MYSQL interview questions

**1. What is MySQL?**

MySQL is a database management system for web servers. It can grow with the website as it is highly scalable. Most of the websites today are powered by MySQL.

**2. What are some of the advantages of using MySQL?**

**Flexibility :** MySQL runs on all operating systems.

**Power :** MySQL focuses on performance.

**Query Caching :** This helps enhance the speed of MySQL greatly.

**Replication :** One MySQL server can be duplicated on another, providing numerous advantages.

**3. What do you mean by ‘databases’?**

A database is a structured collection of data stored in a computer system. It allows for efficient storage, retrieval, and management of data, and is usually managed by a Database Management System (DBMS).

**4. What does SQL in MySQL stand for?**

The SQL in MySQL stands for Structured Query Language. This language is also used in other databases such as Oracle, PostgreSQL and Microsoft SQL Server.

**5. What does a MySQL database contain?**

A MySQL database contains one or more tables, each of which contains records or rows. Within these rows are various columns or fields that contain the data itself.

**6. How can you interact with MySQL?**

There are three main ways you can interact with MySQL:

**1.** using a command line

**2.** via a web interface

**3.** through a programming language

**7. What are MySQL Database Queries?**

A query is a specific request or a question. One can query a database for specific information and have a record returned.

**8. How do you create a database in MySQL?**

CREATE DATABASE database\_name;

**9. How do you create a table using MySQL?**

CREATE TABLE table\_name (column1 VARCHAR(128), column2 NUMERIC(10), column3 CHAR(4));

**10. How do you Insert Data Into MySQL?**

INSERT INTO table\_name (column1, column2, column3,...) VALUES (value1, value2, value3,...);

**11. How to create an Index in MySQL?**

In MySQL, there are different index types, such as a regular **INDEX**, a **PRIMARY KEY,** or a **FULLTEXT** index. You can achieve fast searches with the help of an index. Indexes speed up performance by either ordering the data on disk so it's quicker to find your result or, telling the SQL engine where to go to find your data.

**12. How to Delete Data From a MySQL Table?**

DELETE FROM table\_name WHERE column\_name = value\_name;

**13. What are the Numeric Data Types in MySQL?**

| **Type Name** | **Meaning** |
| --- | --- |
| TINYINT | Very Small Integer |
| SMALLINT | Small Integer |
| MEDIUMINT | Medium-sized Integer |
| INT | Standard Integer |
| BIGINT | Large Integer |
| DECIMAL | Fixed-point number |
| FLOAT | Single-precision floating-point number |
| DOUBLE | Double-precision floating-point number |
| BIT | Bit-field |

**14. What are the String Data Types in MySQL?**

| **Type Name** | **Meaning** |
| --- | --- |
| CHAR | fixed-length nonbinary(character) string |
| VARCHAR | variable-length nonbinary string |
| BINARY | fixed-length binary string |
| VARBINARY | variable-length binary string |
| TINYBLOB | Very small BLOB(binary large object) |
| BLOB | Small BLOB |
| MEDIUMBLOB | Medium-sized BLOB |
| LONGBLOB | Large BLOB |
| TINYTEXT | A very small nonbinary string |
| TEXT | Small nonbinary string |
| MEDIUMTEXT | Medium-sized nonbinary string |
| LONGTEXT | Large nonbinary string |
| ENUM | An enumeration; each column value is assigned, one enumeration member |
| SET | A set; each column value is assigned zero or more set members |
| NULL | NULL in SQL is the term used to represent a missing value. |

**15. What are the Temporal Data Types in MySQL?**

| **Type Name** | **Meaning** |
| --- | --- |
| DATE | A date value, in ' CCYY-MM-DD ' Format |
| TIME | A Time value, in ' hh : mm :ss ' format |
| DATETIME | Date and time value, in ' CCYY-MM-DD hh : mm :ss ' format |
| TIMESTAMP | A timestamp value, in ' CCYY-MM-DD hh : mm :ss ' format |
| YEAR | A year value, in CCYY or YY format |

**16. What is BLOB in MySQL?**

BLOB is an acronym that stands for a binary large object. It is used to hold a variable amount of data. A BLOB can hold a very large amount of data. For example - documents, images, and even videos.

There are four types of BLOB: **TINYBLOB**, **BLOB**, **MEDIUMBLOB**, **LONGBLOB**

**17. What are MySQL “Views”?**

MySQL "Views" are virtual tables that are defined by a query. They do not store data themselves but instead provide a way to represent data stored in one or more underlying tables in a structured manner.

**18. What are MySQL Triggers?**

MySQL triggers are stored programs that are automatically executed (or "triggered") in response to specified events occurring on a particular table or view in the database. These events include INSERT, UPDATE, DELETE operations.

**19. How many Triggers are possible in MySQL?**

There are six Triggers allowed to use in the MySQL database:

**Before Insert**, **After Insert**, **Before Update**, **After Update**, **Before Delete**, **After Delete**

**20. What is the MySQL server?**

The server, **mysqld**, is the hub of a MySQL installation; it performs all manipulation of databases and tables.

**21. What are the MySQL clients and utilities?**

Several MySQL programs are available to help you communicate with the server. For administrative tasks, some of the most important ones are listed here:

• **mysql** **:** An interactive program that enables you to send SQL statements to the server and to view the results. You can also use mysql to execute batch scripts (text files containing SQL statements).

• **mysqladmin** : An administrative program for performing tasks such as shutting down the server, checking its configuration, or monitoring its status if it appears not to be functioning properly.

• **mysqldump :** A tool for backing up your databases or copying databases to another server.

• **mysqlcheck and myisamchk :** Programs that help you perform table checking, analysis, and optimization, as well as repairs if tables become damaged.

**22. What are the types of relationships used in MySQL?**

There are three categories of relationships in MySQL:

**One-to-One:** Usually, when two items have a one-to-one relationship, you just include them as columns in the same table.

**One-to-Many:** One-to-many (or many-to-one) relationships occur when one row in one table is linked to many rows in another table.

**Many-to-Many:** In a many-to-many relationship, many rows in one table are linked to many rows in another table. To create this relationship, add a third table containing the same key column from each of the other tables.