Laboratory practice No. 3: Linked Lists, Dynamic vectors and Hash Tables

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3) Practice for final project defense presentation

3.1

	ArrayList	LinkedList	HashTable
1.1	$O(n^2)$	-	O(nxm)
2.1	$O(n^2xm)$	O(nxm)	-

3.2
3.3 The complexity of the exercise 2.1 is O(n*m). (El método add no le añade complejidad al problema pues siempre se añade al principio o al final, es decir que su complejidad siempre es O(1).
3.4 In 2.1, the N represents the number of lines that the scanned String has, that is to say, the quantity of sentences separated by an enter. The M represents the size of String that is passed as a parameter to the method “texto”, which is the size of each line (it always changes as each line has a different size).

4) Practice for midterms

4.1 B
Complexity O(n+m)
4.2 Complexity O(n)
4.3 B
Complexity O(1)
4.4 1. stack.pop()
2. Complexity O(1)
4.5 A
Complexity O(n)
4.6 O(n3)
4.7 O(n)
4.8 O(n)

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4.9. 1.9
2. Complexity O(k)
3.O(1)
4.10. 1.12
2. Complexity O(n).
3.O(n)
4.11 1. C
2. Complexity O(n)
4.12 1.!s1.isEmpty
2. s1.pop()
3. s2.pop()
4.13. 1. Iv
2. O(1)
4.14.1. Complexity O(n3)
2. Complexity O(n3)
4.15 iii

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