

Hindi Vidya Prachar Samiti's

RAMNIRANJAN JHUNJHUNWALA
COLLEGE OF ARTS, SCIENCE &
COMMERCE (AUTONOMOUS)

Database Management System



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Department of Data Science and Artificial Intelligence

CERTIFICATE

This is to certify Ayush Nivas Gholap FY Bsc Data Science and Artificial Intelligence Roll No. 10025 successfully completed the practical Database Management System(DBMS) during the Academic Year 2024-2025.

Date : 15/2/2025

Prof. Sujata Kotian
Prof-In-Charge

Q1 Create table Sales and perform the following queries:

- 1) Retrieve all columns from the Sales table.
- 2) Retrieve the sale_id and sale_date from the Sales table.
- 3) Filter the Sales table to show only sales with a total_price greater than \$100.
- 4) Retrieve then sale_id and total_price from the Sales table for sales made on January 3, 2024.
- 5) Retrieve the sale_id, product_id and total_price from the Sales table for sales with a quantity_sold greater than 4

Sol :-

```
gorilla
information_schema
mysql
performance_schema
sys
-----
5 rows in set (0.06 sec)

mysql> use gorilla;
Database changed
mysql> create table Sales(sale_id int, product_id int, quantity_sold int, sale_date DATE, total_price float(5,3));
Query OK, 0 rows affected, 1 warning (0.28 sec)

mysql> desc Sales;
+-----+
-> desc Sales;
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 'desc Sales' at line 2
mysql> desc Sales;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| sale_id | int | YES | | NULL | |
| product_id | int | YES | | NULL | |
| quantity_sold | int | YES | | NULL | |
| sale_date | date | YES | | NULL | |
| total_price | float(5,3) | YES | | NULL | |
+-----+
5 rows in set (0.03 sec)
```

```
mysql> insert into Sales values(5, 105, 6, "2024-01-03", "90.00");
Query OK, 1 row affected (0.00 sec)

mysql> select * from Sales;
+-----+
| sale_id | product_id | quantity_sold | sale_date | total_price |
+-----+
| 1 | 101 | 5 | 2024-01-01 | 2500.00 |
| 2 | 102 | 3 | 2024-01-02 | 900.00 |
| 3 | 103 | 2 | 2024-01-02 | 60.00 |
| 4 | 104 | 4 | 2024-01-03 | 80.00 |
| 5 | 105 | 6 | 2024-01-03 | 90.00 |
+-----+
5 rows in set (0.00 sec)

mysql> select sale_id, sale_date from Sales;
ERROR 1054 (42S22): Unknown column 'sale_date' in 'field list'
mysql> select sale_id, sale_date from Sales;
+-----+
| sale_id | sale_date |
+-----+
| 1 | 2024-01-01 |
| 2 | 2024-01-02 |
| 3 | 2024-01-02 |
| 4 | 2024-01-03 |
| 5 | 2024-01-03 |
+-----+
5 rows in set (0.00 sec)

mysql> select total_price from Sales WHERE total_price > 100;
+-----+
| total_price |
+-----+
| 2500.00 |
| 900.00 |
+-----+
2 rows in set (0.01 sec)

mysql> select sale_id, total_price from Sales WHERE sale_date = "2024-01-03";
+-----+
| sale_id | total_price |
+-----+
| 4 | 80.00 |
| 5 | 90.00 |
+-----+
2 rows in set (0.01 sec)

mysql> select sale_id, product_id and total_price from Sales WHERE quantity_sold > 4;
+-----+
| sale_id | product_id and total_price |
+-----+
| 1 | 1 |
| 5 | 1 |
+-----+
2 rows in set (0.00 sec)
```

Q2 Write SQL query for creating:

- 1) Database
- 2) Use Database
- 3) View Database
- 4) View all tables in databases

Sol:-

```
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 9.1.0 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

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

mysql> SHOW databases;
+-----+
| Database |
+-----+
| gorilla  |
| information_schema |
| mysql    |
| performance_schema |
| sys      |
+-----+
5 rows in set (0.07 sec)

mysql> USE gorilla;
Database changed
mysql> SHOW TABLES;
+-----+
| Tables_in_gorilla |
+-----+
| class              |
| sales              |
| student            |
+-----+
3 rows in set (0.01 sec)

mysql> CREATE database
    -> magnum;
Query OK, 1 row affected (0.02 sec)

mysql> SHOW databases;
+-----+
| Database |
+-----+
| gorilla  |
| information_schema |
| magnum   |
| mysql    |
| performance_schema |
| sys      |
+-----+
6 rows in set (0.00 sec)
```

Q3 Write SQL query to:

1) Create table with primary key constraint.

2) Insert – Update – delete records in table.

Sol:-

```
mysql> show databases;
+-----+
| Database |
+-----+
| db       |
| gorilla  |
| information_schema |
| mysql    |
| performance_schema |
| sys      |
+-----+
5 rows in set (0.00 sec)

mysql> use gorilla;
Database changed
mysql> create table animal(id INT PRIMARY KEY,name VARCHAR(64),species VARCHAR(64),age INT);
Query OK, 0 rows affected (0.04 sec)

mysql> insert into animal values(1,'Elephant','Herbivorous',30);
Query OK, 1 row affected (0.01 sec)

mysql> insert into animal values(2,'Lion','Herbivorous',30);
Query OK, 1 row affected (0.00 sec)

mysql> insert into animal values(3,'Lioness','Herbivorous',25);
Query OK, 1 row affected (0.00 sec)

mysql> insert into animal values(4,'Chita','Carnivorous',30);
Query OK, 1 row affected (0.00 sec)

mysql> insert into animal values(5,'Kangaroo','Herbivorous',15);
ERROR 1062 (23000): Duplicate entry '4' for key 'animal.PRIMARY'
mysql> insert into animal values(5,'Kangaroo','Herbivorous',13);
```

```
mysql> UPDATE pet SET price= "2100000"WHERE Identifier=5;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE pet SET price= "100"WHERE Identifier=6;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE pet SET price= "100000"WHERE Identifier=7;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE pet SET price= "5000"WHERE Identifier=8;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE pet SET price= "500000"WHERE Identifier=9;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE pet SET price= "550000"WHERE Identifier=10;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> select *from pet;
+-----+-----+-----+-----+-----+
| Identifier | name | species | age | price |
+-----+-----+-----+-----+-----+
| 1 | Elephant | Herbivorous | 30 | 1000000 |
| 2 | Lion | Herbivorous | 30 | 20000000 |
| 3 | Lioness | Herbivorous | 25 | 2500000 |
| 4 | chita | Carnivorous | 30 | 1500000 |
| 5 | Kangaroo | Herbivorous | 15 | 2100000 |
| 6 | Rat | Herbivorous | 2 | 100 |
| 7 | Dog | Herbivorous | 10 | 100000 |
| 8 | Cat | Carnivorous | 5 | 5000 |
| 9 | Leopard | Carnivorous | 5 | 500000 |
| 10 | panther | Carnivorous | 15 | 550000 |
+-----+-----+-----+-----+-----+
0 rows in set (0.00 sec)

mysql> ALTER TABLE pet
-> MODIFY name CHAR(10);
Query OK, 10 rows affected (0.04 sec)
Records: 10 Duplicates: 0 Warnings: 0
```

```
mysql> SHOW Tables;
+-----+
| Tables_in_gorilla |
+-----+
| class              |
| sales              |
| student            |
+-----+
3 rows in set (0.02 sec)

mysql> DELETE FROM class;
Query OK, 5 rows affected (0.08 sec)

mysql> select *from class;
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 'select *from class' at line 1
mysql> select *from class;
Empty set (0.00 sec)
```

