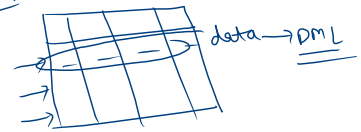
DDL Command 3

Drop command

Drop table table_name

Drop → Alter



→ If you try to drop a table, all the values present inside the table will be deleted, constraints present on that table will be deleted & then table too will be deleted.

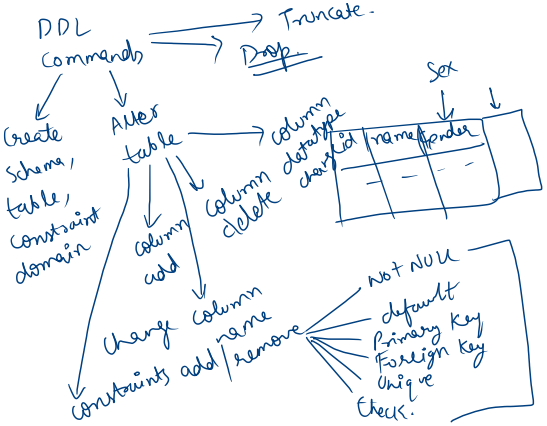
Drop [schema | Table | constraint] <name> [Cascade | Restrict] ;

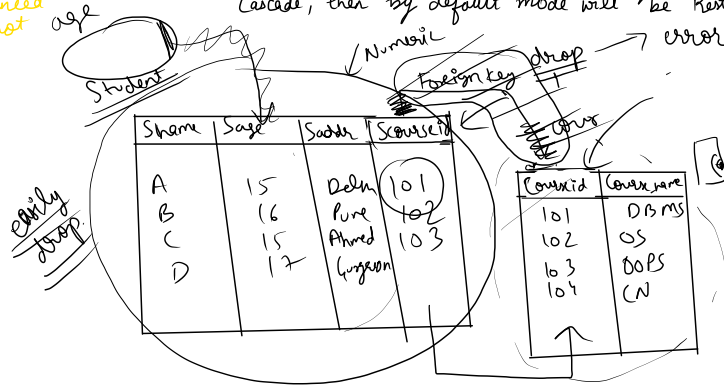
→ Cascade option will create a chain reaction and delete all the elements associated with element.

→ In restrict option, an element is deleted only if has no sub elements within it & it is not referenced in any constraints or views. otherwise, drop will not be executed & result in a error.

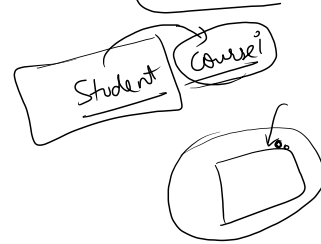
* elements → components used in definition of schema & NOT the data inside tables.

** default → If you have not mentioned explicitly Restrict/Cascade, then by default mode will be Restrict.



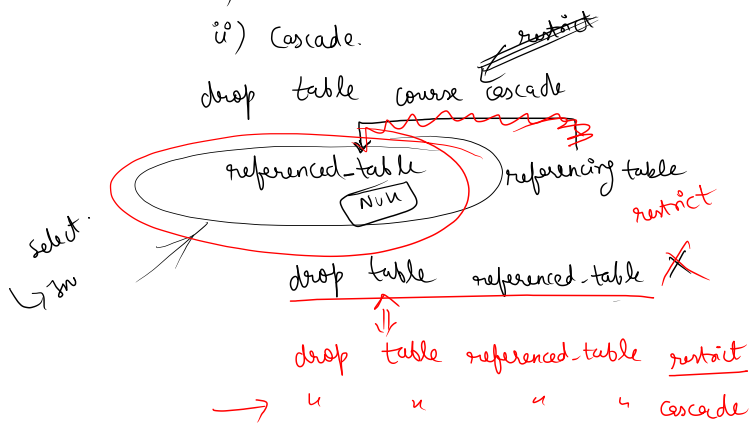


Scourse id C.1 → Numeric
C.2 → [ ]



i) Restrict

ii) Cascade.



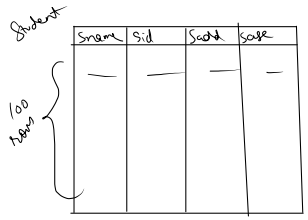
DDL Command 4

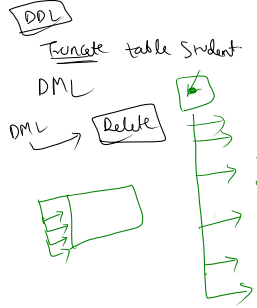
Truncate table table-name;

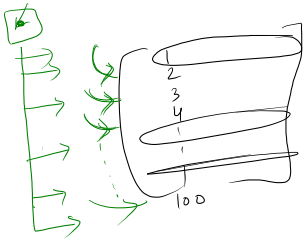
- Deletes all the values inside the table without altering or deleting schema of the table.

