Laboratory practice No. 3: linked lists and dynamic vectors

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3)

3.1

Exercise	ArrayList	LinkedList
1.1	O(n^2)	O(n)

3.2 The algorithm reads the input, creates a linked list, converts the s string to char array and evaluates every char, if the char found is a "[" the location will be change to the start of the linked list, if is a "]" the location will be the end of the linked list; then all the chars will be storage in a stringbuilder, finally it's converted into a string and it's returned to the user.

3.3 O(n)

3.4 n = text string

4) Practice for midterms

4.1 *res = res + ((str.get((str.size()-1)-i)-'0') * ((int)(Math.pow(2,i))));*

4.2 *c) O(n)*

4.3
4.3.1 iv) 0, 2, 4, 6, 8, 10

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4.3.2 i) O(1)

4.4 output.append(token).append(' ');
c) O(1)

4.5 a) [7,8,3,1,2,9]

4.6 b) O(n2)

4.7 iv) 5, 4, 3, 2

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