Name: Sanika M. Sarang   topic: SQL constraints and aggregate functions   (classwork)

```
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases
    -> show databases;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the righ
t syntax to use near 'show databases' at line 2
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| acpatildb          |
| employee           |
| information_schema |
| mysql              |
| performance_schema |
| sakila             |
| sys                |
| world              |
+--------------------+
8 rows in set (0.02 sec)

mysql> use acpatildb;
Database changed
mysql> dhow tables;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the righ
t syntax to use near 'dhow tables' at line 1
mysql> show tables;
+---------------------+
| Tables_in_acpatildb |
+---------------------+
| marksheet           |
| student             |
+---------------------+
2 rows in set (0.02 sec)
```

```
| student             |
+---------------------+
2 rows in set (0.02 sec)

mysql> create table person
    -> (
    -> pid int(3) NOT NULL,
    -> firstname varchar(25) NOT NULL,
    -> lastname varchar(30)
    -> );
Query OK, 0 rows affected, 1 warning (0.04 sec)

mysql> desc table;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the righ
t syntax to use near '' at line 1
mysql> desc person;
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| pid       | int         | NO   |     | NULL    |       |
| firstname | varchar(25) | NO   |     | NULL    |       |
| lastname  | varchar(30) | YES  |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)

mysql> insert into person values(null,"jena", "ortega");
ERROR 1048 (23000): Column 'pid' cannot be null
mysql> insert into person values(1,"jena", "ortega");
Query OK, 1 row affected (0.01 sec)

mysql> insert into person values(2," ", "ortega");
Query OK, 1 row affected (0.01 sec)

mysql> select * from person;
+-----+-----------+----------+
| pid | firstname | lastname |
+-----+-----------+----------+
```

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```
MySQL 8.0 Command Line Cli    X    +    v                                                                                            —    □    X

mysql> select * from person;
+------+-----------+----------+
| pid  | firstname | lastname |
+------+-----------+----------+
|    1 | jena      | ortega   |
|    2 |           | ortega   |
+------+-----------+----------+
2 rows in set (0.00 sec)

mysql> delete from person;
Query OK, 2 rows affected (0.01 sec)

mysql> select * from person;
Empty set (0.00 sec)

mysql> desc person;
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| pid       | int         | NO   |     | NULL    |       |
| firstname | varchar(25) | NO   |     | NULL    |       |
| lastname  | varchar(30) | YES  |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)

mysql> alter table modify column pid int(3) unique;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the righ
t syntax to use near 'column pid int(3) unique' at line 1
mysql> alter table person modify column pid int(3) unique;
Query OK, 0 rows affected, 1 warning (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 1

mysql> insert into person values(1, "jenna","ortega");
Query OK, 1 row affected (0.01 sec)

mysql> insert into person values(1, "wills","ortega");
ERROR 1062 (23000): Duplicate entry '1' for key 'person.pid'
```

```
MySQL 8.0 Command Line Cli    X    +    v                                                                                            —    □    X

Query OK, 1 row affected (0.01 sec)

mysql> insert into person values(1, "wills","ortega");
ERROR 1062 (23000): Duplicate entry '1' for key 'person.pid'
mysql> insert into person values(2, "wills","ortega");
Query OK, 1 row affected (0.01 sec)

mysql> select * from person;
+------+-----------+----------+
| pid  | firstname | lastname |
+------+-----------+----------+
|    1 | jenna     | ortega   |
|    2 | wills     | ortega   |
+------+-----------+----------+
2 rows in set (0.00 sec)

mysql> insert into person values(null," ", "ortega");
Query OK, 1 row affected (0.01 sec)

mysql> select * from person;
+------+-----------+----------+
| pid  | firstname | lastname |
+------+-----------+----------+
|    1 | jenna     | ortega   |
|    2 | wills     | ortega   |
| NULL |           | ortega   |
+------+-----------+----------+
3 rows in set (0.00 sec)

