

Laboratory practice No. 3

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//el punto 1 presenta semejanzas al proyecto final

3) Practice for final project defense presentation

3.1 ArrayList:

The complexity of the ArrayList will be:
Insertion $O(n)$
Search $O(n)$

LinkedList:

The complexity of the LinkedList Will be:
Insertion $O(1)$
Search $O(n)$

When we need to know the position of the elements the best structure will be the Array Or ArrayList.

When the principal operation is insert and delete the best structure will be the Linked List.

3.2 Functioning 2.1:

We initialize the variables then enters in the cycle there are two cases:

When the character is "[" the variable start will be true and the iterator of the cycle will increase so that the character to be added will be the next one.

When the character is "]" the variable start will be false and the iterator of the cycle will increase.

If the variable start is true add character in the position correspondent to the counter value if the variable is false add the character to the end.

3.3 Complexity 2.1:

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ESTRUCTURA DE DATOS 1
Código ST0245

The complexity is $O(n)$.

3.4 Variables (Complexity) 2.1:

The n variable is the length of the character string.

4) Practice for midterms

- 4.1.1) a.
- 4.1.2) a.
- 4.2) b.
- 4.3.1) b.
- 4.3.2) d.
- 4.4.1) `output.append(stack.push).append(' ');`
- 4.4.2) c.
- 4.5) a.
- 4.6) a.
- 4.8) c.
- 4.9.1) c.
- 4.9.2) b.
- 4.9.3) c.
- 4.10.1) d.
- 4.10.2) a.
- 4.10.3) b.
- 4.11.1) c.
- 4.11.2) b.
- 4.12.1) `while(!s1.isEmpty());`
- 4.12.2) `s2.push(s1.pop());`
- 4.12.3) `return s2.pop();`
- 4.13.1) iv.
- 4.13.2) i.
- 4.14.1) i.
- 4.14.2) i.
- 4.15) iv

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