

Laboratory practice No. 3

Samuel Salazar Salazar
Universidad Eafit
Medellín, Colombia
ssalazar1@eafit.edu.co

Carla Sofía Rendón Baliero
Universidad Eafit
Medellín, Colombia
csrendonb@eafit.edu.co

3) Practice for final project defense presentation

3.1 ***ArrayList and LinkedList have a very similar function but in some cases it depends on the case for each of these two, they work better, the linked lists when we want to remove and insert is better because their complexity is $O(1)$, but In the case of looking for a specific position, the ArrayList is better, so it always depends on the case and so we can know which is better.

***With 300,000 vertices it consumes a memory of 900 bytes

***The form that we used to solve that problems is with the use of a mapping, we use an array that varies taking different values.

	ArrayList o vectors	LinkedList
Exercise 1.1	$O(n)$	$O(n^2)$

3.3 The complexity of the broken keyboard problem is $O(n)$

3.4 tx is the string which is made with the broken keyboard
L are the characters of the string a.

4) Practice for midterms

4.1

A:res=res+str.get*Math.pow(2, i);
B: $O(n)$

4.2

B) $O(1)$

4.3

4.3.1: ii) 2,4,6,8,10

4.3.2: ii) $O(n)$

4.4

PhD. Mauricio Toro Bermúdez
Professor | School of Engineering | Informatics and Systems
Email: mtorobe@eafit.edu.co | Office: Building 19 – 627
Phone: (+57) (4) 261 95 00 Ext. 9473

ESTRUCTURA DE DATOS 1
Código ST0245

A: stack.pop()
B: $O(n)$

4.5

b)

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