MYSQL QUESTIONS:

https://www.placementpreparation.io/mcq/mysql/

What does MySQL primarily function as? A database management system

Which command is used to access a MySQL database via command line?Amysql -u user -p

mysql -u user -pA

mysql -u us

MySQL belongs to which category of database management systems?Relational DBMS

In MySQL, which data type is most appropriate for storing monetary values?

Decimal

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### **Data Types**

1. Which MySQL data type is best suited for storing binary data up to 64KB?
   * a) BLOB
   * b) VARBINARY
   * c) TINYBLOB
   * d) MEDIUMBLOB
2. What happens when you try to insert a string into a column with a numeric data type in MySQL?
   * a) MySQL throws an error
   * b) MySQL automatically converts the string to a number if possible
   * c) The string is stored as-is
   * d) MySQL ignores the value and inserts NULL
3. Which MySQL data type should be used to store IPv4 addresses in the most storage-efficient way?
   * a) VARCHAR(15)
   * b) INT UNSIGNED
   * c) CHAR(15)
   * d) BINARY(4)

### **Clauses**

1. Which of the following MySQL clauses is used to remove duplicate rows from the result set?
   * a) UNIQUE
   * b) DISTINCT
   * c) HAVING
   * d) EXCEPT
2. In MySQL, what does the HAVING clause do when used with a GROUP BY clause?
   * a) It filters rows before the grouping is performed
   * b) It filters rows after the grouping is performed
   * c) It filters rows based on aggregate functions
   * d) Both b and c

### **Aggregate Functions**

1. Which MySQL aggregate function would you use to count non-NULL values in a column?
   * a) COUNT(\*)
   * b) COUNT(column\_name)
   * c) SUM(column\_name)
   * d) COUNT(DISTINCT column\_name)
2. Which of the following is TRUE about MySQL aggregate functions?
   * a) They can only be used with GROUP BY
   * b) They can return more than one value
   * c) They ignore NULL values by default
   * d) They can't be used with the HAVING clause

### **CREATE, INSERT, DELETE, DROP, UPDATE**

1. What will happen if you attempt to insert a duplicate primary key value in MySQL?
   * a) The row will be inserted
   * b) MySQL will ignore the new row
   * c) MySQL will replace the old row with the new one
   * d) MySQL will throw an error
2. Which MySQL statement is used to create a new table with columns and datatypes identical to an existing table?
   * a) CREATE TABLE AS
   * b) CREATE TABLE LIKE
   * c) INSERT INTO SELECT
   * d) COPY TABLE
3. What happens when a DELETE command is executed without a WHERE clause in MySQL?
   * a) MySQL deletes all rows
   * b) MySQL deletes only the first row
   * c) MySQL throws an error
   * d) MySQL ignores the command
4. Which MySQL clause would you use to update multiple columns in a single query?
   * a) SET
   * b) MODIFY
   * c) CHANGE
   * d) UPDATE

### **ORDER BY, GROUP BY**

1. In MySQL, which of the following statements is TRUE about the GROUP BY clause?
   * a) It can be used without any aggregate functions
   * b) It cannot be used with ORDER BY
   * c) It groups results into categories based on column values
   * d) It is used to filter rows before aggregation
2. What is the correct order of execution for a MySQL query containing WHERE, GROUP BY, HAVING, and ORDER BY clauses?
   * a) WHERE -> GROUP BY -> HAVING -> ORDER BY
   * b) GROUP BY -> WHERE -> HAVING -> ORDER BY
   * c) WHERE -> HAVING -> GROUP BY -> ORDER BY
   * d) GROUP BY -> HAVING -> WHERE -> ORDER BY
3. In MySQL, what will happen if you use ORDER BY on a VARCHAR column that stores numeric values?
   * a) It will order the numbers lexicographically
   * b) It will order the numbers numerically
   * c) It will throw an error
   * d) It will order them randomly

