**MySQL MCQs**

* **Which of the following is a MySQL command to view the current databases?**
* a) SHOW DATABASES;
* b) DISPLAY DATABASES;
* c) LIST DATABASES;
* d) VIEW DATABASES;
* **What is the correct command to create a new database in MySQL?**
* a) CREATE NEW DATABASE db\_name;
* b) CREATE DATABASE db\_name;
* c) NEW DATABASE db\_name;
* d) MAKE DATABASE db\_name;
* **Which command is used to delete a database in MySQL?**
* a) DELETE DATABASE db\_name;
* b) REMOVE DATABASE db\_name;
* c) DROP DATABASE db\_name;
* d) ERASE DATABASE db\_name;
* **How do you select all columns from a table named 'users'?**
* a) SELECT ALL FROM users;
* b) SELECT \* FROM users;
* c) SELECT FROM users;
* d) SHOW \* FROM users;
* **Which of the following is used to add a new column to an existing table?**
* a) ADD COLUMN table\_name column\_name column\_type;
* b) ALTER TABLE table\_name ADD COLUMN column\_name column\_type;
* c) MODIFY TABLE table\_name ADD column\_name column\_type;
* d) INSERT COLUMN table\_name column\_name column\_type;
* **What is the command to delete rows from a table based on a condition?**
* a) REMOVE FROM table\_name WHERE condition;
* b) DELETE FROM table\_name WHERE condition;
* c) ERASE FROM table\_name WHERE condition;
* d) CLEAR FROM table\_name WHERE condition;
* **Which SQL statement is used to update data in a table?**
* a) MODIFY table\_name SET column\_name = value WHERE condition;
* b) CHANGE table\_name SET column\_name = value WHERE condition;
* c) UPDATE table\_name SET column\_name = value WHERE condition;
* d) EDIT table\_name SET column\_name = value WHERE condition;
* **Which keyword is used to sort the results of a query?**
* a) ORDER BY
* b) SORT BY
* c) GROUP BY
* d) ARRANGE BY
* **How can you limit the number of rows returned by a query?**
* a) LIMIT number;
* b) RESTRICT number;
* c) ROWS number;
* d) COUNT number;
* **Which function is used to count the number of rows in a table?**
* a) SUM()
* b) COUNT()
* c) TOTAL()
* d) NUMBER()
* **What is a primary key?**
* a) A column that uniquely identifies each row in a table
* b) A column that can contain duplicate values
* c) A column used to establish relationships between tables
* d) A column that always has a default value
* **Which MySQL statement is used to create a table?**
* a) NEW TABLE table\_name (columns);
* b) ADD TABLE table\_name (columns);
* c) CREATE TABLE table\_name (columns);
* d) MAKE TABLE table\_name (columns);
* **What does the 'NULL' value represent in MySQL?**
* a) Zero
* b) Empty string
* c) Missing or undefined value
* d) A space character
* **Which SQL clause is used to filter records?**
* a) FILTER
* b) WHERE
* c) HAVING
* d) LIMIT
* **How do you rename a table in MySQL?**
* a) RENAME table\_name TO new\_table\_name;
* b) ALTER TABLE table\_name TO new\_table\_name;
* c) MODIFY TABLE table\_name TO new\_table\_name;
* d) CHANGE TABLE table\_name TO new\_table\_name;
* **Which operator is used to check for a specified pattern in a column?**
* a) LIKE
* b) MATCH
* c) PATTERN
* d) SEARCH
* **What is the purpose of the GROUP BY clause?**
* a) To sort data
* b) To filter data
* c) To group rows that have the same values in specified columns into summary rows
* d) To limit data
* **How do you combine rows from two or more tables, based on a related column?**
* a) MERGE
* b) JOIN
* c) LINK
* d) COMBINE
* **Which command is used to remove a column from a table?**
* a) DELETE COLUMN column\_name FROM table\_name;
* b) REMOVE COLUMN column\_name FROM table\_name;
* c) DROP COLUMN column\_name FROM table\_name;
* d) ERASE COLUMN column\_name FROM table\_name;
* **Which clause is used to filter the results set after grouping?**
* a) WHERE
* b) HAVING
* c) GROUP BY
* d) FILTER
* **What is the correct syntax for a MySQL INSERT statement?**
* a) INSERT INTO table\_name (columns) VALUES (values);
* b) ADD INTO table\_name (columns) VALUES (values);
* c) INSERT table\_name (columns) VALUES (values);
* d) ADD table\_name (columns) VALUES (values);
* **Which of the following is true about foreign keys?**
* a) They uniquely identify each row in a table
* b) They enforce a link between the data in two tables
* c) They allow duplicate values
* d) They always have a default value
* **What does the DISTINCT keyword do?**
* a) It selects all unique values
* b) It sorts the results
* c) It groups the results
* d) It filters the results
* **Which MySQL function is used to calculate the average value of a numeric column?**
* a) SUM()
* b) COUNT()
* c) AVERAGE()
* d) AVG()
* **How do you select all columns from a table named 'customers' where the 'age' is greater than 30?**
* a) SELECT \* FROM customers WHERE age > 30;
* b) SELECT ALL FROM customers WHERE age > 30;
* c) SELECT \* FROM customers HAVING age > 30;
* d) SELECT ALL FROM customers HAVING age > 30;
* **Which MySQL command is used to delete a table?**
* a) DROP TABLE table\_name;
* b) DELETE TABLE table\_name;
* c) REMOVE TABLE table\_name;
* d) ERASE TABLE table\_name;
* **What does the AUTO\_INCREMENT attribute do?**
* a) Automatically inserts a null value
* b) Automatically inserts a unique value
* c) Automatically inserts a zero value
* d) Automatically inserts the previous row's value
* **Which MySQL data type is used to store large text?**
* a) TEXT
* b) VARCHAR
* c) CHAR
* d) STRING
* **How do you create a stored procedure in MySQL?**
* a) CREATE PROCEDURE proc\_name AS BEGIN ... END;
* b) NEW PROCEDURE proc\_name AS BEGIN ... END;
* c) ADD PROCEDURE proc\_name AS BEGIN ... END;
* d) MAKE PROCEDURE proc\_name AS BEGIN ... END;
* **What is the command to display the structure of a table?**
* a) SHOW TABLE table\_name;
* b) DESCRIBE table\_name;
* c) EXPLAIN table\_name;
* d) VIEW TABLE table\_name;