Q4 Write SQL queries for modifying table:

- 1) Change Table Name
- 2) Add new column to Table
- 3) Change column Name
- 4) To change a column data type

Sol:-

```
mysql> ALTER TABLE animal RENAME pet;
Query OK, 0 rows affected (0.01 sec)

mysql> SELECT *FROM pet;
+----+-----+-----+-----+
| id | name | species | age |
+----+-----+-----+-----+
| 1 | Elephant | Herbivorous | 30 |
| 2 | Lion | Herbivorous | 30 |
| 3 | Lioness | Herbivorous | 25 |
| 4 | chita | Carnivorous | 30 |
| 5 | Kangaroo | Herbivorous | 15 |
| 6 | Rat | Herbivorous | 2 |
| 7 | Dog | Herbivorous | 10 |
| 8 | Cat | Carnivorous | 5 |
| 9 | Leopard | Carnivorous | 5 |
| 10 | panther | Carnivorous | 15 |
+----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql> ALTER TABLE pet
-> ADD COLUMN name VARCHAR(64);
ERROR 1060 (42S21): Duplicate column name 'name'
mysql> ADD COLUMN name VARCHAR(64);
-> select *from pet;
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 'ADD COLUMN n
ame VARCHAR(64)
select *from pet' at line 1
mysql> ALTER TABLE pet
-> ADD COLUMN price VARCHAR(64);
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> select *from pet;
+----+-----+-----+-----+-----+
| id | name | species | age | price |
+----+-----+-----+-----+-----+
| 1 | Elephant | Herbivorous | 30 | NULL |
| 2 | Lion | Herbivorous | 30 | NULL |
| 3 | Lioness | Herbivorous | 25 | NULL |
| 4 | chita | Carnivorous | 30 | NULL |
| 5 | Kangaroo | Herbivorous | 15 | NULL |
| 6 | Rat | Herbivorous | 2 | NULL |
| 7 | Dog | Herbivorous | 10 | NULL |
| 8 | Cat | Carnivorous | 5 | NULL |
| 9 | Leopard | Carnivorous | 5 | NULL |
| 10 | panther | Carnivorous | 15 | NULL |
+----+-----+-----+-----+-----+
10 rows in set (0.00 sec)
```

```
mysql> ALTER TABLE employees
-> MODIFY COLUMN emp_id int(5),
-> MODIFY COLUMN income VARCHAR(20);
Query OK, 11 rows affected, 1 warning (1.47 sec)
Records: 11 Duplicates: 0 Warnings: 1
```

```
mysql> ALTER TABLE pet
-> ADD COLUMN name VARCHAR(64);
ERROR 1060 (42S21): Duplicate column name 'name'
mysql> ADD COLUMN name VARCHAR(64);
-> select *from pet;
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 'ADD COLUMN n
ame VARCHAR(64)
select *from pet' at line 1
mysql> ALTER TABLE pet
-> ADD COLUMN price VARCHAR(64);
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> select *from pet;
+----+-----+-----+-----+-----+
| id | name | species | age | price |
+----+-----+-----+-----+-----+
| 1 | Elephant | Herbivorous | 30 | NULL |
| 2 | Lion | Herbivorous | 30 | NULL |
| 3 | Lioness | Herbivorous | 25 | NULL |
| 4 | chita | Carnivorous | 30 | NULL |
| 5 | Kangaroo | Herbivorous | 15 | NULL |
| 6 | Rat | Herbivorous | 2 | NULL |
| 7 | Dog | Herbivorous | 10 | NULL |
| 8 | Cat | Carnivorous | 5 | NULL |
| 9 | Leopard | Carnivorous | 5 | NULL |
| 10 | panther | Carnivorous | 15 | NULL |
+----+-----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql> insert into pet values(10000);
ERROR 1136 (21S01): Column count doesn't match value count at row 1
mysql> ALTER TABLE pet
-> RENAME COLUMN id to identifier;
Query OK, 0 rows affected (0.01 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> select *from pet;
+-----+-----+-----+-----+-----+
| identifier | name | species | age | price |
+-----+-----+-----+-----+-----+
| 1 | Elephant | Herbivorous | 30 | NULL |
| 2 | Lion | Herbivorous | 30 | NULL |
| 3 | Lioness | Herbivorous | 25 | NULL |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

Q5 Write SQL query to update data from table:

Sol:-

```
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 18
Server version: 9.1.0 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

