Problem Sets

1. Explain what is a view? What is the use of a view?

Answer:-

View can be described as virtual table which derived its data from one or more than one table columns. It is stored in the database. View can be created using tables of same database or different database.

We can add SQL functions, WHERE, and JOIN statements to a view and present the data as if the data were coming from one single table.

Use of view:-

**1. Views can hide complexity**

If you have a query that requires joining several tables, or has complex logic or calculations, you can code all that logic into a view, then select from the view just like you would a table.

**2. Views can be used as a security mechanism**

A view can select certain columns and/or rows from a table, and permissions set on the view instead of the underlying tables. This allows surfacing only the data that a user needs to see.

2. Create a simple view

Answer:-

create view reservation1 as

select ppno,flight\_code,class,journey\_date

from reservation

where class = 'BUSINESS';

3. Explain what is an updatable view?

Answer:-

Some views are updatable and references to them can be used to specify tables to be updated in data change statements. That is, you can use them in statements such as UPDATE, DELETE, or INSERT to update the contents of the underlying table.

For a view to be updatable, there must be a one-to-one relationship between the rows in the view and the rows in the underlying table. There are also certain other constructs that make a view nonupdatable. To be more specific, a view is not updatable if it contains any of the following:

Aggregate functions (SUM(), MIN(), MAX(), COUNT(), and so forth)

DISTINCT

GROUP BY

HAVING

UNION or UNION ALL

Subquery in the select list

Certain joins

Reference to nonupdatable view in the FROM clause

Subquery in the WHERE clause that refers to a table in the FROM clause

Refers only to literal values (in this case, there is no underlying table to update)

Multiple references to any column of a base table

4. Create an updatable view

Answer:-

create or replace view reservation1 as

select ppno,flight\_code,class,journey\_date

from reservation

where class = 'BUSINESS';

5. How do you view the existing views

Answer:-

select view\_name from all\_views

6. Explain what is materialized views?

Answer:-

A materialized view is a table segment whose contents are periodically refreshed based on a query, either against a local or remote table. Using materialized views against remote tables is the simplest way to achieve replication of data between sites. Materialized view is like a view but stores both definition of a view plus the rows resulting from execution of the view. It uses a query as the bases and the query is executed at the time the view is created and the results are stored in a table.

7. Create an materialized view?

Answer:-

CREATE MATERIALIZED VIEW custorder AS

SELECT custno, custname, ordno, book

FROM customer, bookorder

WHERE customer.custno=bookorder.custno;