| MYSQL Data Types | |
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| Data Types | Description |
| CHAR | A FIXED length string (can contain letters, numbers, and special characters). It can be from 0 to 255 characters. |
| VARCHAR | A variable-length string (can contain letters, numbers, and special characters). It can be from 0 to 65535 characters. |
| BINARY | Stores fixed-length binary byte string |
| VARBINARY | Stores variable-length binary byte string |
| TINYBLOB | A very small BLOB (binary large object) |
| BLOB | BLOBS are commonly used for storing moderately sized binary objects like images, documents, or small videos. Maximum storage capacity: 65,535 bytes (64 KB) |
| MEDIUMBLOB | It is suitable for storing larger images, audio files, or video clips. Maximum storage capacity: 16,777,215 bytes (16 MB). |
| LONGBLOB | It's used for storing very large binary objects such as high-resolution images, large audio files, or long video files. Maximum capacity: 4 GB of binary data. |
| TINYTEXT | TINYTEXT is the smallest TEXT type, capable of storing a maximum of 255 characters |
| TEXT | TEXT is commonly used for storing moderately sized text fields like articles, comments, or product descriptions. Maximum storage capacity: 65,535 characters (64 KB) |
| MEDIUMTEXT | This makes it suitable for storing larger text fields such as blog posts, lengthy articles, or forum threads. Maximum capacity of 16,777,215 characters (16 MB) |
| LONGTEXT | LONGTEXT is the largest TEXT type, capable of storing a maximum of 4,294,967,295 characters (4 GB) of textual data. |
| ENUM("Medium","Large","Extra Large") | ENUM allows you to select only a single value from a predefined set |
| SET("English" ,"French","Spanish") | SET is similar to ENUM but allows for the selection of multiple values from a predefined set |
| INT | It's used to store whole numbers (positive, negative, or zero) within a certain range2,147,483,648 to 2,147,483,647 (signed) or 0 to 4,294,967,295 (unsigned). |
| BIGINT | BIGINT is similar to INT but can store larger whole number. can store values from - 9,223,372,036,854,775,808 to 9,223,372,036,854,775,807 (signed) or 0 to 18,446,744,073,709,551,615 (unsigned). |

| FLOAT | It is used for decimal points typically 0 to 24 decimal points. FLOAT typically occupies 4 bytes of memory. |
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| DOUBLE | It is used for decimal points typically 25 to 53 decimal points. DOUBLE typically occupies 8 bytes of memory. |
| DECIMAL | DECIMAL is used to store exact numeric values with fixed-point precision. For example DECIMAL(10,2). |
| DATE | date. Format: YYYY-MM-DD. |
| DATETIME(fsp) | Date and time combination. Format: YYYY-MM-DD hh:mm:ss. |
| TIMESTAMP(fsp) | YYYY-MM-DD hh:mm:ss. |
| YEAR | A year in four-digit format.For example 1901 |
| TIME(fsp) | Time. Format: hh:mm:ss. |

MYSQL Constraints

- NOT NULL
- UNIQUE
- PRIMARY KEY
- FOREIGN KEY
- CHECK
- DEFAULT