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

mysql> use gorilla;
Database changed
mysql> SHOW TABLES;
+-----+
| Tables_in_gorilla |
+-----+
| class              |
| sales              |
| student            |
+-----+
3 rows in set (0.00 sec)

mysql> select *from sales;
+-----+
| sale_id | product_id | quantity_sold | sale_date | total_price |
+-----+
| 1       | 101        | 5             | 2024-01-01 | 3000.00     |
| 2       | 102        | 3             | 2024-01-02 | 900.00      |
| 3       | 103        | 2             | 2024-01-02 | 60.00       |
| 4       | 104        | 4             | 2024-01-03 | 80.00       |
| 5       | 105        | 6             | 2024-01-03 | 90.00       |
+-----+
5 rows in set (0.00 sec)

mysql> UPDATE sales
-> SET total_price=2500
-> WHERE sale_id=1;
Query OK, 1 row affected (0.03 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> select *from sales;
+-----+
| sale_id | product_id | quantity_sold | sale_date | total_price |
+-----+
| 1       | 101        | 5             | 2024-01-01 | 2500.00     |
| 2       | 102        | 3             | 2024-01-02 | 900.00      |
| 3       | 103        | 2             | 2024-01-02 | 60.00       |
| 4       | 104        | 4             | 2024-01-03 | 80.00       |
| 5       | 105        | 6             | 2024-01-03 | 90.00       |
+-----+
5 rows in set (0.00 sec)
```

```
mysql> UPDATE sales
-> SET product_id=201,quantity_sold=1,sale_date='2024-02-10',total_price=3000
-> WHERE sale_id=1;
Query OK, 1 row affected (0.03 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> select *from sales;
+-----+
| sale_id | product_id | quantity_sold | sale_date | total_price |
+-----+
| 1       | 201        | 1             | 2024-02-10 | 3000.00     |
| 2       | 102        | 3             | 2024-01-02 | 900.00      |
| 3       | 103        | 2             | 2024-01-02 | 60.00       |
| 4       | 104        | 4             | 2024-01-03 | 80.00       |
| 5       | 105        | 6             | 2024-01-03 | 90.00       |
+-----+
5 rows in set (0.00 sec)

mysql> UPDATE sales
-> SET product_id=202,quantity_sold=2,sale_date='2024-02-11',total_price=2000
-> WHERE sale_id=2;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> select *from sales;
+-----+
| sale_id | product_id | quantity_sold | sale_date | total_price |
+-----+
| 1       | 201        | 1             | 2024-02-10 | 3000.00     |
| 2       | 202        | 2             | 2024-02-11 | 2000.00     |
| 3       | 103        | 2             | 2024-01-02 | 60.00       |
| 4       | 104        | 4             | 2024-01-03 | 80.00       |
| 5       | 105        | 6             | 2024-01-03 | 90.00       |
+-----+
5 rows in set (0.00 sec)
```

Q6 Write SQL query to show the use of:

- 1)Not Null
- 2)Unique Key
- 3)Primary Key

Sol:-

```
mysql> use gorilla;
Database changed
mysql> create table employee(employee_id INT NOT NULL,first_name VARCHAR(50) NOT NULL,last_name VARCHAR(50) NOT NULL);
ERROR 1050 (42S01): Table 'employee' already exists
mysql> create table client(employee_id INT NOT NULL,first_name VARCHAR(50) NOT NULL,last_name VARCHAR(50) NOT NULL);
Query OK, 0 rows affected (0.02 sec)

mysql> insert into client values(1,'Ayush',null);
ERROR 1048 (23000): Column 'last_name' cannot be null
mysql> insert into client values(1,'Ayush','Gholap');
Query OK, 1 row affected (0.00 sec)

mysql> insert into client values(1,'Ayush','Gholap');
Query OK, 1 row affected (0.00 sec)

mysql> create table users(user_id INT PRIMARY KEY,email VARCHAR(50) UNIQUE);
Query OK, 0 rows affected (0.04 sec)

mysql> insert into users values(1,'ayush2104');
Query OK, 1 row affected (0.00 sec)

mysql> insert into users values(1,'goku234');
ERROR 1062 (23000): Duplicate entry '1' for key 'users.PRIMARY'
mysql> insert into users values(2,null);
Query OK, 1 row affected (0.00 sec)

mysql> insert into users values(3,null);
Query OK, 1 row affected (0.00 sec)

mysql> insert into users values(null,null);
ERROR 1048 (23000): Column 'user_id' cannot be null
mysql> insert into users values(5,null);
Query OK, 1 row affected (0.00 sec)
```


Q7 Write an SQL query to show the use of following constraints:

- 1) Foreign key
- 2) Check
- 3) Default
- 4) Auto increment

Sol:-

```
mysql> create table products1(product_id INT PRIMARY KEY,product_name VARCHAR(100),price DECIMAL(10,2),CHECK(price>=1));
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> create table products1(product_id INT PRIMARY KEY,product_name VARCHAR(100),price DECIMAL(10,2),CHECK(price>=1));
Query OK, 0 rows affected (0.02 sec)

mysql> insert into products values(1,'kurkure',5);
ERROR 1146 (42S02): Table 'gorilla.products' doesn't exist
mysql> insert into products1 values(1,'kurkure',5);
Query OK, 1 row affected (0.01 sec)

mysql> insert into products1 values(2,'lays',0);
ERROR 3819 (HY000): Check constraint 'products1_chk_1' is violated.
mysql> select *from users;
+-----+-----+
| user_id | email |
+-----+-----+
| 2 | NULL |
| 3 | NULL |
| 5 | NULL |
| 1 | ayush2104 |
+-----+-----+
4 rows in set (0.00 sec)

mysql> select *from products1;
+-----+-----+-----+
| product_id | product_name | price |
+-----+-----+-----+
| 1 | kurkure | 5.00 |
+-----+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> use gorilla;
Database changed
mysql> Create TABLE Geeks(Id INT,Name VARCHAR(100),Age INT,Location VARCHAR(200) DEFAULT 'Mumbai');
Query OK, 0 rows affected (0.04 sec)

mysql> INSERT into Geeks VALUES(1, 'Ayush' ,18, DEFAULT);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT into Geeks VALUES(2, 'Nikhil' ,20, "Banglore");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT into Geeks VALUES(3, 'Deepali' ,19, "Dubai");
Query OK, 1 row affected (0.01 sec)

mysql> INSERT into Geeks VALUES(4, 'Sid' ,17, DEFAULT);
Query OK, 1 row affected (0.03 sec)

mysql> Select *from Geeks;
+-----+-----+-----+-----+
| Id | Name | Age | Location |
+-----+-----+-----+-----+
| 1 | Ayush | 18 | Mumbai |
| 2 | Nikhil | 20 | Banglore |
| 3 | Deepali | 19 | Dubai |
| 4 | Sid | 17 | Mumbai |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```