### **WHERE, AND, OR, NOT, BETWEEN, IN, LIKE**

1. Which of the following conditions will exclude rows where a column is NULL when using the WHERE clause in MySQL?
   * a) column\_name IS NULL
   * b) column\_name <> NULL
   * c) column\_name IS NOT NULL
   * d) column\_name != NULL
2. Which MySQL operator would you use to find rows where a column value lies between two specified values?
   * a) IN
   * b) BETWEEN
   * c) LIKE
   * d) GROUP BY
3. In MySQL, what does the LIKE clause do when used with the % wildcard?
   * a) Matches exactly one character
   * b) Matches zero or more characters
   * c) Matches only numeric values
   * d) Matches a specific substring only
4. Which of the following is TRUE about the IN clause in MySQL?
   * a) It performs a faster search than multiple OR conditions
   * b) It can only be used with numeric values
   * c) It can be used in both WHERE and HAVING clauses
   * d) It does not work with subqueries

### **LIMIT**

1. In MySQL, what will happen if the LIMIT clause is used without an ORDER BY clause?
   * a) It will return rows in the default order of the database
   * b) It will throw an error
   * c) It will return rows in random order
   * d) It will return only the first row
2. Which of the following MySQL statements is used to retrieve only the first 10 rows from a result set?
   * a) LIMIT 10
   * b) LIMIT 1,10
   * c) TOP 10
   * d) ROWNUM <= 10

**a) BLOB**

**b) MySQL automatically converts the string to a number if possible**

**b) INT UNSIGNED**

**b) DISTINCT**

**d) Both b and c**

**b) COUNT(column\_name)**

**c) They ignore NULL values by default**

**d) MySQL will throw an error**

**b) CREATE TABLE LIKE**

**a) MySQL deletes all rows**

**a) SET**

**c) It groups results into categories based on column values**

**a) WHERE -> GROUP BY -> HAVING -> ORDER BY**

**a) It will order the numbers lexicographically**

**c) column\_name IS NOT NULL**

**b) BETWEEN**

**b) Matches zero or more characters**

**c) It can be used in both WHERE and HAVING clauses**

**a) It will return rows in the default order of the database**

**a) LIMIT 10**

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### **oins**

1. Which of the following is TRUE about MySQL INNER JOIN?
   * a) It returns all rows from both tables
   * b) It returns rows where there is a match in both tables
   * c) It returns unmatched rows from both tables
   * d) It returns unmatched rows from the first table only
2. When performing a LEFT JOIN, what happens if there is no matching row in the right table?
   * a) The unmatched rows are excluded from the result
   * b) NULL values are returned for columns from the right table
   * c) The query throws an error
   * d) It behaves like an **INNER JOIN**
3. Which MySQL join retrieves records from two tables only when the condition specified in the ON clause is met?
   * a) **LEFT JOIN**
   * **b) RIGHT JOIN**
   * **c) CROSS JOIN**
   * **d) INNER JOIN**
4. In MySQL, what does a CROSS JOIN do?
   * a) It returns only the rows that match in both tables
   * b) It returns all possible combinations of rows from both tables
   * c) It returns rows where the condition is NULL
   * d) It only returns rows with common values between tables
5. In MySQL, what is the key difference between LEFT JOIN and RIGHT JOIN?
   * a) **LEFT JOIN returns unmatched rows from the left table, RIGHT JOIN returns unmatched rows from the right table**
   * **b) Both return the same result**
   * **c) RIGHT JOIN performs faster than LEFT JOIN**
   * **d) LEFT JOIN returns unmatched rows from both tables**

