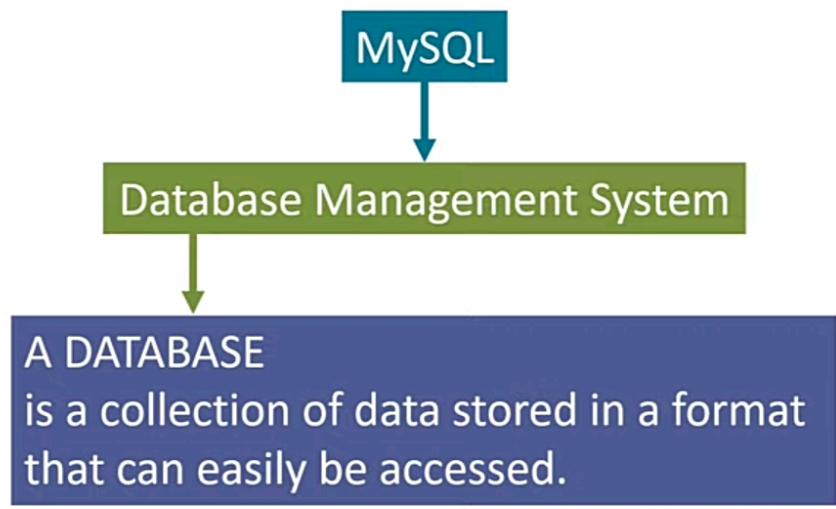




What is MySQL ?





What is Database ?

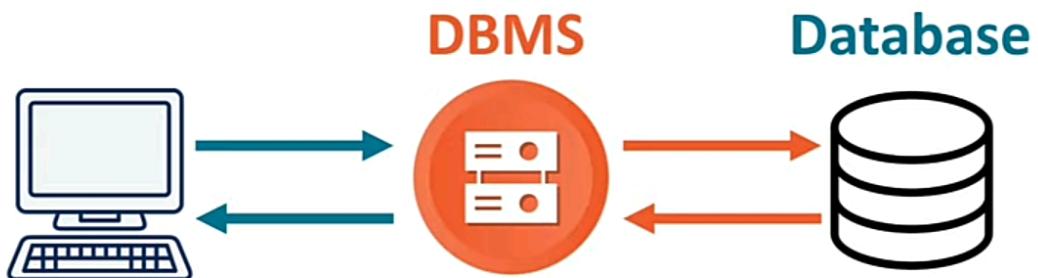
Name	<input type="text"/>
Age	<input type="text"/>
Gender	<input type="radio"/> Male <input type="radio"/> Female
<input type="button" value="Submit"/>	

Collection of Data

Name	Age	Gender
Ram Kumar	21	Male
Salman Khan	22	Male
Meera Khan	21	Female
Sarita Kumari	21	Female
Anil Kapoor	22	Male

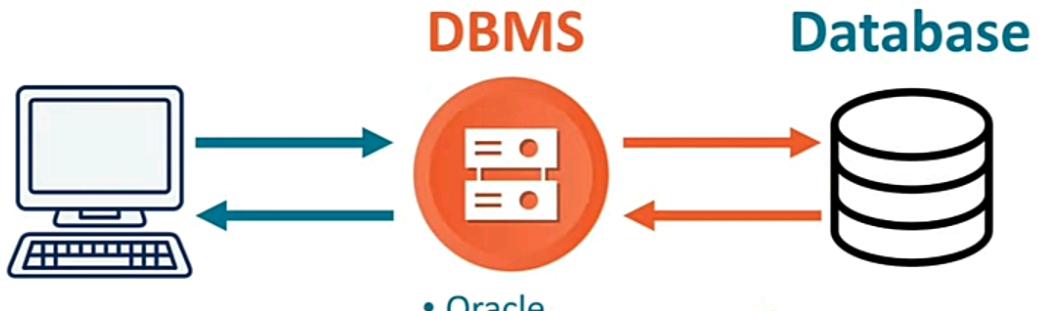


How DBMS Works ?





How DBMS Works ?