**MySQL Exercises**

* **Create a database named library.**

**create database library;**

* **Create a table named books with columns id, title, author, and published\_year.**

**create table books(id int,title varchar(255), author text(255),published\_year date,primary key(id));**

* **Insert three records into the books table.**

**insert into books values(1,'The Alchemist','Paulo coelho','1988-01-01'),(2,'The Hitchhikers guide of galaxy','Douglas adams','1979-10-12'),(3,'The Lion','C.S.Lewis','1950-11-16');**

* **Update the author of the book with id 1 to 'George Orwell'.**

**update books set author='George Orwel' where id=1;**

* **Delete the book with id 3 from the books table.**

**Delete from books where id=3;**

* **Select all columns from the books table.**

**Select \*from books;**

* **Select only the title and author columns from the books table.**

**select title, author from books;**

* **Create a table named members with columns id, name, and membership\_date.**

**create table members(id int, name varchar(255),membership\_date date);**

* **Insert five records into the members table.**

**insert into members values(1,'Aishwarya','2021-01-01'),(2,'Chandralekha','2022-02-01'),(3,'Bhavyasri','2023-01-03'),(4,'Surya','2024-04-07'),(5,'Ankitha','2025-01-01');**

* **Update the name of the member with id 2 to 'Jane Doe'.**

**update members set name='Jane Doe' where id=2;**

* **Delete the member with id 5 from the members table.**

**delete from members where id='5';**

* **Select all columns from the members table.**

select \*from members;

* **Create a table named loans with columns id, book\_id, member\_id, and loan\_date.**

**create table loans( id int auto\_increment, book\_id int, member\_id int,loan\_date date,,primary key(id));**

* **Insert three records into the loans table.**

**insert into loans values(1,1,1,'2022-01-01'),(2,2,2,'2023-01-15'),(3,3,3,'2024-02-01');**

* **Select all loans where the loan\_date is after '2023-01-01'.**

**select \* from loans where loan\_date>'2023-01-01';**

* **Add a new column return\_date to the loans table.**

**alter table loans add column return\_date date;**

* **Update the return\_date for the loan with id 1 to '2023-06-01'.**

**update loans set retuen\_date='2023-06-01' where id=1;**

* **Delete the loan with id 3 from the loans table.**

**delete from loans where id=3;**

* **Select all columns from the loans table.**

**select \*from loans;**

* **Create a view named member\_loans that shows the member's name and the titles of the books they have borrowed.**

**create view member\_loans as select m.name,b.title from members m join loans l on m.id=l.member\_id join books b on l.id=b.id;**

* **Create a stored procedure named get\_book\_by\_title that takes a title as input and returns the book details.**
* **Create an index on the title column of the books table.**

**create index title on books(title);**

* **Create a trigger that updates a last\_updated column in the books table every time a record is updated.**
* **Grant all privileges on the library database to a user named 'librarian' with password 'password123'.**
* **Revoke the INSERT privilege on the books table from the 'librarian' user.**