 3 integers:
1
2
1
Enter the first value:
1
Enter the second value:
2
Segmentation fault
```

The segmentation fault error was related to bad access locations in the memory, where the compiler was reaching references that I had not entered any values into, and gave me incorrect output.