1. What is the difference between truncate, delete, drop?

|  | truncate | delete | drop |
| --- | --- | --- | --- |
| Language | It is also a Data Definition Language Command (DDL) | it is a Data Manipulation Language Command (DML) | It is a Data Definition Language Command (DDL) |
| Use | The TRUNCATE Command deletes all the rows from the existing table, leaving the row with the column names. | The DELETE command deletes one or more existing records from the table in the database. | The DROP Command drops the complete table from the database. |
| Transition | We cannot restore all the deleted rows from the database using the ROLLBACK command. | We can restore any deleted row or multiple rows from the database using the ROLLBACK command. | We cannot get the complete table deleted from the database using the ROLLBACK command. |
| Memory Space | The TRUNCATE command does not free the space allocated for the table from memory. | The DELETE command does not free the allocated space of the table from memory. | The DROP command removes the space allocated for the table from memory. |
| Performance Speed | The TRUNCATE command works faster than the DROP command and DELETE command because it deletes all the records from the table without any condition. | The DELETE command performs slower than the DROP command and TRUNCATE command as it deletes one or more rows based on a specific condition. | The DROP Command has faster performance than DELETE Command but not as compared to the Truncate Command because the DROP command deletes the table from the database after deleting the rows. |
| Syntax | TRUNCATE TABLE table\_name; | DELETE FROM table\_name WHERE condition; | DROP TABLE table\_name; |

2. What are alias in MySQL?

-SQL aliases are used to give a table, or a column in a table, a temporary name.

-Aliases are often used to make column names more readable.

-An alias only exists for the duration of that query.

-An alias is created with the AS keyword.

Alias column symbol-

SELECT column\_name AS alias\_name

FROM table\_name;

Alias table syntax-

SELECT column\_name(s)

FROM table\_name AS alias\_name;

3. How do you display even rows of the any table?

**1st solution-**

select \* from employees

where mod (employee\_id, 2) = 0;

**2nd solution-**

select \* from employees

where employee\_id %2 = 0;

**Odd rows-**

**1st solution-**

select \* from employees

where mod (employee\_id, 2) != 0;

**2nd solution-**

select \* from employees

where employee\_id %2 != 0;

4. How can you remove duplicates from a table(distinct and other way)

**1st sol-By using Distinct**

select distinct name,age,gender from personal;

**2nd sol-By using group by-**

select name,age,gender from personal group by name,age,gender;

**3rd sol-By using CTE**

with CTE as

(select id,name,age,gender,row\_number() over(partition by name order by name) as no\_of\_emp

from personal)

select \* from CTE where no\_of\_emp=1 order by id;

5. How you can find 5th max salary?(Do it by all 3 ways)

**2nd-By using limit-**

select distinct salary from employees order by salary desc limit 4,1;

**2nd-By using subquery-**

SELECT salary FROM

(select distinct salary from employees order by salary desc limit 5) as high

order by salary limit 1;

**3rd sol-By using CTE**

select \* from(

select distinct salary,dense\_rank() over(order by salary desc)as r

from employees)r where r=5;