mysql> create table teacher
    -> (
    -> id int not null,
    -> firstname varchar(50) not null,
    -> age int,
    -> check(age>=18)
    -> );
Query OK, 0 rows affected (0.03 sec)
```

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```
Query OK, 0 rows affected (0.03 sec)

mysql> insert into teacher values(4,"ashwini",12);
ERROR 3819 (HY000): Check constraint 'teacher_chk_1' is violated.
mysql> insert into teacher values(4,"ashwini",20);
Query OK, 1 row affected (0.01 sec)

mysql> alter table teache
    -> add check(id>0);
ERROR 1146 (42S02): Table 'acpatildb.teache' doesn't exist
mysql> alter table teacher
    -> add check(id>0);
Query OK, 1 row affected (0.07 sec)
Records: 1  Duplicates: 0  Warnings: 0

mysql> insert into teacher values(0,"maya",20);
ERROR 3819 (HY000): Check constraint 'teacher_chk_2' is violated.
mysql> alter table teacher
    -> add column city varchar(23) default 'mumbai';
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> insert into teacher values(12,"maya",20);
ERROR 1136 (21S01): Column count doesn't match value count at row 1
mysql> insert into teacher values(12,"maya",20,"pune");
Query OK, 1 row affected (0.00 sec)

mysql> insert into teacher values(12,"maya",20,);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the righ
t syntax to use near ')' at line 1
mysql> insert into teacher values(12,"maya",20,null);
Query OK, 1 row affected (0.01 sec)

mysql> select * from teacher;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the righ
t syntax to use near 'selet * from teacher' at line 1
mysql> select * from teacher;
```

```
mysql> selet * from teacher;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the righ
t syntax to use near 'selet * from teacher' at line 1
mysql> select * from teacher;
+----+-----------+------+--------+
| id | firstname | age  | city   |
+----+-----------+------+--------+
|  4 | ashwini   |   20 | mumbai |
| 12 | maya      |   20 | pune   |
| 12 | maya      |   20 | NULL   |
+----+-----------+------+--------+
3 rows in set (0.00 sec)

mysql> insert into teacher(id, firstname,age) values(20,"mahi",22);
Query OK, 1 row affected (0.01 sec)

mysql> select * from teacher;
+----+-----------+------+--------+
| id | firstname | age  | city   |
+----+-----------+------+--------+
|  4 | ashwini   |   20 | mumbai |
| 12 | maya      |   20 | pune   |
| 12 | maya      |   20 | NULL   |
| 20 | mahi      |   22 | mumbai |
+----+-----------+------+--------+
4 rows in set (0.00 sec)

mysql> CREATE TABLE Sales (
    ->     sale_id INT PRIMARY KEY,
    ->     product_id INT,
    ->     quantity_sold INT,
    ->     sale_date DATE,
    ->     total_price DECIMAL(10, 2)
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> insert into sales(sales_id, product_id, quantity_sold, sale_date, total_price) values(
```
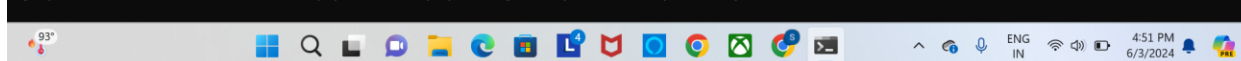
```
MySQL 8.0 Command Line Cli

mysql> insert into sales(sales_id, product_id, quantity_sold, sale_date, total_price) values(
    ->
    -> ;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the righ
t syntax to use near '' at line 1
mysql> insert into sales(sales_id, product_id, quantity_sold, sale_date, total_price) values
    -> (1, 101, 6,'2024-01-01', 150.00),
    -> (2, 102, 7,'2024-01-02', 122.00),
    -> (3, 103, 4,'2024-01-03', 90.00,
    -> (4, 104, 4,'2024-01-04', 77.00),
    -> (5, 105, 8,'2024-01-05', 89.00);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the righ
t syntax to use near '' at line 6
mysql> insert into sales(sales_id, product_id, quantity_sold, sale_date, total_price) values
    -> (1, 101, 6,'2024-01-01', 150.00),
    -> (2, 102, 7,'2024-01-02', 122.00),
    -> (3, 103, 4,'2024-01-03', 90.00),
    -> (4, 104, 4,'2024-01-04', 77.00),
    -> (5, 105, 8,'2024-01-05', 89.00);
ERROR 1054 (42S22): Unknown column 'sales_id' in 'field list'
mysql> insert into sales(sale_id, product_id, quantity_sold, sale_date, total_price) values
    -> (1, 101, 6,'2024-01-01', 150.00),
    -> (2, 102, 7,'2024-01-02', 122.00),
    -> (3, 103, 4,'2024-01-03', 90.00),
    -> (4, 104, 4,'2024-01-04', 77.00),
    -> (5, 105, 8,'2024-01-05', 89.00);
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> select * from sales;
+---------+------------+---------------+------------+-------------+
| sale_id | product_id | quantity_sold | sale_date  | total_price |
+---------+------------+---------------+------------+-------------+
|       1 |        101 |             6 | 2024-01-01 |      150.00 |
|       2 |        102 |             7 | 2024-01-02 |      122.00 |
|       3 |        103 |             4 | 2024-01-03 |       90.00 |
|       4 |        104 |             4 | 2024-01-04 |       77.00 |
```

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+---------+------------+---------------+------------+-------------+
| sale_id | product_id | quantity_sold | sale_date  | total_price |
+---------+------------+---------------+------------+-------------+
|       1 |        101 |             6 | 2024-01-01 |      150.00 |
|       2 |        102 |             7 | 2024-01-02 |      122.00 |
|       3 |        103 |             4 | 2024-01-03 |       90.00 |
|       4 |        104 |             4 | 2024-01-04 |       77.00 |
|       5 |        105 |             8 | 2024-01-05 |       89.00 |
+---------+------------+---------------+------------+-------------+
5 rows in set (0.00 sec)

