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

Truncate, DELETE, and DROP are all SQL commands that can be used to delete data from a database. However, they differ in the way they delete the data and in the level of operation they perform.

TRUNCATE: TRUNCATE is a Data Definition Language (DDL) operation that is used to mark the extents of a table for deallocation (empty for reuse). The result of this operation quickly removes all data from a table, typically bypassing a number of integrity enforcing mechanisms. TRUNCATE operations drop and re-create the table, which is much faster than deleting rows one by one, particularly for large tables.

DELETE: DELETE is a Data Manipulation Language (DML) operation that is used to delete rows from a table. DELETE operations can be rolled back (undone), and the space for the deleted rows is not immediately reused.

DROP: DROP is a Data Definition Language (DDL) operation that is used to delete objects from the database. DROP operations cannot be rolled back.

Here is an example of how these statements might be used:

```
TRUNCATE TABLE my_table;  -- deletes all rows from the table and resets the table structure

DELETE FROM my_table WHERE condition;  -- deletes rows that meet a specific condition

DROP TABLE my_table;  -- deletes the table structure and all its data permanently
```

2. What are alias in MySQL?
Ans:
In MySQL, an alias is a temporary name that you can give to a table or column in a SELECT, UPDATE, INSERT, or DELETE statement. An alias can be used to give a column or table a temporary name to make it easier to write and read the query.

For example, consider the following SELECT statement:

```
SELECT p.product_name AS product, c.category_name AS category
FROM products p INNER JOIN categories c ON p.category_id = c.id
```

In this query, the product_name column from the products table is given the alias product, and the category_name column from the categories table is given the alias category. These aliases can be used throughout the rest of the query to refer to the columns, making the query easier to read and understand.

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

To display only the even rows of a table in MySQL, you can use the MOD() function in the WHERE clause of the SELECT statement. The MOD() function returns the remainder of a division operation, so you can use it to filter the rows based on whether their row number is even or odd.

For example, consider the following SELECT statement:

```
SELECT * FROM table_name WHERE MOD(row_number, 2) = 0;
```

This query will select all rows from the table_name table, and only return the rows where the remainder of dividing the row number by 2 is equal to 0. Since even numbers are always divisible by 2, this will only return the even-numbered rows of the table.

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

There are a few different approaches you can use to remove duplicates from a table in a database:

1. Use the DISTINCT keyword in a SELECT statement:

```
SELECT DISTINCT column1, column2, ...FROM table_name;
```

2. This will return all rows from the table, but with duplicates removed.

Use the GROUP BY clause in a SELECT statement:
```
SELECT column1, column2, ...FROM table_name GROUP BY column1, column2, ...;
```

3. Use a DELETE statement with a WHERE clause to delete specific duplicates:

```
DELETE FROM table_name WHERE id IN ( SELECT id FROM ( SELECT id, ROW_NUMBER() OVER (PARTITION BY column1, column2 ORDER BY id) AS row_num FROM table_name) t WHERE t.row_num > 1);
```

This will delete duplicates based on the columns specified in the PARTITION BY clause. The ROW_NUMBER() function assigns a unique number to each row within a partition, and the WHERE clause filters out rows with a row_num greater than 1, leaving only the duplicates to be deleted.

Note that these are just a few examples, and the specific approach you choose will depend on your specific needs and the capabilities of your database.

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

To find the 5th highest salary in a table using SQL, you can use a combination of the SELECT and LIMIT clauses.

Here is an example using a hypothetical table employees with a column salary:

```
SELECT salary FROM employees ORDER BY salary DESC LIMIT 5, 1;
```

This SQL query will first sort the salaries in the employees table in descending order, and then select the salary at the 5th position in the sorted list (which will be the 5th highest salary). The LIMIT clause specifies that only one row should be returned, starting from the 5th row.

You can also use the RANK() function to assign a rank to each salary based on its value, and then filter for the salary with a rank of 5:

```
SELECT salary FROM (SELECT salary, RANK() OVER (ORDER BY salary DESC) AS rank
 FROM employees) ranked_salaries WHERE rank = 5;
```

This approach is more flexible, as it allows you to easily find the nth highest salary for any value of n.