Q9 Write SQL query for text function:

Sol:-

```
mysql> SELECT LOWER('LEARNSQL.com');
+-----+
| LOWER('LEARNSQL.com') |
+-----+
| learnsql.com           |
+-----+
1 row in set (0.00 sec)

mysql> SELECT UPPER('LearnSQL.com');
+-----+
| UPPER('LearnSQL.com') |
+-----+
| LEARNSQL.COM          |
+-----+
1 row in set (0.00 sec)

mysql> SELECT SUBSTRING('learnSQL.com',9);
+-----+
| SUBSTRING('learnSQL.com',9) |
+-----+
| .com                        |
+-----+
1 row in set (0.00 sec)

mysql> SELECT SUBSTRING('learnSQL.com',1,7);
+-----+
| SUBSTRING('learnSQL.com',1,7) |
+-----+
| learnSQL                      |
+-----+
1 row in set (0.00 sec)

mysql> SELECT SUBSTRING('learnSQL.com',1,8);
+-----+
| SUBSTRING('learnSQL.com',1,8) |
+-----+
| learnSQL                      |
+-----+
1 row in set (0.00 sec)

mysql> SELECT REPLACE('learnSQL.com','SQL','PYTHON');
+-----+
| REPLACE('learnSQL.com','SQL','PYTHON') |
+-----+
| learnPYTHON.com                        |
+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT LENGTH('LearnSQL.com');
+-----+
| LENGTH('LearnSQL.com') |
+-----+
| 12 |
+-----+
1 row in set (0.02 sec)
```

Q10 Write SQL query to arrange rows in ascending and decending order:

Sol:-

```
-----+
5 rows in set (0.00 sec)

mysql> create table franchises(Franchise Varchar(50),inception_year INT,total_revenue_bUSD DECIMAL(5,2),original_medium VARCHAR(50),owner Varchar(50),n_movies INT);
ERROR 1046 (3D000): No database selected
mysql> use gorilla;
Database changed
mysql> create table franchises(Franchise Varchar(50),inception_year INT,total_revenue_bUSD DECIMAL(5,2),original_medium VARCHAR(50),owner Varchar(50),n_movies INT);
Query OK, 0 rows affected (0.02 sec)

mysql> insert into franchises values("Star Wars",1977,46.7,"movie","The Walt Disney Company",12);
Query OK, 1 row affected (0.01 sec)

mysql> insert into franchises values("Mickey Mouse and Friends",1928,52.2,"cartoon","The Walt Disney Company");
ERROR 1136 (21501): Column count doesn't match value count at row 1
mysql> insert into franchises values("Mickey Mouse and Friends",1928,52.2,"cartoon","The Walt Disney Company",10);
Query OK, 1 row affected (0.00 sec)

mysql> insert into franchises values("Anpanman",1975,38.4,"book","Froebel-kan",33);
Query OK, 1 row affected (0.00 sec)

mysql> insert into franchises values("Winnie the poah",1924,48.5,"book","The Walt Disney Company",6);
Query OK, 1 row affected (0.00 sec)

mysql> insert into franchises values("Pokemon",1996,88,"video game","The Pokemon Company",24);
Query OK, 1 row affected (0.00 sec)

mysql> insert into franchises values("Disney Princess",2000,45.4,"movie","The Walt Disney Company",24);
Query OK, 1 row affected (0.00 sec)

mysql> show *from franchises;
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 '*from franchises' at line 1
mysql> select *from franchises;
+-----+-----+-----+-----+-----+-----+
| Franchise | inception_year | total_revenue_bUSD | original_medium | owner | n_movies |
+-----+-----+-----+-----+-----+-----+
| Star Wars | 1977 | 46.70 | movie | The Walt Disney Company | 12 |
| Mickey Mouse and Friends | 1928 | 52.20 | cartoon | The Walt Disney Company | 10 |
| Anpanman | 1975 | 38.40 | book | Froebel-kan | 33 |
| Winnie the poah | 1924 | 48.50 | book | The Walt Disney Company | 6 |
| Pokemon | 1996 | 88.00 | video game | The Pokemon Company | 24 |
| Disney Princess | 2000 | 45.40 | movie | The Walt Disney Company | 24 |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

```
mysql> select Franchise,inception_year
-> FROM franchises
-> ORDER BY inception_year;
+-----+-----+
| Franchise | inception_year |
+-----+-----+
| Winnie the poah | 1924 |
| Mickey Mouse and Friends | 1928 |
| Anpanman | 1975 |
| Star Wars | 1977 |
| Pokemon | 1996 |
| Disney Princess | 2000 |
+-----+-----+
5 rows in set (0.00 sec)

mysql> select Franchise,total_revenue_bUSD
-> FROM franchises
-> ORDER BY total_revenue_bUSD DESC;
+-----+-----+
| Franchise | total_revenue_bUSD |
+-----+-----+
| Pokemon | 88.00 |
| Mickey Mouse and Friends | 52.20 |
| Winnie the poah | 48.50 |
| Star Wars | 46.70 |
| Disney Princess | 45.40 |
| Anpanman | 38.40 |
+-----+-----+
5 rows in set (0.00 sec)
```

Q 11 Write SQL query to limit the no. of rows and get unique values with distinct keyword:

Sol:-

```
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 14
Server version: 9.1.0 MySQL Community Server - GPL

