

Introduction To Databases (IDB)

Lecture 13: Nested Queries (Subqueries)

Question 1: Accounts with a higher balance than the average of all accounts?

```
SELECT A.number
FROM Account A
WHERE A.balance > ( SELECT AVG(A1.balance.)
                   FROM Account A1 ) ;
```

```
SELECT ...
FROM ...
WHERE (term_1,...,term_n op (subquery ) ;
```

- valid iff $\text{size}(\text{subquery}) == n$

Revisiting WHERE

term := attribute | value

Comparison

- (term,...,term) **op** (term,...,term)
- term IS [NOT] NULL
- (term,...,term) **op** ANY (query)
- (term,...,term) **op** ALL (query)
- (term,...,term) **op** [NOT] IN (query)
- EXISTS (query)

Condition

- comparison
- condition **AND** condition
- condition **OR** condition
- NOT condition

All / Any

- All/Any vs. empty set -> true