Attached is the code from the program.

The code first stores the user's variables in a vector and does some operations such as the insert after where it is includes a new variable (that the user inputs) after every occurrence of the first number, such as 1 and 0 in the following output example. The vector is then added into a LinkedList based on its occurrence in the vector. The brackets (if not displayed then there is only one occurrence) show how many times it is repeated.

Then there is a test program for the pop function to see if it works properly.