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

mysql> use gorilla;
Database changed
mysql> select * from franchises;
+-----+-----+-----+-----+-----+-----+
| Franchise | inception_year | total_revenue_bUSD | original_medium | owner | n_movies |
+-----+-----+-----+-----+-----+-----+
| Star Wars | 1977 | 46.70 | movie | The Walt Disney Company | 12 |
| Mickey Mouse and Friends | 1928 | 52.20 | cartoon | The Walt Disney Company | NULL |
| Anpanman | 1973 | 38.40 | book | Froebel-kan | 33 |
| Winnie the Pooh | 1924 | 48.50 | book | The Walt Disney Company | 6 |
| Pokemon | 1996 | 88.00 | video game | The Pokemon Company | 24 |
| Disney Princess | 2000 | 45.40 | movie | The Walt Disney Company | NULL |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> SELECT *
-> FROM franchises
-> LIMIT 3;
+-----+-----+-----+-----+-----+-----+
| Franchise | inception_year | total_revenue_bUSD | original_medium | owner | n_movies |
+-----+-----+-----+-----+-----+-----+
| Star Wars | 1977 | 46.70 | movie | The Walt Disney Company | 12 |
| Mickey Mouse and Friends | 1928 | 52.20 | cartoon | The Walt Disney Company | NULL |
| Anpanman | 1973 | 38.40 | book | Froebel-kan | 33 |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)

mysql> SELECT DISTINCT
-> FROM franchises
-> LIMIT 3;
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 'FROM franchises
LIMIT 3' at line 2
mysql> SELECT DISTINCT owner
-> FROM franchises
-> LIMIT 3;
+-----+
| owner |
+-----+
| The Walt Disney Company |
| Froebel-kan |
| The Pokemon Company |
+-----+
3 rows in set (0.01 sec)
```

Q 12 Write SQL query for filtering on text columns:-

Sol:-

```
mysql> rows in set (0.00 sec)

mysql> create table franchises(franchise Varchar(50),inception_year INT,total_revenue_bud DECIMAL(5,2),original_medium VARCHAR(50),owner Varchar(50),n_movies INT);
ERROR 1064 (30000): No database selected
mysql> use gorilla;
Database changed
mysql> create table franchises(franchise Varchar(50),inception_year INT,total_revenue_bud DECIMAL(5,2),original_medium VARCHAR(50),owner Varchar(50),n_movies INT);
Query OK, 0 rows affected (0.02 sec)

mysql> insert into franchises values('Star Wars',1977,46.7,'movie','The Walt Disney Company',12);
Query OK, 1 row affected (0.01 sec)

mysql> insert into franchises values('Mickey Mouse and Friends',1928,52.2,'cartoon','The Walt Disney Company');
ERROR 1136 (21501): Column count doesn't match value count at row 1
mysql> insert into franchises values('Mickey Mouse and Friends',1928,52.2,'cartoon','The Walt Disney Company',10);
Query OK, 1 row affected (0.00 sec)

mysql> insert into franchises values('Anpanman',1975,38.4,'book','Froebel-kan',33);
Query OK, 1 row affected (0.00 sec)

mysql> insert into franchises values('Winnie the poah',1924,48.5,'book','The Walt Disney Company',6);
Query OK, 1 row affected (0.00 sec)

mysql> insert into franchises values('Pokemon',1996,88,'video game','The Pokemon Company',24);
Query OK, 1 row affected (0.00 sec)

mysql> insert into franchises values('Disney Princess',2000,45.4,'movie','The Walt Disney Company',24);
Query OK, 1 row affected (0.00 sec)

mysql> show *from franchises;
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 '*from franchises' at line 1
mysql> select *from franchises;
+-----+-----+-----+-----+-----+-----+
| Franchise | inception_year | total_revenue_bud | original_medium | owner | n_movies |
+-----+-----+-----+-----+-----+-----+
| Star Wars | 1977 | 46.70 | movie | The Walt Disney Company | 12 |
| Mickey Mouse and Friends | 1928 | 52.20 | cartoon | The Walt Disney Company | 10 |
| Anpanman | 1975 | 38.40 | book | Froebel-kan | 33 |
| Winnie the poah | 1924 | 48.50 | book | The Walt Disney Company | 6 |
| Pokemon | 1996 | 88.00 | video game | The Pokemon Company | 24 |
| Disney Princess | 2000 | 45.40 | movie | The Walt Disney Company | 24 |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> SELECT Franchise,original_medium
-> FROM franchises
-> WHERE original_medium LIKE 'xxx%';
+-----+-----+
| Franchise | original_medium |
+-----+-----+
| Star Wars | movie |
| Pokemon | video game |
| Disney Princess | movie |
+-----+-----+
3 rows in set (0.00 sec)

mysql> SELECT Franchise,original_medium
-> FROM franchises
-> WHERE original_medium LIKE 'xxx%';
+-----+-----+
| Franchise | original_medium |
+-----+-----+
| Mickey Mouse and Friends | cartoon |
| Anpanman | book |
| Winnie the poah | book |
+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> SELECT DISTINCT owner
-> FROM franchises;
+-----+
| owner |
+-----+
| The Walt Disney Company |
| Froebel-kan |
| The Pokemon Company |
+-----+
3 rows in set (0.00 sec)

mysql> .0
-> ;
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 '.0' at line 1
mysql> SELECT franchise,original_medium
-> FROM ;
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 2
mysql> SELECT franchise,original_medium
-> FROM franchises
-> WHERE original_medium='book';
+-----+-----+
| Franchise | original_medium |
+-----+-----+
| Anpanman | book |
| Winnie the poah | book |
+-----+-----+
2 rows in set (0.00 sec)

mysql> SELECT franchise,original_medium
-> FROM franchises
-> WHERE original_medium IN('movie','video game');
+-----+-----+
| Franchise | original_medium |
+-----+-----+
| Star Wars | movie |
| Pokemon | video game |
| Disney Princess | movie |
+-----+-----+
3 rows in set (0.00 sec)
```

Q 13 Write SQL query to Apply filtering on multiple columns and missing data:

Sol:-

```
mysql> select *from franchises;
```

Franchise	inception_year	total_revenue_bUSD	original_medium	owner	n_movies
Star Wars	1977	46.78	movie	The Walt Disney Company	12
Mickey Mouse and Friends	1928	52.28	cartoon	The Walt Disney Company	18
Anpanman	1975	38.48	book	Froebel-kan	33
Winnie the poah	1924	48.58	book	The Walt Disney Company	6
Pokemon	1996	88.88	video game	The Pokemon Company	24
Disney Princess	2000	45.48	movie	The Walt Disney Company	24

5 rows in set (0.00 sec)

