

# SQL queries: summary and examples

Lecture 03.04

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# SELECT FROM WHERE

$\pi$  R  $\sigma$

SELECT	a + b	a    b	DISTINCT	CASE
FROM	R as S	R, S	R JOIN S ON cond	R,S WHERE R.a=S.b
WHERE	a = 'scalar'	a IN bag_of_values	cond1 OR cond2	IS (NOT) NULL

# SUBQUERIES

- FROM – subquery as a relation (table)
- WHERE – subquery as scalar or list (bag)
- WHERE – correlated subqueries

# AGGREGATES, GROUPS

```
SELECT AGGR(column) FROM ...
```

```
SELECT a, b, AGGR(c)  
FROM R  
GROUP BY a,b
```

```
SELECT a, MIN(b)  
FROM R  
GROUP BY a  
HAVING count(b) > 2
```

# SETS

Query1

UNION, INTERSECT, EXCEPT (minus)

Query2

- Results of Query1 and Query2 must be union-compatible
- Result is a SET

ORDER BY, LIMIT