**Constraints:**

restrictions applied while inserting data in particular row.

**Types of constraints:**

1. Not null constraint
2. Primary key constraint
3. Unique Key constraint
4. Foreign key constraint
5. Check constraint
6. Default constraint
7. **Not null constraint:**
   1. **Create:**

Create table emp1(Name varchar2(30), id number(10) Not null);

* 1. **Alter table:**

To alter table and adding constraints the table row on which we want to add the constraint should be empty.

Alter table emp1 modify Name Not null;

1. **Unique constraint:**

Duplicates are not allowed in rows.

* 1. **Create:**

Create table emp1(Name varchar2(40),id number(10) unique);

Or

Create table emp1(Name varchar2(20),id number(20), constraint cp unique(id));

* 1. **Alter:**

Alter table emp1 add constraint cp unique(name);

1. **Primary key:**

Primary key constraint includes both not null and unique constraint

And only one column in the table can have primary key constraint

* 1. **Create:**

Create table emp1(Name varchar2(30) , id number(10) primary key);

Or

Create table emp1(Name varchar(20),id number(10), add constraint vp primary key(id));

* 1. **Alter:**

Alter table emp1 add constraint cp primary key(id);

1. **Foreign key constraint:**

Foreign key constraint is used to relate two tables on two columns having same relations the values present in the column of the parent table only those values are allowed to insert in the child table

And we cannot delete parent table unless and until child table is not deleted.

Foreign key constraint is applied only when the column of parent table on which the constraint is applied is primary key

* 1. **Create:**
     1. Parent table:

Create table emp1(name varchar2(40), id number(10), depid number(5) primary key);

* + 1. Child table:

Create table emp2(depname varchar2(30), depid number(5), constraint cp foreign key(depid) references emp1(depid));

* 1. **Alter:**

Alter table emp1 add constraint v primary key(depid);

Alter table emp2 add constraint cp foreign key(depid) references emp1(depid);

1. **Check constraint:**

It is used to apply some condition on a specific column.

* 1. **Create:**

Create table emp1(Name varchar2(40), age number(2), gender varchar2(30),constraint cp check(gender in(‘Female’,’Male’)));

* 1. **Alter:**

Alter table emp1 add constraint cp check(gender in(‘Female’,’Male’);

1. **Default constraint:**

This constraint is added to place some value at null value.

* 1. **Create:**

Create table emp1(name varchar2(20), age number(2) default 0);

* 1. **Alter:**

Alter table emp1 alter age set default 0;

Or

Alter table modify age default 0;