

## Laboratory practice No. 4: Greedy algorithms

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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

- 4.1  $i = j$
- 4.2  $min > adjacencyMatrix[element][i]$
- 4.3  $length - 1$
- 4.4
  - 4.4.1 Line 10:  $temp/2$
  - 4.4.2 Line 11:  $temp + minimo$
  - 4.4.3  $B$
- 4.5
  - 4.5.1  $D$
  - 4.5.2 By making mergeSort to the set of  $n$  numbers, we can ensure that the smallest are in the first positions. The sum of the first  $k$  numbers, arranged from least to greatest, will always be the minimum sum with  $k$  numbers. The complexity of making mergeSort is  $O(n \log n)$ , and the access to the  $k$  numbers is  $O(k)$ , but by multiplying the final complexity of the algorithm is  $O(n \log n)$ .
- 4.6 A
  - 4.6.1  $i+1$
  - 4.6.2  $res+1$
  - 4.6.3  $last = i$
  - 4.6.4  $2$

**ESTRUCTURA DE DATOS 2**  
**Código ST0247**

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