### **Aggregate Functions**

1. Which MySQL aggregate function is used to calculate the number of unique values in a column?
   * a) **COUNT(\*)**
   * **b) COUNT(DISTINCT column)**
   * **c) SUM()**
   * **d) AVG()**
2. What is the primary difference between the SUM() and COUNT() functions in MySQL?
   * a) **SUM() counts all rows, while COUNT() adds numeric values**
   * **b) SUM() adds numeric values, while COUNT() counts all rows or non-NULL values**
   * **c) SUM() only works with integers, while COUNT() works with all data types**
   * **d) SUM() calculates the total, while COUNT() returns the highest value**
3. **Which aggregate function is used to find the middle value from a set of numbers in MySQL?**
   * **a) MEDIAN()**
   * **b) MODE()**
   * **c) AVG()**
   * **d) MySQL does not have a built-in function for this**
4. **In MySQL, how does the** GROUP\_CONCAT() function work?
   * a) It counts the number of rows in each group
   * b) It concatenates strings from rows within a group into a single string
   * c) It returns the sum of a group of values
   * d) It finds the highest value in each group
5. Which of the following MySQL aggregate functions ignores NULL values by default?
   * a) **COUNT(\*)**
   * **b) SUM(column)**
   * **c) AVG(column)**
   * **d) All of the above**

### **ACID Properties**

1. Which of the following is a key component of the "Atomicity" property in MySQL?
   * a) A transaction is divided into multiple steps
   * b) All steps of a transaction must complete successfully or none at all
   * c) The result of a transaction is immediately visible to all users
   * d) None of the above
2. Which property in MySQL ensures that the database is in a consistent state before and after a transaction?
   * a) Atomicity
   * b) Consistency
   * c) Isolation
   * d) Durability
3. In MySQL, which of the following properties ensures that the effects of a completed transaction persist even in the case of a system crash?
   * a) Atomicity
   * b) Consistency
   * c) Isolation
   * d) Durability
4. Which of the following correctly describes the "Isolation" property in MySQL?
   * a) Transactions occur independently of each other
   * b) Transactions share data during execution
   * c) Transactions execute serially, one after another
   * d) Completed transactions can be rolled back

### **States of Transactions**

1. Which of the following is TRUE about the "Active" state of a transaction in MySQL?
   * a) The transaction has been committed
   * b) The transaction is being executed
   * c) The transaction has been aborted
   * d) The transaction has not started yet
2. In MySQL, what happens when a transaction is in the "Partially Committed" state?
   * a) The transaction is rolled back
   * b) All changes are saved, but not yet visible to other transactions
   * c) The transaction is fully completed
   * d) The transaction is waiting for resources
3. What does the "Failed" state of a transaction indicate in MySQL?
   * a) The transaction was aborted due to an error
   * b) The transaction was committed successfully
   * c) The transaction was rolled back and all changes were undone
   * d) The transaction is still being executed
4. Which of the following commands is used to terminate a transaction and discard all changes in MySQL?
   * a) **COMMIT**
   * **b) ROLLBACK**
   * **c) SAVEPOINT**
   * **d) FLUSH**
5. In MySQL, when does a transaction enter the "Committed" state?
   * a) When the transaction is rolled back
   * b) When all changes are saved permanently in the database
   * c) When the transaction is aborted
   * d) When the transaction is partially completed
6. Which MySQL command is used to make changes permanent and exit a transaction?
   * a) **ROLLBACK**
   * **b) SAVEPOINT**
   * **c) COMMIT**
   * **d) EXIT**

**b) It returns rows where there is a match in both tables**

**b) NULL values are returned for columns from the right table**

**d) INNER JOIN**

**b) It returns all possible combinations of rows from both tables**

**a) LEFT JOIN returns unmatched rows from the left table, RIGHT JOIN returns unmatched rows from the right table**

**b) COUNT(DISTINCT column)**

**b) SUM() adds numeric values, while COUNT() counts all rows or non-NULL values**

**d) MySQL does not have a built-in function for this**

**b) It concatenates strings from rows within a group into a single string**

**d) All of the above**

**b) All steps of a transaction must complete successfully or none at all**

**b) Consistency**

**d) Durability**

**a) Transactions occur independently of each other**

**b) The transaction is being executed**

**b) All changes are saved, but not yet visible to other transactions**

**a) The transaction was aborted due to an error**

**b) ROLLBACK**

**b) When all changes are saved permanently in the database**

**c) COMMIT**

**https://www.examveda.com/mysql/practice-mcq-question-on-mysql-miscellaneous/**

1. How communication is established with MYSQL - network calls
2. How are identifiers quoted in mysql - backtics
3. What does control-\_ do in mys1l input editor = undoes the changes.