mysql> create table user(uid int primary key auto\_increment, uname varchar(30) not null, uconatct bigint not null, uemaillid varchar(50) unique not null, upassword varchar(50) not null);

Query OK, 0 rows affected (0.10 sec)

mysql> desc user;

+-----------+-------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+-----------+-------------+------+-----+---------+----------------+

| uid | int | NO | PRI | NULL | auto\_increment |

| uname | varchar(30) | NO | | NULL | |

| uconatct | bigint | NO | | NULL | |

| uemaillid | varchar(50) | NO | UNI | NULL | |

| upassword | varchar(50) | NO | | NULL | |

+-----------+-------------+------+-----+---------+----------------+

5 rows in set (0.01 sec)

mysql> insert into user(uname, uconatct, uemaillid , upassword)values("Rani", 9865327412 , "ra23

@gmail.com", "ra454545"),("Soname", 9856745685, "so234@gmail.com", "l4567999");

Query OK, 2 rows affected (0.01 sec)

Records: 2 Duplicates: 0 Warnings: 0

mysql> insert into user values("Amit", 9876543210, "Amit@gmail.com", "amit123");

ERROR 1136 (21S01): Column count doesn't match value count at row 1

mysql> insert into user values(3,"Amit", 9876543210, "Amit@gmail.com", "amit123");

Query OK, 1 row affected (0.01 sec)

mysql> insert into user(uname, uconatct , upassword)values("Rani", 9865327412 , "ra454545"),

-> ;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '' at line 1

mysql> insert into user(uname, uconatct, upassword)values("Sonamya", 9874562111, "ra45698");

ERROR 1364 (HY000): Field 'uemaillid' doesn't have a default value

mysql> insert into user(uname, uconatct, umaillid, upassword)values("Sonamya", 9874562111, "somya@12345gmail.com", "ra45698");

ERROR 1054 (42S22): Unknown column 'umaillid' in 'field list'

mysql> insert into user(uname, uconatct, uemaillid, upassword)values("Sonamya", 9874562111, "som

ya@12345gmail.com", "ra45698");

Query OK, 1 row affected (0.01 sec)

mysql> SELECT \* from user;

+-----+---------+------------+----------------------+-----------+

| uid | uname | uconatct | uemaillid | upassword |

+-----+---------+------------+----------------------+-----------+

| 1 | Rani | 9865327412 | ra23@gmail.com | ra454545 |

| 2 | Soname | 9856745685 | so234@gmail.com | l4567999 |

| 3 | Amit | 9876543210 | Amit@gmail.com | amit123 |

| 4 | Sonamya | 9874562111 | somya@12345gmail.com | ra45698 |

+-----+---------+------------+----------------------+-----------+

4 rows in set (0.00 sec)

mysql> select uemaillid from user where uemaillid like "%@gmail.com";

+-----------------+

| uemaillid |

+-----------------+

| Amit@gmail.com |

| ra23@gmail.com |

| so234@gmail.com |

+-----------------+

3 rows in set (0.00 sec)

mysql> select uname, ucontact from user where uid>2;

ERROR 1054 (42S22): Unknown column 'ucontact' in 'field list'

mysql> select uname, uconatct from user where uid>2;

+---------+------------+

| uname | uconatct |

+---------+------------+

| Amit | 9876543210 |

| Sonamya | 9874562111 |

+---------+------------+

2 rows in set (0.00 sec)

mysql> select \* from user where uname asc;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'asc' at line 1

mysql> select \* from user order by uname asc;

+-----+---------+------------+----------------------+-----------+

| uid | uname | uconatct | uemaillid | upassword |

+-----+---------+------------+----------------------+-----------+

| 3 | Amit | 9876543210 | Amit@gmail.com | amit123 |

| 1 | Rani | 9865327412 | ra23@gmail.com | ra454545 |

| 2 | Soname | 9856745685 | so234@gmail.com | l4567999 |

| 4 | Sonamya | 9874562111 | somya@12345gmail.com | ra45698 |

+-----+---------+------------+----------------------+-----------+

4 rows in set (0.00 sec)

mysql> select uconatct from user where uuse conatct "98%";

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '"98%"' at line 1

mysql> select uconatct from user where uconatct like "98%";

+------------+

| uconatct |

+------------+

| 9865327412 |

| 9856745685 |

| 9876543210 |

| 9874562111 |

+------------+

4 rows in set (0.00 sec)

mysql> insert into user(uname, uconatct, uemaillid, upassword)values("Sonya", 7459862111, "somya

