- A **synonym** is an alternative name for objects(Tables) such as tables, views, sequences, stored procedures, and other database objects.
- Objects can have many synonyms.
- Synonyms are generally used when granting access to an object from another schema and you don't want the users to have to worry about knowing which schema owns the object.
- To create a PRIVATE synonym in your own schema, you must have the CREATE SYNONYM system privilege.
- To create a PRIVATE synonym in another user's schema, you must have the CREATE ANY SYNONYM system privilege.
- To create a PUBLIC synonym, you must have the CREATE PUBLIC SYNONYM system privilege.

ADVANTAGES OF USING SYNONYM:

- A synonym provides what is termed *location transparency* because the synonym name hides the actual object name and object owner from the user of the synonym.
- You can create a synonym for a database object and then refer to the synonym in application code. The underlying object can be moved or renamed, and a redefinition of the synonym will allow the application code to continue to execute without errors.
- A public synonym can be used to allow easy access to an object for all system users.

SAMPLE RELATION - CUSTOMER

| CUSTOMER_ID | NAME | CURRENT_BALANCE | PHONE_NO | CITY |
|-------------|---------|-----------------|------------|------------|
| 019523012 | George | 15000 | 9865984759 | Coimbatore |
| 019523013 | Antony | 18500 | 9659845789 | Chennai |
| 019523045 | Dharani | 32650 | 9658523214 | Chennai |
| 019523025 | Suresh | 62555 | 8965985478 | Salem |
| 019586489 | Vanitha | 26590 | 7854896589 | Trichy |

TO CREATE PUBLIC SYNONYM:

SYNTAX:

CREATE OR REPLACE PUBLIC SYNONYM synonym_name FOR schema.table_name;

EXPLANATION:

OR REPLACE:

Allows you to recreate the synonym (if it already exists) without having to issue a DROP synonym command.

PUBLIC:

It means that the synonym is a public synonym and is accessible to all users.

SCHEMA:

The appropriate schema. If this phrase is omitted, Oracle assumes that you are referring to your own schema.

EXAMPLE:

CREATE OR REPLACE PUBLIC SYNONYM SYN_CUSTOMER FOR system.CUSTOMER;

TO CREATE PRIVATE SYNONYM:

SYNTAX:

CREATE OR REPLACE SYNONYM synonym_name FOR schema.table_name;

EXPLANATION:

OR REPLACE:

Allows you to recreate the synonym (if it already exists) without having to issue a DROP synonym command.

SCHEMA:

The appropriate schema. If this phrase is omitted, Oracle assumes that you are referring to your own schema.

EXAMPLE:

CREATE OR REPLACE SYNONYM PRI_SYN_CUSTOMER FOR system.CUSTOMER;

The synonym **PRI_SYN_CUSTOMER** can only be used by the schema 'system', since it is **private**.

TO DROP PUBLIC SYNONYM:

SYNTAX:

DROP PUBLIC SYNONYM SYNONYM_NAME;

EXAMPLE:

SQL> DROP PUBLIC SYNONYM SYN_CUSTOMER;

Synonym dropped.

TO DROP PRIVATE SYNONYM:

SYNTAX:

DROP SYNONYM SYNONYM_NAME;

EXAMPLE:

SQL> DROP SYNONYM PRI_SYN_CUSTOMER;

Synonym dropped.