

## 1.- Relational model operations

## 1.- What operations do we need to do to get the Names of the employees with a salary bigger than 20

table 1

primarykey	name	age	group	title
1	maria	7	a1	admon
2	candela	9	b4	director
3	fernando	11	c3	eng

table 2

primary key	date	salaries
1	01/10/2018	10
2	01/10/2017	45
3	01/11/2018	30

2.- What is the hierarchy tree in this html code

## <property>

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<author> paper database </author>

</document>

<film>

<author> paper database </author>

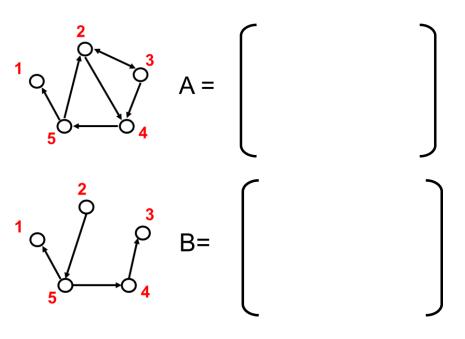
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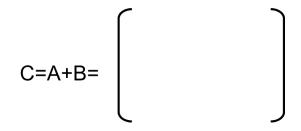


## 3.- Networks and matrices

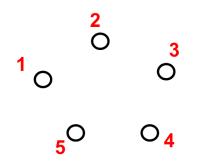
**3.1.- Define the adjacency matrix of the following network.** The **adjacency matrix** represents a network, calculate the matrix of the following network



3.2 Sum A+B

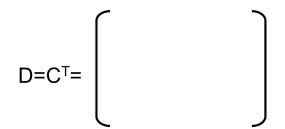


3.3 Draw the corresponding network C

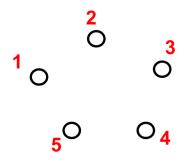




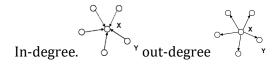
3.4 Calculate matrix D= transposed of C



3.5 Draw the corresponding network D. What is the effect of the operation in the graph?



**3.5** We define the **in-degree** as the number of arrows aiming a node and **out-degree** the outcome links



**Outdegree**: outdegree for node 3 is \_\_\_\_\_, which we obtain by summing the number of non-zero entries in the 3rd row.

**Indegree:** the indegree for node 3 is \_\_\_\_\_, which we obtain by summing the number of non-zero entries in the 3rd column