Laboratory practice No. 3 LinkedLists and Dynamic Vectors

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3) Practice for final project defense presentation

3.3

The complexity of thee broken keyboard algorithm in the worst case would be O(n) because there are some for loops but never a nested loop so it would be T(n) + T(n) … and by the Sum property of the O notation it would be O(n).

3.4

The n in the 3.1 has to be understood as the amount of substrings generated when you separate the original string every time you get a '[' or ']'.

4) Practice for midterms

- *4.4 stack.pop()*
- *C. O(1)*
- *4.8 c. O(n) and O(1)*
- *4.9.1 d. O(n)*
- *4.9.2 a. 6*
- *4.9.3 d. O(n)*
- *4.10.1 c. O(Max(list)*n^2)*
- *4.10.2 b. O(n)*
- *4.11.1 !s1.isEmpty()*
- *4.11.2 s1.pop()*
- *4.11.3 s2.pop()*
- *4.13.1 iii. O(n^2)*