- Oracle
- MySQL
- MS SQL Server
- PostgreSQL
- MongoDB

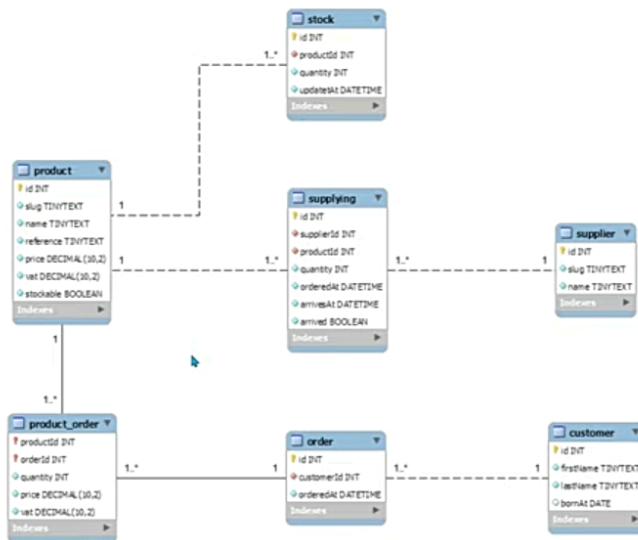


Two type of Database :

Relational

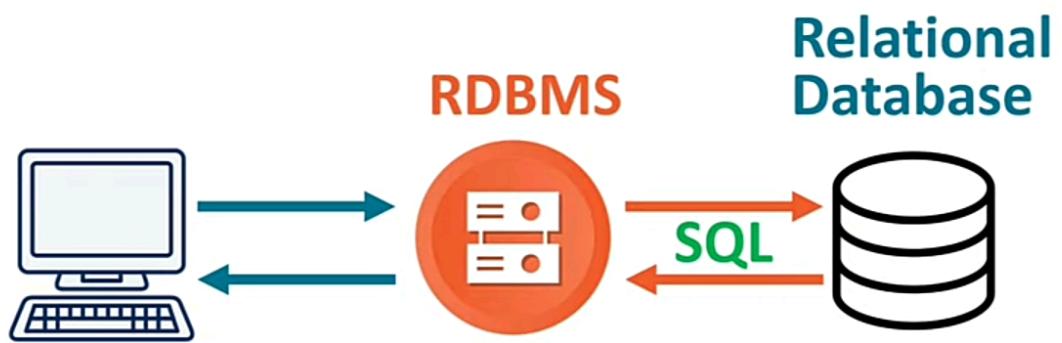
- Relational Database (RDBMS)
- RDBMS use SQL

Structured Query Language





Relational Database Management System





Two type of Database :

NoSQL

- NoSQL is not a Table-based Database.
- NoSQL databases are document based.
- MongoDB, Redis, Cassandra etc.



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Advantage of MySQL :

- Cross Platform
- Used with multiple languages (PHP, NodeJS, Python, C#).
- MySQL software is Open Source.
- MySQL is RDBMS.
- The MySQL Database Server is fast, reliable, scalable, and easy to use.
- MySQL Server works in client/server or embedded systems.



Popular Websites Using MySQL

- Facebook
- Twitter
- Google
- Wikipedia
- Youtube
- Flickr
- Pinterest



Content Management System Using MySQL

- Wordpress
- Joomla
- Drupal
- Magento
- phpBB
- TYPO3
- MODx



What we will learn in this course ?

- Create Database & Tables in database.
- Add Data in database.
- Update Data in database.
- Read data from database.
- Delete Data from database.

SQL Commands



How to create SQL Table ?

Name = String
Age = Numeric
Gender = String

Column Names Column Datatypes

Name	Age	Gender
Ram Kumar	21	Male
Salman Khan	22	Male
Meera Khan	21	Female
Sarita Kumari	21	Female
Anil Kapoor	22	Male

Table Name



Create Table Syntax

```
CREATE TABLE table_name (
    column1 datatype,
    column2 datatype,
    column3 datatype,
    ....
);
```



Datatypes in MySQL

3 Type of Category in Datatypes :

1. String
2. Numeric
3. Date and Time



String Datatypes in MySQL

1. CHAR(size) **0 to 255**
2. VARCHAR(size) **0 to 65535**
3. BINARY(size)
4. VARBINARY(size)
5. TINYTEXT **255 characters**
6. TEXT(size) **65,535 bytes**
7. MEDIUMTEXT **16,777,215 characters**
8. LONGTEXT **4,294,967,295 characters**
9. TINYBLOB **255 bytes**
10. BLOB(size) **65,535 bytes**
11. MEDIUMBLOB **16,777,215 bytes**
12. LONGBLOB **4,294,967,295 bytes**
13. ENUM(val1, val2, val3, ...) **list up to 65535 values**
14. SET(val1, val2, val3, ...)



