



**Q. What are injections?**

Ans. These are the vulnerabilities through which attackers gains illegal access to the data. It allows attackers to directly insert their commands/codes into the web server.

**Q. What is SQL?**

SQL is abbreviated as Structured Query language which is used to query data from the database. It helps in communicating to database software to retrieve/store data from/in the databases.

**Q. What is a database?**

Databases is a part of database software in which all the application information like user information, messages, posts etc. are placed in a structured, easy to access and secured way. These databases contain tables.; tables contain columns and rows and each row has separate cells storing data against the specific column in a specific format.

**Q. How is SQL used to communicate with database software?**

SQL is a language which is used inside Server Side Programming Languages to communicate to database software in order

way. These databases contain tables.; tables contain columns and rows and each row has separate cells storing data against the specific column in a specific format.

### **Q. How is SQL used to communicate with database software?**

SQL is a language which is used inside Server Side Programming Languages to communicate to database software in order to Save data in databases and retrieve it later.

### **Q. What are the three types of commands used in MySQL?**

**Data Definition Language (DDL):-** This command is used to define the structure of the data like how and where it would be stored. It is used in creating databases and tables, defining the structure of the tables and the columns. Examples include :- Create table, Alter table, Drop table.

**Data Manipulation Language (DML):-** These commands are used to manipulate already existing data inside a table or insert new data (rows) inside a table. It helps to edit, delete, and create rows. Example Commands: Insert into <table>, update table (rows) and delete table (rows).

**Data Query Language (DQL):-** These commands are used to Query data from the database i.e. fetch required data from the database. It is used to fetch data from all the

separate cells storing data against the specific column in a specific format.

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**Data Query Language (DQL):-** These commands are used to Query data from the database i.e. fetch required data from the database. It is used to fetch data from all the rows, fetch specific data, sort data and even calculate values inside the rows. Examples:



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**Data Query Language (DQL):-** These commands are used to Query data from the database i.e. fetch required data from the database. It is used to fetch data from all the rows, fetch specific data, sort data and even calculate values inside the rows. Examples: Select <columns> from <table>, Order by <column>.

## login.php

```
<?php
```

```
$user = $_POST['un'];  
$pass = $_POST['pass'];
```

```
$result= QUERY: SELECT * FROM users WHERE  
username='$user' AND password='$pass'
```

```
if( $result IS NOT BLANK ){  
    echo "login success";  
}  
else{  
    echo "login failed";  
}
```

```
?>
```

**Representative code**

Q1/3

How can you pass non-numeric values in an SQL command?

A Non-numeric values are invalid in an SQL command.

B Non-numeric values are passed by enclosing them either in single and double quotes.



Well done. Correct Answer.

**Explanation:**

If the non-numeric values are not enclosed in single or double quotes, the script will either show an error or fail to load.

*81% students get this answer correct at their first attempt*

C Non-numeric values can be passed using condition in the syntax

Q2/3

What is the role of \* in a SQL query?

A

It is used to fetch all the columns in a table.



Well done. Correct Answer.

**Explanation:**

Asterisk is used to fetch all the columns from the table.

*55% students get this answer correct at their first attempt*

B

It is used to fetch all the rows in a table.

C

It works as a substitute for SELECT clause.

Your friend Himanshu is running an SQL command. But every time, the script shows an error. Help him in finding the error from the given code:  
`SELECT COUNT(name) FROM users  
where active=yes;`

A      COUNT

B      where

C      Active = yes



Well done. Correct Answer.

### Explanation:

"Yes" is a non-numeric value, which is not enclosed in a single or double quote in the query. While SQL is case insensitive, COUNT is a function used to return number of rows from the table, and semicolon is used to terminate SQL commands just like in PHP.





## Basics of Databases and...

### Summary



Now that we have come to the end of this topic, you should be able to:

1. Describe SQL- the whys and hows
2. Describe the basic communication model between servers and clients using SQL
3. Describe a database and its various components
4. Describe the basic types of SQL statements in MySQL
5. Build basic Select queries in MySQL

If you have doubts regarding any of the above mentioned points, please go through the relevant videos and helper texts again.