## set operation

### syntax

```
SELECT . . . UNION [ALL] SELECT . . .
```

- SELECT \* FROM books UNION SELECT \* FROM newbooks;
- SELECT \* FROM books UNION ALL SELECT \* FROM newbooks;

### syntax

```
SELECT . . . INTERSECT SELECT . . .
```

SELECT \* FROM books INTERSECT SELECT \* FROM newbooks;

### syntax

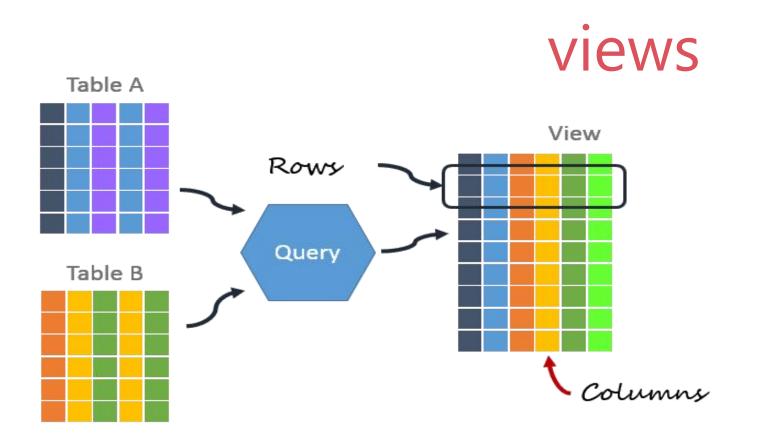
SELECT ... EXCEPT EXCEPT are not available in the second dataset.

SELECT \* FROM books EXCEPT SELECT \* FROM newbooks;

A **VIEW** in SQL as a logical subset of data from one or more tables. Views are used to restrict data access. A **VIEW** contains no data of its own but its like window through which data from tables can be viewed or changed. The table on which a View is based are called BASE Tables.

There are 2 types of Views in SQL:

- **Simple View** : Simple views can only contain a single base table.
- **Complex View**: Complex views can be constructed on more than one base table. In particular, complex views can contain: join conditions, a group by clause, a order by clause.





### Views are not updatable in the following cases:

- A table in the FROM clause is reference by a subquery in the WHERE statement.
- There is a subquery in the SELECT clause.
- The SQL statement defining the view joins tables.
- One of the tables in the FROM clause is a non-updatable view.
- The SELECT statement of the view contains an aggregate function such as SUM(), COUNT(), MAX(), MIN(), and so on.
- The keywords DISTINCT, GROUP BY, HAVING clause, LIMIT clause, UNION, or UNION ALL appear in the defining SQL statement.

### create view/ show create view

The select\_statement is a SELECT statement that provides the definition of the view. The select\_statement can select from base tables or other views.

CREATE [OR REPLACE] VIEW view\_name [(column\_list)]
AS select\_statement [WITH CHECK OPTION]

SHOW CREATE VIEW view\_name

show create VIEW v1;

# alter / drop view

This statement changes the definition of a view, which must exist.

```
ALTER VIEW view_name [(column_list)]
AS select_statement
[WITH CHECK OPTION]
```

e.g.

ALTER VIEW studentview AS SELECT namefirst, namelast, emailed FROM student;

DROP VIEW removes one or more views.

```
DROP VIEW [IF EXISTS] view_name [, view_name] ...
```

#### e.g.

- DROP VIEW studentview;
- DROP VIEW studentid10view, studentviewwithcheck;
- DROP VIEW studentTotalMarksView, studentAddressView;