Self Join in Oracle

What is Self-Join in Oracle?

The Self Join in Oracle is nothing but joining a table by itself. We need to use Self Join when we have some relations between the columns of the same table.

When you are implementing the self-join mechanism in Oracle, then you have to create the alias for the table name.

You can create any number of aliases for a single table name in Oracle. Aliases are nothing but the
alternative name given to a table.

The Self Join is not a different kind of join. The Self Join is like any other join except that the two
instances of the same table will be joined together.

So, it can be classified as any type of join, such as

1. **Inner Join**
2. **Outer (Left, Right, Full) join**
3. **Cross Join**

Left Self-Join Example in Oracle:

A MANAGER is also an EMPLOYEE. Both the NORMAL EMPLOYEE and MANAGER records are present in the same Employee table.

So, here we need to join the table Employee with itself using different alias names,

let say, E for Employee and M for Manager.

Here we are going to use the Left Outer Join which will get the records with ManagerId NULL.

```
SELECT E.FullName as Employee, M.FullName as Manager
FROM Employee E
LEFT OUTER JOIN Employee M
ON E.ManagerId = M.EmployeeId;
```

Inner Self Join Example in Oracle:

Now, we are going to use Inner Self Join to join two instances of the same Employee table which will not retrieve the records with ManagerId NULL.

```
SELECT E.FullName as Employee, M.FullName as Manager
FROM Employee E
INNER JOIN Employee M
ON E.ManagerId = M.EmployeeId;
```

Cross Self Join Example:

Now, we are going to use Cross Self Join to join two instances of the same Employee table. In this case, each record of instance will be multiplied with each other of other instances.

```
SELECT E.FullName as Employee, M.FullName as Manager
FROM Employee E
CROSS JOIN Employee M;
```