# **Laboratory practice No. 3:**

# **Linked lists and dynamic vectors**

**(SOLVED ONLY THE PRACTICE FOR MIDTERMS)**

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**3) Practice for final project defense presentation**

**3.1**

**3.2**

**3.3**

**3.4**

**3.5**

**3.6**

***4) Practice for midterms***

* 1. ***Optional***
  2. ***Opt*** *c) O(n)*
  3. **DOES NOT EXIST**
  4. ***1. LINE 21*** output.append(**token**).append(' ');

***2.*** *c)**O(1)*

* 1. ***Optional***
  2. ***Opt*** *a) O(n^3)*
  3. **DOES NOT EXIST**
  4. c) O(n) y O(1)
  5. **4.8.1** a) O(k)

**4.8.2**.c) 12

**4.8.3** c) O(n)

* 1. **4.9.1** d) O(n^2)

**4.9.2** a) 6

**4.9.3** b) O(n)

* 1. **4.10.1** b) O(max(list)\*n^2)

**4.10.2** b) O(n)

* 1. **4.11.1 LINE 13** (s1!.isEmpty())

**4.11.2 LINE 14** (s1.pop())

**4.11.3 LINE 17** (s2.pop())

* 1. **4.12.1** iv) 0, 2, 4, 6, 8, 10

**4.12.2** i) O(1)

**4.13 4.13.1** iii) O(𝑛^2 )

**4.13.2** iii) O(𝑛^2 )