

SQL COMMANDS

ASSIGNMENTS

1. What is MySQL?
2. How is a database related to a table ?
3. Write MySql command that will be used to open an already existing database "CONTACTS".
4. Ms. Mirana wants to remove the entire content of a table "BACKUP" alongwith its structure to release the storage space. What MySql statement should she use?
5. Mr. Sanghi created two tables with CITY as Primary key in Table1 and Foreign Key in Table2. While inserting a row in Table2, Mr. Sanghi is not able to enter a value in the column CITY. What could be the possible reason for it?
6. Write a SQL command to view the constraints of EMP table.
7. Distinguish between ALTER TABLE and UPDATE commands of MySQL.
8. Mentioned two categories in which MySQL commands are broadly classified?
9. Is NULL value the same as 0 (zero)? Write the reason for your answer.
10. Write the UPDATE command to increase the commission (column name :COMM) by 500 of all the salesman who have achieved sales (Column name : SALES) more than 200000. The table's name is COMPANY.
11. While using SQL pattern matching, what is the difference between '_' (underscore) and '%' wildcard symbols?
12. Write one similarity and one difference between CHAR and VARCHAR data types.
13. In a table 'Employee', a column 'Occupation' contains many duplicate values. Which keyword would you use if you wish to list only different values?
14. Ariya wants to add another column 'Gender' in the already existing table 'CUSTOMERS'. She has written the following statement. However, it has errors. Rewrite the correct statement. `MODIFY TABLE CUSTOMERS GENDER char(1);`
15. In a hospital, the patients are allocated to wards. A database named 'Hospital' is created. One table in this database is: WARD with WardId, WardName, NumOfBeds as columns and WardId as the primary key. Write another suitable table you could expect to see in the 'Hospital' database, with 3 suitable columns identifying Primary key and Foreign key in the table that you expect.

16. What is the purpose of ALTER TABLE command in MySQL? How is it different from UPDATE command?
17. What is the purpose of ORDER BY clause in MySQL? How is it different from GROUP BY clause?
18. What is the difference between “%” and “_” wild card character with reference to LIKE clause of MySQL?
19. The Doc_name Column of a table Hospital is given below:

Doc_name
Avinash
Hariharan
Vinayak
Deepak
Sanjeev

Based on the information, find the output of the following queries:

- (i) Select doc_name from Hospital where doc_name like “%v”;
 - (ii) Select doc_name from Hospital where doc_name like “:%e%”;
20. Mr. Janak is using a table with following columns:
Name, Class, Course_Id, Course_name
He needs to display names of students, who have not been assigned any stream or have been assigned Course_name that ends with “economics”.
He wrote the following command, which did not give the desired result.
SELECT Name, Class FROM Students WHERE Course_name=NULL OR Course_name=”%economics”;
Help Mr. Janak to run the query by removing the error and write the correct query.
 21. There is a column Salary in a Table EMPLOYEE. The following two statements are giving different outputs. What may be the possible reason?
SELECT COUNT(*) FROM EMPLOYEE;
SELECT COUNT(SALARY) FROM EMPLOYEE;
 22. Charvi wants to delete the records where the "FirstName" is "Rama" in the ‘Emp’ Table. She has entered the following SQL statement. An error is being displayed. Rewrite the correct statement.
DELETE ‘Rama’ FirstName FROM Emp;

23. Write a MySQL command for creating a table "BANK" whose structure is given below:

Table : BANK

Field Name	Datatype	Size	Constraint
Acct_number	Integer	4	Primary Key
Name	Varchar	3	
BirthDate	Date		
Balance	Integer	8	Not Null

24. Write a MySQL command to create the Table STOCK including its Constraints.

Table STOCK

Name of Column	Type	Size	Constraint
Id	Decimal	4	Primary Key
Name	Varchar	20	
Company	Varchar	20	
Price	Decimal	8	Not Null

25. Write SQL command to create the table VEHICLE with given constraint:

Table : VEHICLE

COLUMN_NAME	DATATYPE(SIZE)	CONSTRAINT
RegNo	CHAR(10)	Primary Key
Regdate	DATE	
Owner	VARCHAR(30)	
Address	VARCHAR(40)	

