***Deadline*: week 7 → monday 16:40**

Description: **On the relational structure created for the first lab, write SQL statements that:**

- insert data – for at least 4 tables; at least one statement should violate referential integrity constraints
- update data – for at least 3 tables;
- delete data – for at least 2 tables;
- In the UPDATE / DELETE statements, use at least once: {AND, OR, NOT}, {<,<=,=,>,>=,<> }, IS [NOT] NULL, IN, BETWEEN, LIKE.

On the same database, write the following SQL queries:

- 2 queries with the union operation; use UNION [ALL] and OR;
- 2 queries with the intersection operation; use INTERSECT and IN;
- 2 queries with the difference operation; use EXCEPT and NOT IN;
- 4 queries with INNER JOIN, LEFT JOIN, RIGHT JOIN, and FULL JOIN (one query per operator); one query will join at least 3 tables, while another one will join at least two *many-to-many* relationships;
- 2 queries with the IN operator and a subquery in the WHERE clause; in at least one case, the subquery should include a subquery in its own WHERE clause;
- 2 queries with the EXISTS operator and a subquery in the WHERE clause;
- 2 queries with a subquery in the FROM clause;
- 4 queries with the GROUP BY clause, 3 of which also contain the HAVING clause; 2 of the latter will also have a subquery in the HAVING clause; use the aggregation operators: COUNT, SUM, AVG, MIN, MAX;
- 4 queries using ANY and ALL to introduce a subquery in the WHERE clause (2 queries per operator); rewrite 2 of them with aggregation operators, and the other 2 with IN / [NOT] IN.

You must use:

- arithmetic expressions in the SELECT clause in at least 3 queries;
- conditions with AND, OR, NOT, and parentheses in the WHERE clause in at least 3 queries;
- DISTINCT in at least 3 queries
- ORDER BY in at least 2 queries
- TOP in at least 2 queries.