

MySQL

DDL and DML Statements (...Continuation)

HOME ASSIGNMENT:

Create an Employee database with the below details:

Database Name: employeeDB

Table Name: employeeTB

Fields:

employee number – varchar(6)

employee name – varchar(15)

department – varchar(15)

designation – varchar(15)

salary – int(8)

HOME ASSIGNMENT: ANSWER

1) create database emp_db;

2) use emp_db;

3) create table emp_tb (employee_number
varchar(6), employee_name varchar(15), department
varchar(15), designation varchar(15), salary int(8));

4) insert into emp_tb
values ("AS421", "Arun", "Sales", "Manager", 300000)

HOME ASSIGNMENT: ANSWER

```
5)insert into emp_tb  
values("AS434","Arjun","ID","Supervisor",20000);
```

```
6) insert into emp_tb  
values("AS450","Bala","Accounts","Accounts head",50000);
```

```
7) select * from emp_tb;
```

MySQL SELECT:

MySQL SELECT statement is used to fetch data from a database table.

SYNTAX:

```
SELECT * FROM table_name
```


```
SELECT column_name(s) FROM table_name
```

MySQL WHERE:

The WHERE clause is used to filter records at the time of SELECT..

SYNTAX:

```
SELECT [*] FROM [Table_name]
WHERE [condition1] [AND [OR]]
[condition2]...
```

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- WHERE clause can be used to apply various comma separated condition, in one or more tables.
 - Using the WHERE clause to select the specified condition.
 - Specific conditions using AND or OR operators.
 - A WHERE clause can be used with DELETE or UPDATE.

Here is the list of operators, which can be used with the **WHERE** clause.
Assume field A holds 10 and field B holds 20, then –

Operator	Description	Example
=	Checks if the values of the two operands are equal or not, if yes, then the condition becomes true.	(A = B) is not true.
!=	Checks if the values of the two operands are equal or not, if the values are not equal then the condition becomes true.	(A != B) is true.
>	Checks if the value of the left operand is greater than the value of the right operand, if yes, then the condition becomes true.	(A > B) is not true.
<	Checks if the value of the left operand is less than the value of the right operand, if yes then the condition becomes true.	(A < B) is true.
>=	Checks if the value of the left operand is greater than or equal to the value of the right operand, if yes, then the condition becomes true.	(A >= B) is not true.
<=	Checks if the value of the left operand is less than or equal to the value of the right operand, if yes, then the condition becomes true.	(A <= B) is true.

SQL GENERAL DATA TYPES

Each column in a database table is required to have a name and a data type.

The following table lists the general data types in SQL:

Data type	Description
CHARACTER(n)	Character string. Fixed-length n
VARCHAR(n) or CHARACTER VARYING(n)	Character string. Variable length. Maximum length n
BINARY(n)	Binary string. Fixed-length n
BOOLEAN	Stores TRUE or FALSE values
SMALLINT	Integer numerical (no decimal). Precision 5
INTEGER	Integer numerical (no decimal). Precision 10
BIGINT	Integer numerical (no decimal). Precision 19
DECIMAL(p,s)	Exact numerical, precision p, scale s. Example: decimal(5,2) is a number that has 5 digits before the decimal and 2 digits after the decimal
FLOAT(p)	Approximate numerical, mantissa precision p. A floating number in base 10 exponential notation. The size argument for this type consists of a single number specifying the minimum precision
DOUBLE PRECISION	Approximate numerical, mantissa precision 16
DATE	Stores year, month, and day values
TIME	Stores hour, minute, and second values
TIMESTAMP	Stores year, month, day, hour, minute, and second values

MySQL - UPDATE

There may be a requirement where the existing data in a MySQL table needs to be modified. You can do so by using the SQL UPDATE command. This will modify any field value of any MySQL table.

Syntax:

The following code block has a generic SQL syntax of the UPDATE command to modify the data in the MySQL table –

```
UPDATE table_name SET field1 = new-value1, field2 = new-value2  
[WHERE Clause]
```

- You can update one or more field altogether.
- You can specify any condition using the WHERE clause.
- You can update the values in a single table at a time.

The WHERE clause is very useful when you want to update the selected rows in a table.