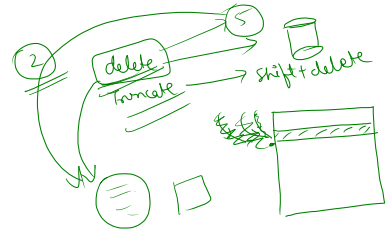
Drop:

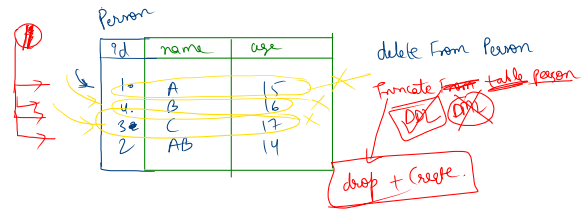
> Why is Truncate a DDL command & not DML?









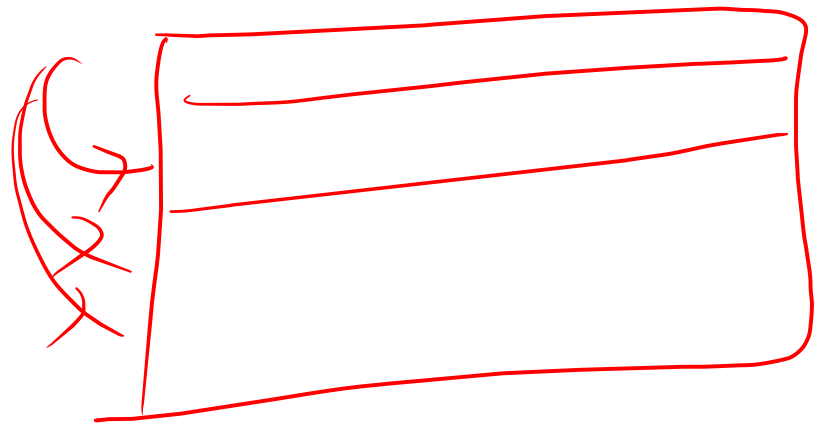


DML Commands (Data Manipulation Language)

- Insert
- Update
- Delete
- Select

(1 : N)

row or set of



Insert Command

name, age, sex

('A', , 'M') ✗

(name, sex)
values
(

i) Insert into table_name values (v1, v2, v3, ----vn);

* here values should be provided in the order columns inside table are created while table creation.

ii) Insert into table_name (att1, att2, att3 --- attn)
values (v1, v2, v3, --- vn);

name, age, sex
age, sex, name
0, 'M', 'ABCD'

* v1 value will be inserted against att1
v2 " " " " " att2
and so on.

Insert operation will result in error if
i) datatype mismatch.
ii) constraint violation.

* If values for certain columns are not provided while performing insert operation, then database will allocate default value corresponding to that column.

Delete Command (DML)

→ It is used to remove tuples from a relation.

Syntax :-

Delete FROM table_name
Where column_name condition value ;

where id=2

id%2=0

student

id	name	gender
1	A	M
2	B	F
3	C	F
4	D	M

Update Command

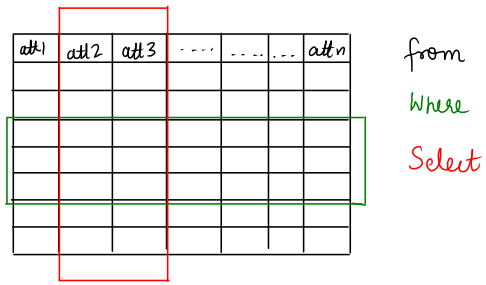
- It is used to alter already present VALUES inside a table. (Imp.)

```
Update  table_name
Set     attr1 = val1 , att2 = val2 , ----- attrn = valn
where   attrk condition valuek.
```

* Can throw an error if we have data type or constraint violation.

Select Command

```
SELECT  attr1, attr2, attr3, ------
FROM    tablename
WHERE   attr1 condition attr2 ------ ;
```



1. 'Select' and 'From' are mandatory, however 'where' is an optional clause.

2. Select (*) → This will output all the columns present in table.

3. Select *
   From student, marks;
   table1, table2 ----
   → Cartesian product.

4. If 2 tables in join operation have same attribute names, then we use below

   a) Select student.name, student.age, marks.name, marks.age
      from student, name
      where student.name = marks.name and student.age = marks.age;

   b) Select S.name, S.age, M.name, M.age
      FROM Student as S, Marks as M
      where S.name = M.name and S.age = M.age;

   c) Select S.name, S.age, M.name, M.age
      FROM Student S, Marks M
      where S.name = M.name and S.age = M.age;

   Aliasing is used to resolve ambiguity.

   * Aliasing can be used in Select clause as well.

```
Select S.name as name_of_student, M.marks as marks_of_Student
From Student S, Marks M
where S.name = M.name and S.age = M.age;
```

SQL treats table not as a set but as a multiset.

→ Duplicate entries are allowed in tables, views, query results.

⇒ An SQL table with a key is restricted to being a set.

Select DISTINCT keyword is used to eliminate duplicate tuples from the result set.

Select ALL keyword is used to select all the tuples from the result set.

```
Select All Salary
From Employee;
```

```
Select Distinct Salary
from Employee;
```