mysql> desc sales;
+---------------+---------------+------+-----+---------+-------+
| Field         | Type          | Null | Key | Default | Extra |
+---------------+---------------+------+-----+---------+-------+
| sale_id       | int           | NO   | PRI | NULL    |       |
| product_id    | int           | YES  |     | NULL    |       |
| quantity_sold | int           | YES  |     | NULL    |       |
| sale_date     | date          | YES  |     | NULL    |       |
| total_price   | decimal(10,2) | YES  |     | NULL    |       |
+---------------+---------------+------+-----+---------+-------+
5 rows in set (0.00 sec)

mysql> create table productdata(
    -> productid int,
    -> pro_name varchar(20),
    -> category varchar(20),
    -> unit_price decimal(10,2)
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> insert into productdata(productid, pro_name, category, unit_price) values
    -> (111, "elephant";
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the righ
t syntax to use near '' at line 2
mysql> delete from productdata;
Query OK, 0 rows affected (0.00 sec)
```

```
MySQL 8.0 Command Line Cli    ×    +    ∨                                                                    —    ☐    ✕

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the righ
t syntax to use near '' at line 2
mysql> delete from productdata;
Query OK, 0 rows affected (0.00 sec)

mysql> create table productdata(
    -> productid int unique,
    -> pro_name varchar(20) not null,
    -> category varchar(20) default 'toy',
    -> unit_price decimal(10,2) check(unit_price>0)
    -> );
ERROR 1050 (42S01): Table 'productdata' already exists
mysql> create table productdata1(
    -> productid int unique,
    -> pro_name varchar(20) not null,
    -> category varchar(20) default 'toy',
    -> unit_price decimal(10,2) check(unit_price>0)
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> desc productdata1;
+------------+---------------+------+-----+---------+-------+
| Field      | Type          | Null | Key | Default | Extra |
+------------+---------------+------+-----+---------+-------+
| productid  | int           | YES  | UNI | NULL    |       |
| pro_name   | varchar(20)   | NO   |     | NULL    |       |
| category   | varchar(20)   | YES  |     | toy     |       |
| unit_price | decimal(10,2) | YES  |     | NULL    |       |
+------------+---------------+------+-----+---------+-------+
4 rows in set (0.00 sec)

mysql> insert into productdata1(productid,pro_name,category,unit_pric
e) values
    -> (111,"baby elephant", "soft toy",220.00)
    -> (111,"remote control car", "toy",300.00);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the righ
t syntax to use near '(111,"remote control car", "toy",300.00)' at line 3
```

```
MySQL 8.0 Command Line Cli    ×    +    ∨                                                                    —    ☐    ✕

t syntax to use near '(111,"remote control car", "toy",300.00)' at line 3
mysql> insert into productdata1(productid,pro_name,category,unit_price) values
    -> (111,"baby elephant", "soft toy",220.00)
    -> (112,"remote control car", "toy",300.00);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the righ
t syntax to use near '(112,"remote control car", "toy",300.00)' at line 3
mysql> insert into productdata1(productid,pro_name,category,unit_price) values
    -> (111,"baby elephant", "soft toy",220.00),
    -> (112,"remote control car", "toy",300.00);
Query OK, 2 rows affected (0.01 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql> select * from productdata1;
+-----------+--------------------+----------+------------+
| productid | pro_name           | category | unit_price |
+-----------+--------------------+----------+------------+
|       111 | baby elephant      | soft toy |     220.00 |
|       112 | remote control car | toy      |     300.00 |
+-----------+--------------------+----------+------------+
2 rows in set (0.00 sec)

mysql> insert into productdata1(productid, pro_name, unit_price) values(113,"barbie", 200.00);
Query OK, 1 row affected (0.01 sec)

mysql> select * from productdata1;
+-----------+--------------------+----------+------------+
| productid | pro_name           | category | unit_price |
+-----------+--------------------+----------+------------+
|       111 | baby elephant      | soft toy |     220.00 |
|       112 | remote control car | toy      |     300.00 |
|       113 | barbie             | toy      |     200.00 |
+-----------+--------------------+----------+------------+
3 rows in set (0.00 sec)

mysql> select max(unit_price) from productdata1;
+-----------------+
| max(unit_price) |
```

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```
|         113 | barbie              | toy       |        200.00 |
+-------------+---------------------+-----------+---------------+
3 rows in set (0.00 sec)

mysql> select max(unit_price) from productdata1;
+-----------------+
| max(unit_price) |
+-----------------+
|          300.00 |
+-----------------+
1 row in set (0.01 sec)

mysql> select min(unit_price) as result_min from productdata1;
+------------+
| result_min |
+------------+
|     200.00 |
+------------+
1 row in set (0.00 sec)

mysql> select count(unit_price) as total from productdata1;
+-------+
| total |
+-------+
|     3 |
+-------+
1 row in set (0.00 sec)

mysql> select ag(unit_price) as average from productdata1;
ERROR 1305 (42000): FUNCTION acpatildb.ag does not exist
mysql> select avg(unit_price) as average from productdata1;
+------------+
| average    |
+------------+
| 240.000000 |
+------------+
1 row in set (0.01 sec)
```