Grant SELECT Object Privilege On One or More Tables to a User

Summary: In this lab, you will learn how to use the Oracle `GRANT` statement to grant `SELECT` object privilege on one or more tables to a user.

Grant SELECT on a table to a user

To grant the `SELECT` object privilege on a table to a user or role, you use the following statement:

```
GRANT SELECT ON table_name TO {user | role};
```

The following example illustrates how to grant the `SELECT` object privilege on a table to a user.

First, create a new user called `DW` and grant the `CREATE SESSION` to the user:

```
CREATE USER dw IDENTIFIED BY abcd1234;

GRANT CREATE SESSION TO dw;
```

Second, grant the `SELECT` object privilege on the `sys.customers` table to the `dw` user:

```
GRANT SELECT ON customers TO dw;
```

Finally, use the `dw` user to log in to the Oracle Database and [query data] from the `sys.customers` table:

```
SELECT COUNT(*)
FROM sys.customers;
```

Here is the output:

```
  COUNT(*)

    5
```

Grant SELECT on all tables in a schema to a user

Sometimes, you want to grant `SELECT` on all tables that belong to a schema or user to another user. Unfortunately, Oracle doesn't directly support this using a single SQL statement.

To work around this, you can select all table names of a user (or a schema) and grant the `SELECT` object privilege on each table to a grantee.

The following stored procedure illustrates the idea:

```
CREATE PROCEDURE grant_select(
    username VARCHAR2,
    grantee VARCHAR2)
AS
BEGIN
    FOR r IN (
```

```
        SELECT owner, table_name
        FROM all_tables
        WHERE owner = username
    )
    LOOP
        EXECUTE IMMEDIATE
            'GRANT SELECT ON '||r.owner||'.'||r.table_name||' to ' || grantee;
    END LOOP;
END;
```

This example grants the `SELECT` object privileges of all tables that belong to the user `SYS` to the user `DW` :

```
EXEC grant_select('HR','DW');
```

When you use the user `DW` to login to the Oracle Database, the user `DW` should have the `SELECT` object privilege on all tables of the `SYS` 's schema.

In this lab, you have learned how to grant the `SELECT` object privilege on one or more tables to a user.