

## IN BETWEEN LIKE operators #77

Υλοποίηση των IN, BETWEEN, LIKE για όλες τις συνθήκες:

SELECT,DELETE,UPDATE,INNER JOIN

### Για το SELECT:

IN: SELECT \* FROM table1 WHERE column1 IN (1,2,3)

BETWEEN: SELECT \* FROM table1 WHERE column1 BETWEEN "A" AND "C"

LIKE: SELECT \* FROM table1 WHERE column1 LIKE %A

### Για το DELETE:

IN: DELETE FROM table1 WHERE column1 IN (1,2,3)

BETWEEN: DELETE FROM table1 WHERE column1 BETWEEN "A" AND "C"

LIKE: DELETE FROM table1 WHERE column1 LIKE %A

### Για το UPDATE:

IN: UPDATE table1 SET column1 = value1 WHERE column2 IN (1,2,3)

BETWEEN: UPDATE table1 SET column1 = value1 WHERE column2 BETWEEN "A" AND "C"

LIKE: UPDATE table1 SET column1 = value1 WHERE column2 LIKE %A

### Για το INNER JOIN:

IN: SELECT \* FROM table1 INNER JOIN table2 ON column1 = column1 WHERE table1.column2 IN (1,2,3)

BETWEEN: SELECT \* FROM table1 INNER JOIN table2 ON column1 = column1 WHERE table1.column2 BETWEEN "A" AND "C"

LIKE: SELECT \* FROM table1 INNER JOIN table2 ON column1 = column1 WHERE table1.column2 LIKE %A

Σε όλα τα παραδείγματα χρησιμοποιείται ο παρακάτω πίνακας:

```
(university)> select * from students
```

name (str)	surname (str)	grade (int)
vasilis	vasiliou	10
manolis	xristou	7
xristos	xristou	9
kostas	spirou	7

Παράδειγμα με SELECT:

```
(university)> select * from students where name like %os
name (str)      surname (str)      grade (int)
-----
xristos         xristou                          9
```

Παράδειγμα με UPDATE:

```
(university)> update table students set grade = 5 where name in (xristos,kostas)
(university)> select * from students
name (str)      surname (str)      grade (int)
-----
vasilis         vasiliou          10
manolis         xristou            7
xristos         xristou            5
kostas          spirou             5
```

### INSERT INTO table SELECT ... #78

Πλήρης υλοποίηση του INSERT INTO table SELECT σε συνδυασμό και με το issue #77, δηλαδή το SELECT λειτουργεί και με τα IN, BETWEEN, LIKE.

Παράδειγμα εκτέλεσης:

```
(university)> insert into students select * from students2 where name like %os
(university)> select * from students
name (str)      surname (str)      grade (int)
-----
vasilis         vasiliou          10
manolis         xristou            7
xristos         xristou            5
kostas          spirou             5
giorgos         vasiliou           7
```

Ο πίνακας students2 που χρησιμοποιήθηκε είναι ο εξής:

```
(university)> select * from students2
name (str)      surname (str)      grade (int)
-----
giorgos         vasiliou           7
vaggelis        xristou            5
```

## GROUP BY column [HAVING] clause #85

Πλήρης υλοποίηση του GROUP BY με τα εξής Aggregate Functions:

MIN(), MAX(), AVG(), COUNT(), SUM()

Παράδειγμα:

```
(university)> select count(name),surname from students group by surname
count(name) (str)  surname (str)
-----
                1  spirou
                2  vasiliou
                2  xristou
```

Και επίσης υλοποίηση των aggregate functions χωρίς το GROUP BY

```
(university)> select count(name) from students
count(name) (str)
-----
                5
```

Πλήρης υλοποίηση του HAVING:

```
(university)> select surname,count(name) from students group by surname having count(name) > 1
surname (str)  count(name) (str)
-----
vasiliou                2
xristou                2
```