26. Write MySQL command to create the table "Toyz" with the following structure and constraints.

Table : TOYZ

Colun_Name	Datatype(Size)	Constraints
Toy_no	Int(10)	Primary Key
Tou_name	Varchar(20)	
Type	Char(10)	
Price	Decimal(8,2)	
Colour	Varchar(15)	

27. Write MySQL command to create the Table 'LIBRARY' with given constraints.

Table: LIBRARY

COLIMN_NAME	DATATYPE(SIZE)	CONSTRAINT
BookId	Int(10)	Primary Key
BookName	Varchar(40)	Not Null
Type	Char(4)	
Author	Varchar(40)	
No_Copies	Int(6)	
Price	Decimal(8,2)	

28. Write SQL query to create a table 'Song' with the following structure

Field	Type	Constraint
Songid	Integer	Primary key
Title	Varchar(50)	
Duration	Integer	
ReleaseDate	Date	

29. Consider the table EXAM given below. Write commands in MySql for(i) to (iv) and output for (v) to (vii)

Table: EXAM

No	Name	Stipend	Subject	Average	Division
1	Karan	400	English	68	FIRST
2	Aman	680	Mathematics	72	FIRST
3	Javed	500	Accounts	67	FIRST
4	Bishakh	200	Informatics	55	SECOND
5	Sugandha	400	History	35	THIRD
6	Suparna	550	Geography	45	THIRD

- (i) To list the names of those students, who have obtained Division as FIRST in the ascending order of NAME.
- (ii) To display a report listing NAME, SUBJECT and Annual stipend received assuming that the stipend column has monthly stipend.

(iii) To count the number of students, who have either accounts or informatics as subject.

(iv) To insert a new row in the table EXAM:

6,"Mohan",500,"English",73,"Second"

(v) SELECT AVG(Stipend) FROM EXAM WHERE DIVISION="THIRD"

(vi) SELECT COUNT(DISTINCT Subject) FROM EXAM;

(vii) SELECT MIN(Average) FROM EXAM WHERE Subject="English";

30. Consider the following table names EXAM with details of marks. Write command of MySQL for (i) to (IV) and Output for (v) to (Vii).

Table : EXAM.

Adno	SName	Percentage	Clsection	Stream
R001	Sushant	90.2	12A	Science
R002	Vaidyanath	80.5	12B	Humanities
R003	Miara	68.9	12B	Science
R004	Niara	96.0	12A	Commerce
R005	Shinjini	88.9	12D	Commerce

(i) To display all information of the students of humanities in descending order of percentage.

(ii) To display Adno, Name, Percentage and Stream of those students whose name is less than 6 characters long.

(iii) To add another column Bus)Fees with datatype and size as decimal (8,2).

(iv) To increase percentage by 2% of all the humanities students.

(v) SELECT COUNT(*) FROM EXAM;

(vi) SELECT Sname, Percentage FROM EXAM WHERE Name LIKE "N%";

(vii) SELECT ROUND(Percentage,0) FROM EXAM WHERE Adno="R005";

31. In a database there are two tables "ITEM" and "CUSTOMER" as shown below:

Table : ITEM

ID	ItemName	Company	Price
1001	Moisturiser	XYZ	40
1002	Sanitizer	LAC	35
1003	Bath Soap	COP	25
1004	Shampoo	TAP	95
1005	Lens Solution	COP	350

Table : CUSTOMER

C_ID	CustomerName	City	ID
01	Samridhh Ltd	New Delhi	1002
05	Big Line Inc	Mumbai	1005
12	97.8	New Delhi	1001
15	Tom N Jerry	Bangalore	1003

Write the command in SQL queries for the following:

- To display the details of Items whose Price is in the range of 40 and 95(Both values included)
- To display the CustomerName, City from table Customer and ItemName and Price from table Item, with their corresponding matching ID.
- To increase the price of all the products by 50.

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In a database there are two tables: Table ITEM:

<u>I</u> Code	<u>I</u> name	Price
101	Television	75000
202	Computer	42000
303	Refrigerator	90000
404	Washing Machine	27000

Table BRAND:

<u>ICode</u>	Brand
101	Sony
202	HP
303	LG
404	IFB

Write MySql queries for the following:

- (i) To display ICode, IName and corresponding Brand of those Items, whose price is between 20000 and 45000 (both values inclusive).
- (ii) To display ICode, Price and BName of the item which has IName as "Television"?
- (iii) To increase the price of all the Items by 15%.