7.2

Benefits of Using Views

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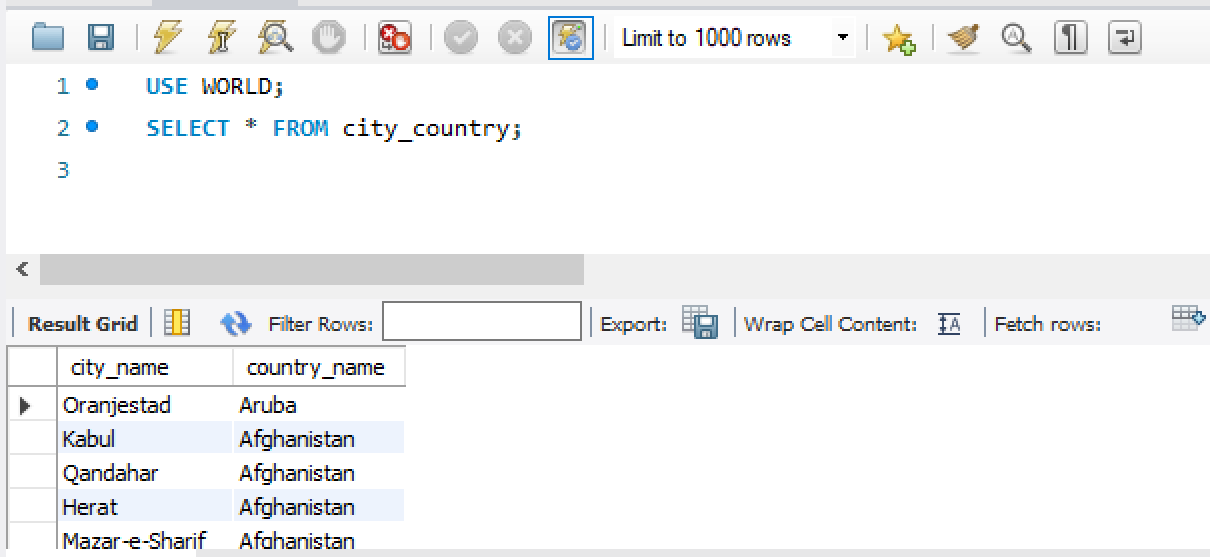
- Design Flexibility: By using a view instead of a query in an application, it is easier to make changes to the underlying table structure.
- Improved Security: By using a view to return data from tables instead of a SELECT, you can hide the WHERE clause or other columns to which you do not want the user to have access.
- Query Simplification: You can write simple select statements against views, which handle complex queries and joins.

Code Sample:

```
USE WORLD;
CREATE VIEW city_country AS
SELECT ci.name AS city_name, co.name AS country_name
FROM city ci
    JOIN country co
    ON ci.CountryCode = co.Code;
```

Results by selecting from the city_country view:



```
USE WORLD;
SELECT * FROM city_country;
```

city_name	country_name
Oranjestad	Aruba
Kabul	Afghanistan
Qandahar	Afghanistan
Herat	Afghanistan
Mazar-e-Sharif	Afghanistan

CREATE VIEW city_country AS

- Create a new VIEW object and give it the name city_country
- The AS statement precedes the query that will be assigned to the VIEW

SELECT ci.name AS city_name, co.name AS country_name

- Only the columns defined in the SELECT statement will be available to the VIEW
- It is a good idea to provide a column alias in the select because the VIEW will not have access to the underlying table structure.

FROM city ci

JOIN country co

ON ci.CountryCode = co.Code;

- The JOIN statement of the SELECT.
- Once you have created a VIEW, you can run SQL statements using the VIEW as if it were a table.
- By creating a VIEW, we can run selects that retrieve data from multiple tables without having to re-code a join.
- Notice how the SELECT * retrieves only the rows defined in the SELECT statement used in the VIEW creation.
- If you want to drop a VIEW, we can run the DROP VIEW statement
- If you want to modify an existing view you can use the statement CREATE OR REPLACE VIEW. That way you do not have to run a DROP VIEW statement and then a CREATE VIEW statement.