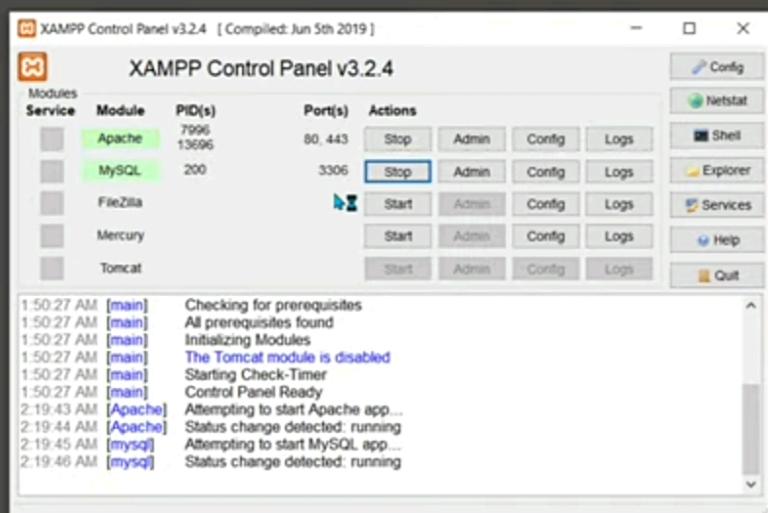
Numeric Datatypes in MySQL

1. BIT(size) **1 to 64**
2. TINYINT(size) **-128 to 127**
3. INT(size) **-2147483648 to 2147483647**
4. INTEGER(size)
5. SMALLINT(size) **-32768 to 32767**
6. MEDIUMINT(size) **-8388608 to 8388607**
7. BIGINT(size) **-9223372036854775808 to 9223372036854775807**
8. BOOL
9. BOOLEAN **0 / 1**
10. FLOAT(p)
11. DOUBLE(size, d) **255.568**
12. DECIMAL(size, d)
13. DEC(size, d)



Date & Time Datatypes in MySQL

1. DATE '1000-01-01' to '9999-12-31'
2. DATETIME(fsp) YYYY-MM-DD hh:mm:ss
3. TIMESTAMP(fsp)
4. TIME(fsp) hh:mm:ss
5. YEAR four-digit format : 1901



No connection

Navigator

SCHEMAS

Filter objects

phpmyadmin

student

Tables

personal

Columns

id
name
birth_date
phone
gender

Indexes

Foreign Keys

Triggers

Views

Stored Procedures

Functions

Administration Schemas Information

Schema: student

Query 1

CREATE TABLE personal(
 id INT,
 name VARCHAR(50),
 birth_date DATE,
 phone VARCHAR(12),
 gender VARCHAR(1)
);

Output

Action Output

#	Time	Action	Message
1	02-23-57	use student	0 row(s) affected
2	02-28-47	CREATE TABLE personal(id INT, name VARCHAR(50), birth_date DATE, phone VARCHAR(12), gender VARCHAR(1))	0 row(s) affected

Navigator

SCHEMAS

Filter objects

phpmyadmin

student

Tables

personal

product

Views

Stored Procedures

Functions

Administration Schemas Information

Schema: student

Query 1

CREATE TABLE product(pid INT, pname VARCHAR(50), pcompany VARCHAR(50), price INT);