```
sql> SELECT Franchise,inception_year,total_revenue_bUSD
-> FROM franchises
-> WHERE inception_year < 1958 AND total_revenue>50;
ERROR 1054 (42S22): Unknown column 'total_revenue' in 'where clause'
sql> WHERE inception_year < 1958 AND total_revenue_bUSD>50;
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 'WHERE incept
n_year < 1958 AND total_revenue_bUSD>50' at line 1
sql> SELECT Franchise,inception_year,total_revenue_bUSD
-> FROM franchises
-> WHERE inception_year < 1958 AND total_revenue_bUSD>50;
```

Franchise	inception_year	total_revenue_bUSD
Mickey Mouse and Friends	1928	52.28

row in set (0.00 sec)

```
1 row in set (0.00 sec)

mysql> SELECT Franchise,inception_year,total_revenue_bUSD
-> FROM franchises
-> WHERE inception_year < 1958 OR total_revenue>50;
ERROR 1054 (42S22): Unknown column 'total_revenue' in 'where clause'
mysql> SELECT Franchise,inception_year,total_revenue_bUSD
-> FROM franchises
-> SELECT Franchise,inception_year,total_revenue_bUSD>50;
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 'SELECT Franc
ise,inception_year,total_revenue_bUSD>50' at line 3
mysql> SELECT Franchise,inception_year,total_revenue_bUSD
-> FROM franchises
-> WHERE inception_year < 1958 OR total_revenue_bUSD>50;
```

Franchise	inception_year	total_revenue_bUSD
Mickey Mouse and Friends	1928	52.28
Winnie the poah	1924	48.58
Pokemon	1996	88.88

3 rows in set (0.00 sec)

```
mysql> SELECT Franchise,n_movies
-> FROM franchises
-> WHERE n_movies IS NULL;
Empty set (0.00 sec)

mysql> SELECT Franchise,n_movies
-> FROM franchises
-> WHERE n_movies IS NOT NULL;
```

Franchise	n_movies
Star Wars	12
Mickey Mouse and Friends	18
Anpanman	33
Winnie the poah	6
Pokemon	24
Disney Princess	24

6 rows in set (0.00 sec)

```
mysql>
```

Q 14 Write SQL query for filtering all numeric column:

Sol:-

```
mysql> use gorilla;
Database changed
mysql> create TABLE franchises(Franchise VARCHAR(30),inception_year INT,total_revenue_bUSD DECIMAL(20,2),original_medium VARCHAR(50),owner VARCHAR(50),n_movies INT);
Query OK, 0 rows affected (0.06 sec)

mysql> INSERT into franchises VALUES('Star Wars',1977,46.7,'movie','The Walt Disney Company',12);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT into franchises VALUES('Mickey Mouse and Friends',1928,52.2,'cartoon','The Walt Disney Company',NULL);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT into franchises VALUES('Anpanman',1973,38.4,'book','Froebel-kan',33);
Query OK, 1 row affected (0.02 sec)

mysql> INSERT into franchises VALUES('Winnie the Pooh',1924,48.5,'book','The Walt Disney Company',6);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT into franchises VALUES('Pokemon',1996,88,'video game','The Pokemon Company',24);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT into franchises VALUES('Disney Princess',2000,45.4,'movie','The Walt Disney Company',NULL);
Query OK, 1 row affected (0.01 sec)

mysql> select *from franchises;
+-----+-----+-----+-----+-----+-----+
| Franchise | inception_year | total_revenue_bUSD | original_medium | owner | n_movies |
+-----+-----+-----+-----+-----+-----+
| Star Wars | 1977 | 46.70 | movie | The Walt Disney Company | 12 |
| Mickey Mouse and Friends | 1928 | 52.20 | cartoon | The Walt Disney Company | NULL |
| Anpanman | 1973 | 38.40 | book | Froebel-kan | 33 |
| Winnie the Pooh | 1924 | 48.50 | book | The Walt Disney Company | 6 |
| Pokemon | 1996 | 88.00 | video game | The Pokemon Company | 24 |
| Disney Princess | 2000 | 45.40 | movie | The Walt Disney Company | NULL |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> SELECT franchise,inception_year
-> FROM franchises;
-> select *from franchises;
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 'select *from franchises' at line 3
mysql> SELECT franchise,inception_year
-> FROM franchises
-> WHERE inception_year>1928
-> WHERE inception_year>1928;
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 'WHERE inception_year>1928' at line 4
mysql> SELECT Franchise,inception_year
-> FROM franchises
-> WHERE inception_year>1928;
+-----+-----+
| Franchise | inception_year |
+-----+-----+
| Star Wars | 1977 |
| Anpanman | 1973 |
| Pokemon | 1996 |
| Disney Princess | 2000 |
+-----+-----+
```

```
mysql> SELECT Franchise,inception_year
-> FROM franchises
-> WHERE inception_year>1928;
+-----+-----+
| Franchise | inception_year |
+-----+-----+
| Star Wars | 1977 |
| Mickey Mouse and Friends | 1928 |
| Anpanman | 1973 |
| Pokemon | 1996 |
| Disney Princess | 2000 |
+-----+-----+
5 rows in set (0.00 sec)

mysql> SELECT Franchise,inception_year
-> FROM franchises
-> WHERE inception_year<=1977;
+-----+-----+
| Franchise | inception_year |
+-----+-----+
| Star Wars | 1977 |
| Mickey Mouse and Friends | 1928 |
| Anpanman | 1973 |
| Winnie the Pooh | 1924 |
+-----+-----+
4 rows in set (0.00 sec)

mysql> SELECT Franchise,inception_year
-> FROM franchises
-> WHERE inception_year=1996;
+-----+-----+
| Franchise | inception_year |
+-----+-----+
| Pokemon | 1996 |
+-----+-----+
1 row in set (0.00 sec)

mysql> SELECT Franchise,inception_year
-> FROM franchises
-> WHERE inception_year<>1996;
+-----+-----+
| Franchise | inception_year |
+-----+-----+
| Star Wars | 1977 |
| Mickey Mouse and Friends | 1928 |
| Anpanman | 1973 |
| Winnie the Pooh | 1924 |
| Disney Princess | 2000 |
+-----+-----+
5 rows in set (0.00 sec)
```


Q 15 Write SQL query to show the implementation of aggregation on data:

Sol:-

