

SQL Avanzado

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Name	Acronym	Phone_number	Number_students
Ciencias de la Computación e Informática	ECCI	2511-8000	888
Ciencias de la Comunicación Colectiva	ECCC	2511-3000	999
Lenguas Modernas	ELM	2511 8391	NULL
Administración de Negocios	EAN	2511-9180	3000
Antropología	EAT	2511-6458	500
Matemática	EMat	2511-6551	1500

← SELECT



Las operaciones de comparación en SQL son...

	TRUE	FALSE	UNKNOWN
TRUE	TRUE	FALSE	UNKNOWN
FALSE	FALSE	FALSE	FALSE
UNKNOWN	UNKNOWN	FALSE	UNKNOWN

Figure 1: AND truth table

	TRUE	FALSE	UNKNOWN
TRUE	TRUE	TRUE	TRUE
FALSE	TRUE	FALSE	UNKNOWN
UNKNOWN	TRUE	UNKNOWN	UNKNOWN

Figure 2: OR truth table

	TRUE	FALSE
TRUE	FALSE	TRUE
FALSE	TRUE	FALSE
UNKNOWN	UNKNOWN	UNKNOWN

Figure 3: NOT truth table



🐦 Nested query

Outer →

```
SELECT NAME, CREDITS
FROM COURSE
WHERE ACRONYM IN (
  SELECT ACRONYM
  FROM _GROUP
  WHERE SEMESTER=1 AND YEAR = 2022
);
```

← Inner

SQL JOINS

```
SELECT <select_list>
FROM TableA A
LEFT JOIN TableB B
ON A.Key = B.Key
```

```
SELECT <select_list>
FROM TableA A
RIGHT JOIN TableB B
ON A.Key = B.Key
```

```
SELECT <select_list>
FROM TableA A
INNER JOIN TableB B
ON A.Key = B.Key
```

```
SELECT <select_list>
FROM TableA A
FULL OUTER JOIN TableB B
ON A.Key = B.Key
WHERE A.Key IS NULL
OR B.Key IS NULL
```

```
SELECT <select_list>
FROM TableA A
LEFT JOIN TableB B
ON A.Key = B.Key
WHERE B.Key IS NULL
```

```
SELECT <select_list>
FROM TableA A
RIGHT JOIN TableB B
ON A.Key = B.Key
WHERE A.Key IS NULL
```

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5

```
SELECT <attribute list>
FROM <table list>
WHERE <condition>
GROUP BY <grouping condition>
HAVING <group condition>
ORDER BY <attribute list>;
```

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6

```
CREATE ASSERTION POSITIVE.CREDITS
CHECK ( NOT EXISTS ( SELECT *
                     FROM COURSE
                     WHERE CREDITS < 1));
```

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7

TRIGGERS

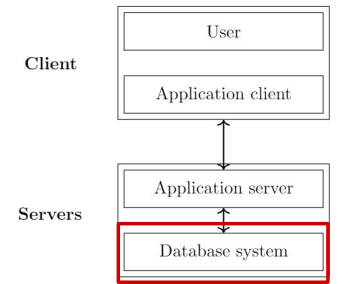
INSERTS

DELETES

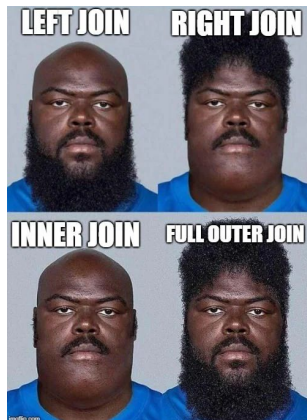
UPDATES

Name	Acronym	Phone_number	Number_students
Ciencias de la Computación e Informática	ECCI	2511-8000	888
Ciencias de la Comunicación Colectiva	ECCC	2511-3600	999
Lenguas Modernas	ELM	2511 8391	NULL
Administración de Negocios	EAN	2511-9180	3000
Antropología	EAT	2511-6458	500
Matemática	EMat	2511-6551	1500

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8



Stored procedures or functions



Referencias

- R. Elmasri and S. Navathe, Fundamentals of database systems, 7th ed. Pearson, 2016, chapters 7, 10.4 and 26.1.
- Microsoft. Microsoft sql documentation. [Online]. Available: <https://docs.microsoft.com/en-us/sql>