**MySQL Assignment**

**1. What is MySQL?**

* It is an open source relation database management system (RDMS) that it will stores and manages the data. It is used to manage databases and servers.
* It uses standard SQL. And it is ideal for both small & large application.
* It is very fast, reliable, and easy to use.
* MySQL is available on all major operating systems, including windows, Linux.

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

MySQL has been written in C and C++.

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

Advantages of MySQL:

1. Cost – Effective
2. Scalable
3. Cross – platform
4. Easy to use
5. High speed data processing
6. Strong community
7. Replication backup & high availability
8. User authentication, access control, encryption

**4. What is a database?**

It is an application which we can stores the collection of data.

Ex: files, photos, videos etc….

Each database has one (or) more distinct API’S for creating, managing, searching data.

API’S 🡪 Application Programming Interface

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

MySQL: My Structured Query Language

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

Select version ()

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

It contains tables that stores the information which required by the MySQL server as it is run.

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

* Frist we will open MySQL workbench
* Click the + button next to MySQL connection
* Enter in the connection name, hostname, port, username & password
* Click test connection
* Click on ok
* Click on the new connection
* Enter the password if it required

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

There are two types:

1. **Transaction – safe:** These will include InnoDB and BDB
2. **Non Transaction – safe:** These includes HEAP, ISAM, MERGE & MyISAM

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

The way to access the databases in MySQL

1. **Data Definition Language (DDL):** This queries define or modify the structure of the database.
2. **Data Manipulation Language (DML):** In these queries they can handle data within the tables.
3. Data Query Language (DQL): It is used to query data (it is a subset of DML)
4. **Data Control Language (DCL):** In this queries manage user permission & access control.
5. **Transaction Control Language (TCL):** It is used to manage transaction.

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

1. Insert into
2. Drop Table
3. Show Table
4. Truncate Table
5. Select
6. Explain

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

Create database

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

Create table name

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

We will use **INSERT INTO** statement

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

Alter table table-name 2drop [column] column-name

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

Delete from table name where condition

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

Show database;

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

* Char data type
* Varchar data type
* Binary data type
* Var binary data type
* Text data type
* Set data type

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

**SQL means:** It is a language for querying databases.

🡪 It is a standard programming language used to manage & manipulate the relation databases.

🡪 It will provide the syntax & structure for operation like SELECT, INSERT, UPDATE & DELETE on database

**MySQL means:** It is an open source database product.

🡪 It is a specific implementation of SQL

🡪 It is a database platform that will stores & retrieves the date using SQL

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

**Char means:** It is a fixed – length data type.

* + It has a fixed size
  + It has less efficient for short data in storage efficient
  + It’s max length is 255 characters

**Varchar means:** It is a variable – length data type.

* + It has a variable size
  + It efficient for varying data
  + It’s max length is up to 65,535 characters
* Char is faster than Varchar