

TennisDB - View

1. Create a view with all towns from the p_players table:
2. create a view with the player numbers and league numbers of all players with a league number:
3. Remove the competition player whose league number is 7060:
4. A view formula may specify another view. Create such a view by your own.

Column name of views

Usually the column names in the view are the same as the column name in the select statement. It is possible to define explicitly column names for a view. These new column names are permanent for the view, it is not possible to use the old ones.

5. Create a view with the player number, name, initials and the year of birth of each player who lives in Stratford:

6. Use of group functions in a view - Create a view with the number of players from each town:

Updating views

If you update views, the underlying tables are being updated. Nevertheless, updating views can have unexpected results.

7. Create a view of all players born before 1950

8. Now we would like to alter (update) the year of birth of the veteran whose player number is 2 from 1948 to 1960.

This is a correct update. If we are looking now at the view using a select, player 2 no longer appears.

With the **with check option** when creating a view, you can forbid such an unexpected effect.

If a view includes the "with check option" clause all changes via update and insert statements are controlled for validity.

- An update statement is correct if the rows are updated still belong to the virtual content of the view after the update.
- An insert statement is correct if the new rows belong to the virtual content of the view.

Limitation on updating

1. The **select** may not contain **distinct**.
2. The **select** may not contain statistical functions.
3. The **from** may specify only one table.
4. The **select** may not contain a group by.
5. The **select** may not contain set operators.

6. A virtual column may not be updated.

```
Create view a_ages_v(playerno, begin_ages) as
Select p_playernr, p_year_joined-p_year_of_birth
From p_players
```

The begin_ages may not be updated. Though the p_playerno may be updated.

Try:

```
update a_ages_v set playerno=1000 where playerno=2
```

and

```
update a_ages_v set begin_ages=2 where playerno=2
```

Restriction for insert statements

7. The select clause must contain all **not null** columns from the table which are specified in the **from** clause.