1. **What is MySQL?**

* MySQL is an open-source relational database management system (RDBMS) that stores and manages data
* MySQL is a database system that uses structured query language (SQL) to organize data into tables and enforce rules between data fields.

1. **In which language has MySQL been written?**

MySQL is written in C and C++.

1. **What are the advantages of using MySQL?**

1.Opensource

2.Data security

3.Scalability on Demand

4.Higher Efficiency

5.Complete Transactional Support

1. **What is a database?**

A database is a collection of related information that can be stored, retrieved, and edited.

.5.**What does 'MySQL' stand for?**

MySQL stands for "My Structured Query Language". It's a relational database management system (RDBMS) that uses Structured Query Language (SQL) to store and manage data.

6.**How to check MySQL version?**

Here is the syntax for MySQL SELECT VERSION query: SELECT VERSION();

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

A MySQL database contains data organized into tables.

**Tables**

**Records (Rows)**

**Columns (Fields)**

**Indexes**

**Keys**

**Views**

**Triggers**

**Schemas**

8. **List the ways to interact with MySQL?**

Work bench

Command line

9. **What are the different tables in MySQL?**

There are different types of tables in MySQL.

* Transaction-safe tables
* Non-transaction-safe tables

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

1. SELECT
2. INSERT
3. UPDATE
4. DELETE
5. CREATE
6. DROP
7. ALTER
8. JOIN

11. **What are some common MySQL commands?**

* DDL (data definition language)
* DML(data manipulate language)
* DQL(Data query language)
* DCL(data control language)
* TCL(Transaction Control Language )
* Utility Commands

12. **How to create a database in MySQL?**

The syntax for the CREATE DATABASE : DATABASE databasename. (Devops)

* Create table tablename;

13. **How to create table using MySQL?**

1. CREATE TABLE table\_name ( column1 datatype, column2 datatype, ...
2. CREATE TABLE Persons ( PersonID int, ...
3. CREATE TABLE new\_table\_name AS. SELECT column1, column2,... FROM existing\_table\_name. ...
4. Example. CREATE TABLE TestTable AS. SELECT customername, contactname.

14. **How to insert data in MySQL?**

INSERT INTO table\_name values (column\_1,column\_2,column\_3) VALUES (value\_1,value\_2,value\_3)

15. **How do you remove a column form a database?**

1.ALTER TABLE table\_name

2. DROP [COLUMN] column\_name;

16. **How do you delete data from MySQL table?**

* **DELETE FROM table\_name**: Deletes all records from the table
* **DELETE FROM table\_name WHERE condition**: Deletes specific records from the table
* **WHERE condition**: Specifies which records to delete

**17. How can you view a database in MySQL?**

* DATABASE() to find out which database is currently selected
* SHOW TABLES to find out what tables the default database contains
* SHOW CREATE TABLE to obtain the CREATE TABLE statement necessary to create an existing table
* SHOW INDEX FROM tbl\_name to produce information about indexes on a table

18. **What are string data types in MySQL?**

**Char:** It is used to store for fixed length string

**Varchar:** It is used to store variable length string

**Text:**Text is used to store long text strings

**Tinytext**: is a string data type used for very small text values.

**Medium Text**: is used for storing larger strings, up to 16,777,215 characters.

**Longtext:** is used for storing very large strings, up to 4,294,967,295 characters.

**Enum**: is used to store one of several predefined values.

**Set:** is similar to ENUM, but it allows multiple values to be stored from a predefined list.

19.**what is difference between mysql and sql?**

|  |  |
| --- | --- |
| SQL | MySQL |
| SQL is a query programming language that manages RDBMS. | MySQL is a relational database management system that uses SQL. |
| SQL is primarily used to query and operate database systems. | MySQL allows you to handle, store, modify and delete data and store data in an organized way. |
| SQL does not support any connector. | MySQL comes with an in-built tool known as MySQL Workbench that facilitates creating, designing, and building databases. |
| SQL follows a simple standard format without many or regular updates. | MySQL has numerous variants and gets frequent updates. |
| SQL supports only a single storage engine. | MySQL offers support for multiple storage engines along with plug-in storage, making it more flexible. |
| SQL does not allow other processors or even its own binaries to manipulate data during execution. | MySQL is less secure than SQL, as it allows third-party processors to manipulate data files during execution. |

20.**what is difference between char and varchar?**

Char is used to store a fixed length string and Varchar is used to store a variable length string.

create database trigger;

use trigger;

create table newjoineer(emp\_id int(10),emp\_name varchar(40),emp\_age int(20),emp\_designation varchar(40));

insert into newjoineer values('100','Archana','21','SSD'),('200','Rachana','-1','SE'),('300','Chaithu','18','DE'),('400','sairam','24','JSE'),('400','Madhu','22','AE');

select \* from newjoineer;

DELIMITER //

CREATE TRIGGER age\_verifyeri

BEFORE INSERT ON newjoineer

FOR EACH ROW

BEGIN

IF new.emp\_age < 0 THEN

SET new.emp\_age = 0;

END IF;

END //

DELIMITER ;

insert into newjoineer values('100','Archana','21','SSD'),('200','Rachana','-1','SE'),('300','Chaithu','18','DE'),('400','sairam','24','JSE'),('400','Madhu','22','AE');

select \* from newjoineer;