

## Laboratory practice No. 5: Graphs

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### 3) Practice for final project defense presentation

#### 3.1 How the Point 1.1 works?

The connections of the people are saved in positions of a matrix, the map we use has the coordinates of the destination and of each person who moves to the university. The time it may possibly take for people to pick up others is known from the weight of each node

#### 3.2 How much memory is used?

A matrix has an  $O(n*m)$  space, this is because it store rows and columns and connect the nodes. The consumed memory would be  $(300.000)^2$

#### 3.5 Complexity 2.1

$O(n)$

#### 3.6 Variables

$n$  is the number of nodes the graph has and the connection between the owners of the vehicles and the company

### 4) Practice for midterms

#### 4.1

	0	1	2	3	4	5	6	7
0				1	1			
1	1		1			1		
2		1			1		1	
3								1
4			1					
5								
6			1					
7								

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**ESTRUCTURA DE DATOS 1**  
**Código ST0245**

**4.2**

0-> [3,4]  
1-> [0,2,5]  
2-> [1,4,6]  
3-> [7]  
4-> [2]  
5-> []  
6-> [2]  
7-> []

**4.3 b**

**4.4.1 ii**

**4.4.2 i**

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