Output

Action Output

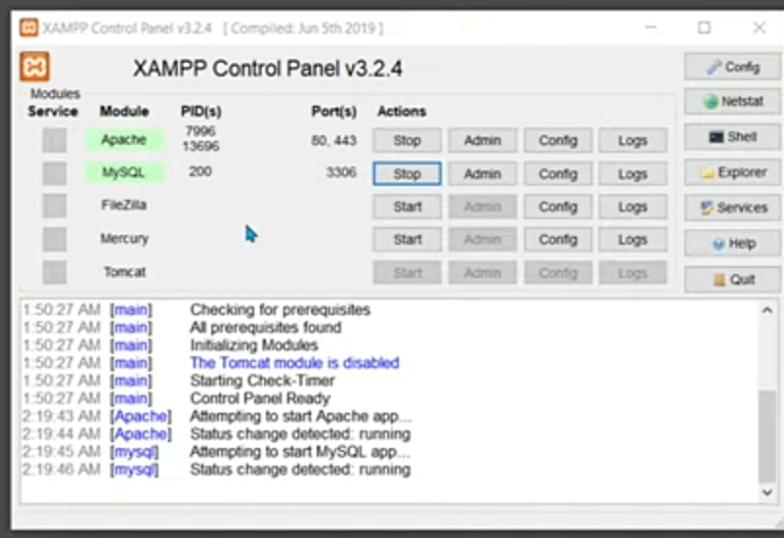
#	Time	Action	Message
1	02:23:57	use student	0 row(s) affected
2	02:28:47	CREATE TABLE personal(id INT, name VARCHAR(50), birth_date DATE, phone VARCHAR(12), gender CHAR(1));	0 row(s) affected
3	02:31:46	CREATE TABLE product(pid INT, pname VARCHAR(50), pcompany VARCHAR(50), price INT)	Error Code: 1064
4	02:32:14	CREATE TABLE product(pid INT, pname VARCHAR(50), pcompany VARCHAR(50), price INT)	0 row(s) affected



How to Insert data in Tables with SQL ?

Name	Age	Gender
Ram Kumar	21	Male
Salman Khan	22	Male
Meera Khan	21	Female
Sarita Kumari	21	Female
Anil Kapoor	22	Male

```
INSERT INTO table_name ( column1, column2, ....)
VALUES ( value1, value2,....);
```



Schemas

Filter objects

phpmyadmin

student

Tables

personal

Columns

- Id
- name
- birth_date
- phone
- gender

Indexes

Foreign Keys

Triggers

product

Views

Stored Procedures

Functions

Administration Schemas

No object selected

Query 1 × personal

1 • INSERT INTO personal (id, name, birth_date, phone, gender)

2 VALUES (1, "Ram Kumar", "1990-07-15", "99775544881", "M");

Output

Action Output

Time Action

Message

The screenshot shows the phpMyAdmin interface. On the left, the 'Schemas' sidebar is open, showing the 'student' schema with its tables: 'personal', 'product', and 'Views'. The 'personal' table is expanded, showing columns: id, name, birth_date, phone, and gender. The 'Actions' tab is selected in the top navigation bar. In the main query editor area, titled 'Query 1 × personal', there is a single query:

```
1 • INSERT INTO personal (id, name, birth_date, phone, gender)
2 VALUES (1, "Ram Kumar", "1990-07-15", "99775544881", "M");
```

The 'Output' section below the query editor has 'Action Output' selected. The 'Message' section is currently empty.



Insert Data in Tables with SQL :

Name	Age	Gender
Ram Kumar	21	Male
Salman Khan	22	Male
Meera Khan	21	Female
Sarita Kumari	21	Female
Anil Kapoor	22	Male

```
INSERT INTO table_name ( column1, column2, ....)
VALUES ( value1, value2,....);
```



Insert Multiple Rows Syntax :

```
INSERT INTO table_name ( column1, column2, ....)
VALUES
( value1, value2,...),
( value1, value2,...),
( value1, value2,...);
```

YahooBaba - Warning ×

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

phpmyadmin

student

Tables

personal

product

Views

Stored Procedures

Functions

testing

Query 1 × personal

Limit to 1000 n

```
1 • INSERT INTO personal (id, name, birth_date, phone, gender)
2 VALUES
3 (3, "Anil Kapoor", "1991-10-05", "94752544881", "M"),
4 (4, "Juhi Chawla ", "1992-03-25", "94756664881", "M"),
5
```

Administration Schemas

Information

No object selected

Output