@1234gmail.com", "ra4598");

Query OK, 1 row affected (0.01 sec)

mysql> select \* from user;

+-----+---------+------------+----------------------+-----------+

| uid | uname | uconatct | uemaillid | upassword |

+-----+---------+------------+----------------------+-----------+

| 1 | Rani | 9865327412 | ra23@gmail.com | ra454545 |

| 2 | Soname | 9856745685 | so234@gmail.com | l4567999 |

| 3 | Amit | 9876543210 | Amit@gmail.com | amit123 |

| 4 | Sonamya | 9874562111 | somya@12345gmail.com | ra45698 |

| 5 | Sonya | 7459862111 | somya@1234gmail.com | ra4598 |

+-----+---------+------------+----------------------+-----------+

5 rows in set (0.00 sec)

mysql> select uconatct from user where uconatct like "98%";

+------------+

| uconatct |

+------------+

| 9865327412 |

| 9856745685 |

| 9876543210 |

| 9874562111 |

+------------+

4 rows in set (0.00 sec)

mysql> SELECT LEFT(uname, 1) AS first\_char, COUNT(\*) AS user\_count

-> FROM users

-> GROUP BY first\_char

-> ORDER BY first\_char;

ERROR 1146 (42S02): Table 'practices.users' doesn't exist

mysql> SELECT LEFT(uname, 1) AS f┌────────────────────────────┐unt

-> FROM users │Enter char to delete up to: │

-> GROUP BY first\_char └────────────────────────────┘

-> ORDER BY first\_char;

ERROR 1146 (42S02): Table 'practices.users' doesn't exist

mysql> SELECT LEFT(uname, 1) AS first\_char, COUNT(\*) AS user\_count FROM user GROUP BY first\_char ORDER BY first\_char;

+------------+------------+

| first\_char | user\_count |

+------------+------------+

| A | 1 |

| R | 1 |

| S | 3 |

+------------+------------+

3 rows in set (0.01 sec)

mysql>

1. Create a "User" table:

Create a `User` table with the following schema:

- `uid` (INT, PRIMARY KEY, AUTO\_INCREMENT)

- `uname` (VARCHAR(50), NOT NULL)

- `ucontact` (BIGINT, NOT NULL)

- `uemailid` (VARCHAR(100), UNIQUE, NOT NULL)

- `upassword` (VARCHAR(50), NOT NULL)

Data Insertion Assignments

2. Insert a new user into the "User" table with `uid` auto-generated, and details:

`uname`: "Amit", `ucontact`: 9876543210, `uemailid`: "amit@gmail.com", `upassword`: "amit123".

3. Insert another user into the "User" table with incomplete details (e.g., no `uemailid`).

Check and handle errors due to NOT NULL constraints.

4. Write a query to insert multiple users into the table with unique email IDs and passwords.

Data Retrieval Assignments

5. Retrieve all users from the "User" table.

6. Retrieve the usernames of all users with email domains ending in "@gmail.com".

7. Retrieve the `uname` and `ucontact` of users whose `uid` is greater than 2.

8. Retrieve all users sorted by `uname` in ascending order.

9. Retrieve users whose contact number starts with "98".

10. Retrieve a count of users grouped by the first character of their `uname`.

Data Update Assignments

11. Update the `upassword` of the user with the `uid` = 2 to "securePass123".

12. Update the contact number of a user with the email "john.doe@example.com".

13. Update the usernames of all users whose name starts with "R" to include a prefix "Mr. ".

14. Reset the passwords of all users to "tempPass" where the `uid` is greater than 5.

Data Deletion Assignments

15. Delete the user with `uid` = 4.

16. Delete all users whose `uemailid` is NULL.

17. Delete all users whose `uname` contains the word "test".

18. Write a query to delete users whose contact number is less than 10 digits.

Constraints Assignments

19. Add a `NOT NULL` constraint to a column that is currently nullable.

20. Modify the `ucontact` column to ensure only unique values are allowed.

**21. Write a query to check if the `PRIMARY KEY` is set for the `uid` column.**

22. Alter the table to add a new column `created\_at` (DATETIME) with a default value of the current timestamp.

Advanced Constraints and Validation

23. Add a foreign key in another table that references the `uid` column in the "User" table.

24. Write a query to fetch users whose `uid` is not referenced in the foreign key of the second table.

25. Write a query to drop the AUTO\_INCREMENT feature from the `uid` column, reinsert data manually, and reset it to auto-increment.