```
mysql> select *from franchises;
```

Franchise	inception_year	total_revenue_bu\$	original_medium	owner	n_movies
Star Wars	1977	46.70	movie	The Walt Disney Company	12
Mickey Mouse and Friends	1928	52.20	cartoon	The Walt Disney Company	10
Anpanman	1975	38.40	book	Froebel-kan	33
Winnie the poah	1924	48.50	book	The Walt Disney Company	6
Pokemon	1996	88.00	video game	The Pokemon Company	24
Disney Princess	2000	45.40	movie	The Walt Disney Company	24

6 rows in set (0.00 sec)

```
mysql> SELECT Franchise,inception_year
-> FROM franchises
-> WHERE inception_year BETWEEN 1928 AND 1977;
```

Franchise	inception_year
Star Wars	1977
Mickey Mouse and Friends	1928
Anpanman	1975

3 rows in set (0.00 sec)

```
mysql> SELECT COUNT(*) FROM franchises;
```

COUNT(*)
6

1 row in set (0.02 sec)

```
mysql> SELECT SUM(total_revenue_bu$)
-> FROM franchises;
```

SUM(total_revenue_bu\$)
319.20

1 row in set (0.00 sec)

```
mysql> SELECT AVG(total_revenue_bu$)
-> FROM franchises;
```

AVG(total_revenue_bu\$)
53.200000

1 row in set (0.00 sec)

```
mysql> SELECT MIN(total_revenue_bu$)
-> FROM franchises;
```

MIN(total_revenue_bu\$)
38.40

1 row in set (0.02 sec)

```
mysql> SELECT MAX(total_revenue_bu$)
-> FROM franchises;
```

MAX(total_revenue_bu\$)
88.00

1 row in set (0.00 sec)

```
mysql> SELECT owner , COUNT(*)
-> FROM franchises
-> GROUP BY owner;
```

ERROR 1146 (42S02): Table 'gorilla.franchises' doesn't exist

```
mysql> SELECT owner , COUNT(*)
-> FROM franchises
-> GROUP BY owner;
```

owner	COUNT(*)
The Walt Disney Company	4
Froebel-kan	1
The Pokemon Company	1

3 rows in set (0.01 sec)

```
mysql> SELECT original_medium, SUM(n_movies) AS total_movies
-> FROM franchises
-> GROUP BY original_medium
-> ORDER BY total_movies DESC;
```

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 'ORDER BY total_movies DESC' at line 5

```
mysql> SELECT original_medium, SUM(n_movies) AS total_movies
-> FROM franchises
-> GROUP BY original_medium
-> ORDER BY total_movies DESC;
```

original_medium	total_movies
book	39
video game	24
movie	12
cartoon	NULL

4 rows in set (0.00 sec)

Q 16 Write SQL query for Grouping, Filtering and Sorting:

Sol:-

```
mysql> select *from franchises;
```

Franchise	Inception_year	total_revenue_bUSD	original_medium	owner	n_movies
Star Wars	1977	46.70	movie	The Walt Disney Company	12
Mickey Mouse and Friends	1928	52.20	cartoon	The Walt Disney Company	10
Anpanman	1975	38.40	book	Froebel-kan	33
Winnie the poah	1924	48.50	book	The Walt Disney Company	6
Pokemon	1996	88.00	video game	The Pokemon Company	24
Disney Princess	2000	45.40	movie	The Walt Disney Company	24

```
6 rows in set (0.00 sec)
```

```
mysql> SELECT original_medium, SUM(n_movies) AS total_movies
-> FROM franchises
-> GROUP BY original_medium
-> HAVING SUM(n_movies) >10
-> ORDER BY total_movies;
```

original_medium	total_movies
movie	12
video game	24
book	39

```
3 rows in set (0.01 sec)
```

```
mysql> SELECT original_medium, SUM(n_movies) AS total_movies
-> FROM franchises
-> WHERE owner='The Walt Disney Company'
-> GROUP BY original_medium
-> HAVING SUM(n_movies) >10
-> ORDER BY total_movies DESC;
```

original_medium	total_movies
movie	12

```
1 row in set (0.01 sec)
```

Q 17 Write SQL query to show the implementation of Numeric Function:

Sol:-

```
mysql> SELECT MOD(13,2);
+-----+
| MOD(13,2) |
+-----+
|          1 |
+-----+
1 row in set (0.01 sec)

mysql> SELECT ROUND(1234.56789,3);
+-----+
| ROUND(1234.56789,3) |
+-----+
|          1234.568 |
+-----+
1 row in set (0.01 sec)

mysql> SELECT ROUND(1234.56739,3);
+-----+
| ROUND(1234.56739,3) |
+-----+
|          1234.567 |
+-----+
1 row in set (0.00 sec)

mysql> SELECT TRUNCATE(-13.56,0);
+-----+
| TRUNCATE(-13.56,0) |
+-----+
|             -13 |
+-----+
```

```
mysql> SELECT CEIL(13.1);
+-----+
| CEIL(13.1) |
+-----+
|          14 |
+-----+
1 row in set (0.01 sec)

mysql> SELECT CEIL(-13.9);
+-----+
| CEIL(-13.9) |
+-----+
|          -13 |
+-----+
1 row in set (0.00 sec)

mysql> SELECT FLOOR(13.8);
+-----+
| FLOOR(13.8) |
+-----+
|           13 |
+-----+
1 row in set (0.01 sec)

mysql> SELECT FLOOR(-13.2);
+-----+
| FLOOR(-13.2) |
+-----+
|          -14 |
+-----+
1 row in set (0.00 sec)

mysql> SELECT TRUNCATE(13.56,1);
+-----+
| TRUNCATE(13.56,1) |
+-----+
|           13.5 |
+-----+
1 row in set (0.00 sec)

mysql> SELECT ABS(-12);
+-----+
| ABS(-12) |
+-----+
|          12 |
+-----+
1 row in set (0.01 sec)

mysql> SELECT SQRT(25)
-> SELECT SQRT(25);
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 'SELECT SQRT(25)' at line 2
mysql> SELECT SQRT(25);
+-----+
| SQRT(25) |
+-----+
|          5 |
+-----+
```

Q 18 Write a SQL query for the following table and perform the following operations:

- 1) From the following table, write a SQL query to calculate total purchase amount of all orders. Return total purchase amount.
- 2) From the following table, write a SQL query to calculate the average purchase amount of all orders. Return average purchase amount.
- 3) From the following table, write a SQL query that counts the number of unique salespeople. return number of salespeople.
- 4) From the following table, write a SQL query to count the number of customers. return number of customers.
- 5) From the following table, write a SQL query to determine the number of customers who have purch_amt > 2480.
- 6) From the following table, write a SQL query to find the maximum purchase amount.
- 7) From the following table, write a SQL query to find the minimum purchase amount.
- 8) From the following table, write a SQL query to count the no. of customers whose customer id is 3002 or 3008.
- 9) From the following table, write a SQL query to count the number of customers whose salesman_id is 5001.
- 10) From the following table, write a SQL query to count all the orders generated on '2012-08-17'. Return number of orders.

Sol:-

