Database Query Writing

Using Mysql

Create Database

```
create DATABASE database_name;
```

Create Table

```
create TABLE table_name (

    column1 DATATYPE properties.. ,

    column2 DATATYPE properties.. ,

    …

);
```

Insert Data

INSERT INTO table_name (column1, column2, column3...) VALUES

(column1Value, column2Value, column3Value, ..),

(column1Value, column2Value, column3Value, ..);

https://www.w3schools.com/mysql/mysql_datatypes.asp

Fetch Data

To get all columns data from the table:

SELECT * from table_name;

To get specific column(s) data from the table:

SELECT column1_name, column2_name from table_name;

Fetch Data

To fetch data based on conditions :

*SELECT * from table_name WHERE column_name = value;*

*SELECT * from table_name WHERE column1_name = value1 AND column2_name = value2;*

Data Sorting

The result set is sorted in a specific order.

Sorting by ascending order (from lowest to highest)

*SELECT * FROM table_name ORDER BY column_name ASC;*

Sorting by descending order (from highest to lowest)

*SELECT * FROM table_name ORDER BY column_name DESC;*

Aggregations

Mathematical analysis is performed on data using the Aggregator function.

FUNCTIONS	DEFINITION	QUERY FORMAT
COUNT()	Count total records	*select COUNT(*) FROM table_name;*
SUM()	Finding the total sum	*select SUM(col_name) FROM table_name;*
AVG()	Find the mean value	*select AVG(col_name) FROM table_name;*
MIN()	Finding the minimum value	*select MIN(col_name) FROM table_name;*
MAX()	Finding the maximum value	*select MAX(col_name) FROM table_name;*

Data Limiting

A specific number of records can be returned.

*SELECT * FROM table_name LIMIT numberOfLimits;*

Pagination:

*SELECT * FROM table_name LIMIT numberOfLimits OFFSET offsetNumber;*

Data Grouping

The GROUP BY statement groups rows that have the same values into summary rows.

Example: find the number of customers in each country.

The GROUP BY statement is often used with aggregate functions (COUNT(), MAX(), MIN(), SUM(), AVG()) to group the result-set by one or more columns.

SELECT column_name(s) FROM table_name GROUP BY column_name(s);

Update Data

Update all records of a column:

UPDATE table_name SET column_name = value;

Update records on conditions:

UPDATE table_name SET column_name = value WHERE condition(s);

Delete Data

Delete all records of the table:

DELETE FROM table_name;

Delete records on conditions:

DELETE FROM table_name WHERE condition(s);

Joining Table

Inner Join:

 SELECT column_name(s) FROM table1 INNER JOIN table2 ON table1.column_name = table2.column_name;

Left Join:

 SELECT column_name(s) FROM table1 LEFT JOIN table2 ON table1.column_name = table2.column_name;

Right Join:

 SELECT column_name(s) FROM table1 RIGHT JOIN table2 ON table1.column_name = table2.column_name;