1. What is MySQL?

**A:** MySQL can be defined as a DBMS software that is used to manage and manipulate the data using the SQL. It is popular RDBMS used in the web applications and software development. MySQL allows users to manage, store and retrieve the data stored on the database

1. In which language has MySQL been written?

**A:** MySQL is written In C and C++ languages. This allows the MySQL to be efficient and portable across various platforms such as windows, macOS and Linux. This use of C and C++ also contributes to the performance as a RDBMS enabling it to handle large datasets and high transaction volumes effectively.

1. What are the advantages of using MySQL?

**A:** Advantages of MySQL:

* Performance and speed (fast data retrieval and query optimization due to the use of indexing and caching)
* Scalability (supports high traffic, horizontal scalability (easily scale out on multiple servers))
* Cost-effectiveness
* Compatibility
* Security

1. What is a database?

**A:** A database is an organized collection of data that is stored electronically in a computer system. It is designed to facilitate the easy storage, retrieval, modification, and management of large amounts of information. Databases typically consist of tables that contain rows and columns, where each column represents a specific type of data (such as names or numbers) and each row corresponds to a single record or instance of that data. While databases can be stored on physical devices like servers or hard drives, they themselves are not hardware components but rather software constructs that organize and manage data effectively

1. What does 'MySQL' stand for?

**A:** MySQL stands for my structured query language. Michael widenius is referred as the father of MySQL.

1. How to check MySQL version?

**A:** Using the command MySQL version (); in workbench we can find the version of the MySQL

1. What does a MySQL database contain?

**A:** MySQL database is a comprehensive system (a system that includes all the necessary components) that organizes and manages structured data through tables, schemas, indexes, views, stored procedures, triggers, constraints, and metadata

1. List the ways to interact with MySQL.

**A:** There are several ways to interact with MySQL,

* MySQL Command-Line Client
* MySQL shell
* Graphical User Interfaces (GUIs)
* Programming Language Interfaces (libraries and APIs in programming languages such as MySQL-connector (library by oracle) or SQLAlchemy (python tool kit) in python)

1. What are MySQL Database Queries?

* SELECT
* INSERT
* UPDATE
* DELETE
* CREATE TABLE
* ALTER TABLE
* DROP TABLE
* TRUNCATE
* SHOW DATABASES
* SHOW TABLES
* DESCRIBE

1. What are some common MySQL commands?

* SELECT
* INSERT
* UPDATE
* DELETE
* CREATE TABLE
* ALTER TABLE
* DROP TABLE
* TRUNCATE
* SHOW DATABASES
* SHOW TABLES
* DESCRIBE
* DROP

1. How to create a database in MySQL?

**A: Using mysql command line:**

* Connect to mysql
* Create the database
* Use the database

**Using workbench:**

* Launch mysql workbench
* Create a new database in the navigator panel

1. How to create table using MySQL?

**A:** We can create a table using the CREATE TABLE command

**Ex:** CREATE TABLE Customers (

CustomerID INT AUTO\_INCREMENT,

LastName VARCHAR (255) NOT NULL,

FirstName VARCHAR (255),

Address VARCHAR (255),

City VARCHAR (255),

PRIMARY KEY (CustomerID)

);

1. How to insert data in MySQL?

**A:** Using the insert into command we can insert the data in the table

**Ex:** INSERT INTO Customers (CustomerName, City, Country)

VALUES (‘vignan’, 'HYD', 'India'),

(‘Rahul’, ‘Pune’, 'India'),

(‘Manu’, ‘Bangalore’,’India’);

1. How do you remove a column form a database?

**A:** We can remove the column using the following command:  
ALTER TABLE table\_name

DROP COLUMN column\_name;

1. How do you delete data from MySQL table?

**A:** We can delete the data using the following command:

**Syntax:** DELETE FROM table\_name WHERE condition;

1. How can you view a database in MySQL?

**A:** To view a database in MySQL workbench we can use the following command:

Show databases;

1. What are string data types in MySQL?

**A:** String data types are used to store the text and binary data.

* CHAR
* VARCHAR
* BINARY
* VARBINARY
* BLOB
* TEXT
* SET

19.what is difference between MySQL and SQL?

**A:** SQL is the language used for interacting with databases, while MySQL is a specific implementation of an RDBMS that utilizes SQL for data management tasks.

20.what is difference between char and varchar?

**A:** Char is used to store a fixed number of characters where as varchar is used to store the characters of variable length. Maximum length is of 255 characters and for varchar the maximum length is of 65,535