SQL insert and delete

COMS10012 Software Tools

INSERT

```
INSERT INTO 
  (<col> [,<col>...])

VALUES
  (<value> [,<value>...])
  [, (<value> [,<value>...]);
;
```



INSERT

```
INSERT INTO Volunteer (id, name)
VALUES
    (1, 'Fred'),
    (2, 'Sarah')
;
```



Strings

Single quotes for strings!

Double quotes are only for databasey things (like column names).

Backslashes escape single quotes, backslashes, newlines etc. in single-quoted strings.



Quotes

```
INSERT INTO Person (name)
VALUES ('John O\'Donnell');
INSERT INTO "table" (id) VALUES (1);
```



Delete

```
DELETE FROM 
  [WHERE <condition>];

TRUNCATE TABLE ;
```



Update

```
UPDATE TABLE 
 SET <col>=<value> [,<col>=<value>...]
  [WHERE <condition>];
UPDATE TABLE Volunteer
SET email='sarah.bs4@example.com'
WHERE id=3;
```



Upsert

INSERT fails if a key already exists (resp. a constraint is violated); UPDATE does not create new rows.

MariaDB: INSERT IGNORE, REPLACE INTO and INSERT ... ON DUPLICATE KEY UPDATE.

SQLite: INSERT OR REPLACE, ON CONFLICT.



Comments

```
-- this is a comment
-- it starts with two dashes
-- and goes until the end of the line
-- to be on the safe side, put a space
-- directly after the dashes
# MariaDB also allows this
/* and this */
```

