

## Laboratory practice No. 3: Linked list and dynamic vectors.

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### 4) Practice for midterms

**4.1** Line 4 : `res += int(vector[i])*(2**(len(vector) -1) -i)`  
Complexity:  $O(n)$

**4.2** C

**4.3** 4.3.1. IV  
4.3.2 i

**4.4** Line 21: `output.append(token)`  
Complexity in the worst case for `pop()` :  $O(1)$

**4.5** A

**4.6** A

**4.7** III

**4.8** D

**4.9** 4.9.1 A 4.9.2 C 4.9.3 C

**4.10** 4.10.1 D 4.10.2 A 4.10.3 B

**4.11** 4.11.1 C 4.11.2 B

**4.12** 4.12.1 `while(!(s1.isEmpty()));` 4.12.2 `s2.push(s1.pop());` 4.12.3 `return s2. pop`

**4.13** 4.13.1 I 4.13.2 I