```
mysql> use guerrilla;
Database changed
mysql> show tables;
Empty set (0.00 sec)

mysql> create table company(ord_no int,purch_amt varchar(50),ord_date DATE,customer_id int,salesman_id int);
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 'table company(ord_
o int,purch_amt varchar(50),ord_date DATE,customer_id int,salesman_id int);' at line 1
mysql> create table company(ord_no int,purch_amt varchar(50),ord_date DATE,customer_id int,salesman_id int);
Query OK, 0 rows affected (0.01 sec)

mysql> insert into company values(78001,150.5,2012-10-09,3005,5002);
Query OK, 1 row affected (0.00 sec)

mysql> insert into company values(78009,270.65,2012-09-19,3001,5005);
Query OK, 1 row affected (0.01 sec)

mysql> insert into company values(78002,65.25,2012-08-17,3009,5003);
Query OK, 1 row affected (0.00 sec)

mysql> insert into company values(78004,110.5,2012-08-17,3009,5003);
Query OK, 1 row affected (0.01 sec)

mysql> insert into company values(78007,940.5,2012-09-10,3005,5002);
Query OK, 1 row affected (0.01 sec)

mysql> insert into company values(78005,2400.6,2012-07-27,3007,5001);
Query OK, 1 row affected (0.01 sec)

mysql> insert into company values(78008,5700,2012-09-10,3002,5001);
Query OK, 1 row affected (0.00 sec)

mysql> insert into company values(78010,1303.43,2012-09-10,3004,5006);
Query OK, 1 row affected (0.00 sec)

mysql> insert into company values(78003,2400.4,2012-10-10,3009,5003);
Query OK, 1 row affected (0.01 sec)

mysql> insert into company values(78012,250.45,2012-06-27,3009,5002);
Query OK, 1 row affected (0.01 sec)

mysql> insert into company values(78011,70.29,2012-08-17,3003,5007);
```

```
mysql> select distinct(salesman_id) from company;
+-----+
| salesman_id |
+-----+
| 5001         |
| 5005         |
| 5006         |
| 5003         |
| 5002         |
| 5007         |
+-----+
6 rows in set (0.00 sec)

mysql> select count(customer_id) from company;
+-----+
| count(customer_id) |
+-----+
| 12                  |
+-----+
1 row in set (0.00 sec)

mysql> select customer_id from company WHERE purch_amt > 2400;
+-----+
| customer_id |
+-----+
| 3002         |
| 3009         |
| 3002         |
+-----+
3 rows in set (0.00 sec)

mysql> sum(purch_amt);
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 'sum(purch_amt)' at
line 1
mysql> select sum(purch_amt) from company;
+-----+
| sum(purch_amt) |
+-----+
| 3043.5         |
+-----+
1 row in set (0.01 sec)
```

```
mysql> insert into company values(78013,3043.5,2012-04-25,010002,5001);
Query OK, 1 row affected (0.01 sec)

mysql> select * from company;
+-----+-----+-----+-----+-----+
| ord_no | purch_amt | ord_date | customer_id | salesman_id |
+-----+-----+-----+-----+-----+
| 78001   | 150.5     | 2012-10-09 | 3005         | 5002         |
| 78009   | 270.65    | 2012-09-19 | 3001         | 5005         |
| 78002   | 65.25     | 2012-08-17 | 3009         | 5003         |
| 78004   | 110.5     | 2012-08-17 | 3009         | 5003         |
| 78007   | 940.5     | 2012-09-10 | 3005         | 5002         |
| 78005   | 2400.6    | 2012-07-27 | 3007         | 5001         |
| 78008   | 5700      | 2012-09-10 | 3002         | 5001         |
| 78010   | 1303.43   | 2012-09-10 | 3004         | 5006         |
| 78003   | 2400.4    | 2012-10-10 | 3009         | 5003         |
| 78012   | 250.45    | 2012-06-27 | 3009         | 5002         |
| 78011   | 70.29     | 2012-08-17 | 3003         | 5007         |
| 78013   | 3043.5    | 2012-04-25 | 010002      | 5001         |
+-----+-----+-----+-----+-----+
12 rows in set (0.00 sec)

mysql> sum(purch_amt) from company;
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 'sum(purch_amt) from
company' at line 1
mysql> select sum(purch_amt) from company;
+-----+
| sum(purch_amt) |
+-----+
| 17943.18       |
+-----+
1 row in set (0.01 sec)

mysql> select avg(purch_amt) from company;
+-----+
| avg(purch_amt) |
+-----+
| 1481.765       |
+-----+
1 row in set (0.00 sec)
```

```
mysql> select min(purch_amt) from company;
+-----+
| min(purch_amt) |
+-----+
| 110.5          |
+-----+
1 row in set (0.00 sec)

mysql> select ord_no from company WHERE DATE = '2012-08-17';
ERROR 1064 (42000): Unknown column 'DATE' in 'where clause'
mysql> select ord_no from company WHERE ord_date = '2012-08-17';
+-----+
| ord_no |
+-----+
| 78002   |
| 78004   |
+-----+
2 rows in set (0.00 sec)

mysql> select count(salesman_id) from company;
+-----+
| count(salesman_id) |
+-----+
| 12              |
+-----+
1 row in set (0.00 sec)

mysql> select count(customer_id) from company WHERE customer_id = 3002 or 3008;
+-----+
| count(customer_id) |
+-----+
| 12                |
+-----+
1 row in set (0.00 sec)

mysql> select count(customer_id) from company WHERE salesman_id = 5001;
+-----+
| count(customer_id) |
+-----+
| 6                  |
+-----+
1 row in set (0.01 sec)
```

