

# MySQL Basics in Hindi

# Agenda

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- Introduction to Database
- DBMS, RDBMS
- Installation of MySQL Database
- Introduction to SQL, Types of SQL statements
- How to create Database?
- How to create table, alter table?
- Insert query, Update query
- Delete query
- Select query
- Where Clause
- Order by Clause
- Drop table vs Truncate table
- Summary

# Introduction to Database

# Database

- Database is a systematic collection of different data items, which are related to each other.
- Data in the database can be table, view, index etc.
- We store the data in database so that we can easily fetch it, update it, delete it, process it.
- We perform different operations upon the data present in the database to generate the meaningful information.



# DBMS

# Database Management System(DBMS)

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- Database management system help us to store the data in a systematic way.
- DBMS helps us to manage the data in database efficiently and securely.
- DBMS helps us to get the information out of database in more faster and customized way.

# RDBMS

# Relational Database Management System(RDBMS)

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- Relational Database Management System works upon the principles of Relational Model which was introduced by Dr. E. F. Codd.
- All the latest Database Management System works on this concept of RDBMS.
- In RDBMS data is stored in the form of rows and columns, called **table**.
- Examples of Relational Database Management are as Oracle, MySQL, MS SQL Server, IBM DB2 etc.



# Installation of MySQL

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# Introduction to SQL and types of SQL statements

# SQL and types of SQL statements

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- SQL means Structured Query Language
- SQL is used to perform different database operations like storing the data, updating the data, modifying the data, deleting the data.
- With the help of SQL we can connect with database, we can create new database, we can change the structure of existing database.

# Types Of SQL Statements

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- Data Query Language(DQL)
- Data Manipulation Language(DML)
- Data Control Language(DCL)
- Data Definition Language(DDL)
- Transaction Control Language(TCL)

# How to create a Database?

# How to create a Database?

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- In MYSQL we create a new database using following syntax:

Syntax: `create database name_of_database;`

E.g. 1. `create database mysampled;`

E.g. 2. `create database mytestdb;`

- In above examples mysampled and mytestdb are the names of databases which we are creating.

# How to create a table?



# How to create a table?

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- Table is combination of rows and columns.
- In MySQL we create table using the following syntax:

```
create table name_of_table
(
    name_of_column datatype,
    name_of_column datatype,
    name_of_column datatype,
    name_of_column datatype,
    primary key(column name)
);
```

# How to alter a table?

# How to alter a table?

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- Alter command is used to change the definition of table like adding new column, deleting column, changing data type of column etc.
- In MySQL we alter table using the following syntax:

1. `alter table name_of_table  
add column name_of_column datatype`
2. `alter table name_of_column  
modify column name data type`
3. `alter table name_of_table  
drop column name_of_column`

# Insert query

# Insert query

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- To add new record in the table insert statement is used
- In MySQL we add new record in table using following syntax :

1. insert into *name\_of\_table*(*name\_of\_column1*,  
*name\_of\_column2*, *name\_of\_column3*)  
values(*first\_value*, *second\_value*,*third\_value*)

2. insert into *name\_of\_table* values (*first\_value*, *second\_value*,*third\_value*,*nth\_value*)

# Update query

# Update query

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- To modify the value of a particular row in a table **update statement** is used.
- In MySQL we use update statement using the following syntax :

```
update name_of_table  
set name_of_column = new value  
    name_of_column= new value  
where condition;
```

# Delete query



# Delete query

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- To remove a particular row in a table **delete statement** is used.
- In MySQL we use delete statement using following syntax :

```
delete from name_of_table  
where condition;
```

# Select query

# Select query

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- To get the records from a table we use **select statement**.
- In MySQL we use select statement using following syntax :

1. *select name\_of\_column1, name\_of\_column1, name\_of\_column1,  
from name\_of\_table;*

2. *select \* from name\_of\_table*

# Where Clause

# Where Clause

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- To get particular records from a table we have to specify the condition in query.
- We specify the condition in the query using **where clause**.
- In MySQL we use select statement with where clause using the following syntax :

1. *select name\_of\_column1, name\_of\_column2, name\_of\_column3,  
from name\_of\_table where condition*

2. *select \* from name\_of\_table where condition*

# Order By Clause

# Order By Clause

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- To get the records in a particular sequence from a table we use **order by clause** in the query.
- In MySQL we use order by clause with select statement using the following syntax :

```
select * from name_of_table  
where condition  
order by name_of_column[ASC/DESC];
```

- In the above query it will get the records which fulfill the mentioned condition and will display it according to values of column mentioned after order by clause. By default it will display in ascending order.

# Drop table Vs Truncate table



# Drop table Vs Truncate table

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- To delete the table from database we use **drop table statement**.
- In MySQL we use drop table statement using following syntax :  
`drop table name_of_table;`
- This delete all the rows from table and delete the structure of table also. After this table does not exists in database.
- To delete all the rows from the table we use **truncate table statement**.
- In MySQL we use drop table statement using following syntax :  
`truncate table name_of_table;`
- This delete all the rows from table, it means it will make table empty. But table structure is present in database.

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# Thank You