Observe the given two tables(Store and Supplier) carefully and attempt the questions that follow:

```
mysql> use computer2022;
Database changed
mysql> SELECT * FROM STORE;
+--------+-----------------+------+------+------------+-------+
| itemno | itemname        | qty  | rate | lastbuy    | scode |
+--------+-----------------+------+------+------------+-------+
|   1001 | Ball Pen        |  100 |   12 | 1991-09-01 | S01   |
|   1002 | Notebook Small  |   25 |   27 | 1990-12-15 | S03   |
|   1003 | Gel Pen Soft    |   75 |    5 | 1987-09-04 | S05   |
|   1007 | Gel Pen Classic |  105 |   15 | 1984-10-03 | S04   |
|   1004 | Sharpener       |   82 |    7 | 1992-03-31 | S01   |
|   1005 | Ruler Deluxe    |   30 |   10 | 1985-02-07 | S02   |
|   1006 | Pencil nataraj  |  150 |    8 | 1990-06-23 | S05   |
+--------+-----------------+------+------+------------+-------+
7 rows in set (0.00 sec)

mysql> SELECT * FROM SUPPLIER;
+-------+--------------------+----------+
| scode | suppliername       | location |
+-------+--------------------+----------+
| S01   | Premium Stationers | Delhi    |
| S02   | Soft Plastics      | Delhi    |
| S03   | Ganesh Books       | Mumbai   |
| S05   | Tetra Supply       | Kolkata  |
| S04   | Classic Plastics   | Mumbai   |
+-------+--------------------+----------+
5 rows in set (0.00 sec)
```

SET-1

Write SQL Queries for Q 1 to 4 and Outputs for Q 5 to 6:

1. Display the Scode, name and Quantity of Pencil Nataraj and Ruler Deluxe.
   SELECT SCODE, ITEMNAME, QTY FROM STORE WHERE ITEMNAME=”PENCIL NATARAJ” OR ITEMNAME=”RULER DELUXE”;

```
+-------+----------------+------+
| SCODE | ITEMNAME       | QTY  |
+-------+----------------+------+
| S02   | Ruler Deluxe   |   30 |
| S05   | Pencil nataraj |  150 |
+-------+----------------+------+
```

2. Display the Scode, Name of the item and supplier name with their corresponding matching Scode.

SELECT SUPPLIER.SCODE, ITEMNAME, SUPPLIERNAME FROM SUPPLIER,STORE WHERE SUPPLIER.SCODE=STORE.SCODE;

SCODE	ITEMNAME	SUPPLIERNAME
S01	Ball Pen	Premium Stationers
S03	Notebook Small	Ganesh Books
S05	Gel Pen Soft	Tetra Supply
S04	Gel Pen Classic	Classic Plastics
S01	Sharpener	Premium Stationers
S02	Ruler Deluxe	Soft Plastics
S05	Pencil nataraj	Tetra Supply

3. Display the item name and scode of those items whose name contains the substring ”Gel”.

   SELECT ITEMNAME, SCODE FROM STORE WHERE ITEMNAME LIKE”%GEL%”;

```
mysql> SELECT ITEMNAME,SCODE FROM STORE WHERE ITEMNAME LIKE"%GEL%";
```

ITEMNAME	SCODE
Gel Pen Soft	S05
Gel Pen Classic	S04

4. Display the sum and average of rate for each suppliers.

   SELECT SCODE,SUM(RATE),AVG(RATE) FROM STORE GROUP BY SCODE;

SCODE	SUM(RATE)	AVG(RATE)
S01	19	9.5000
S02	10	10.0000
S03	27	27.0000
S04	15	15.0000
S05	13	6.5000

5. **SELECT * FROM SUPPLIER WHERE SUPPLIERNAME IN (“TETRA SUPPLY”,”CLASSIC PLASTICS”);**

scode	suppliername	location
S05	Tetra Supply	Kolkata
S04	Classic Plastics	Mumbai

6. **SELECT DISTINCT(LOCATION) FROM SUPPLIER;**

location
Delhi
Mumbai
Kolkata

SET-2

Write SQL Queries for Q 1 to 4 and Outputs for Q 5 to 6:

1. Display the details of Store whose Quantity is above 100.
   SELECT * FROM STORE WHERE QTY>100;

itemno	itemname	qty	rate	lastbuy	scode
1007	Gel Pen Classic	105	15	1984-10-03	S04
1006	Pencil nataraj	150	8	1990-06-23	S05

2. Display the Supplier Table whose Scode is S01 and S05.
   SELECT * FROM SUPPLIER WHERE SCODE="S01" OR SCODE="S05";

scode	suppliername	location
S01	Premium Stationers	Delhi
S05	Tetra Supply	Kolkata

3. Display the count of suppliers Location Wise.
   SELECT LOCATION, COUNT(*) FROM SUPPLIER GROUP BY LOCATION;

LOCATION	COUNT(*)
Delhi	2
Kolkata	1
Mumbai	2

4. Display the supplier table in descending order of Supplier.
   SELECT * FROM SUPPLIER ORDER BY SUPPLIERNAME DESC;

scode	suppliername	location
S05	Tetra Supply	Kolkata
S02	Soft Plastics	Delhi
S01	Premium Stationers	Delhi
S03	Ganesh Books	Mumbai
S04	Classic Plastics	Mumbai

5. **SELECT DISTINCT (LOCATION) FROM SUPPLIER;**

LOCATION
Delhi
Mumbai
Kolkata

6. **SELECT ITEMNO,ITEMNAME,QTY,RATE FROM STORE WHERE ITEMNAME LIKE"S%";**

ITEMNO	ITEMNAME	QTY	RATE
1004	Sharpener	82	7

SET-3

Write SQL Queries for Q 1 to 4 and Outputs for Q 5 to 6:

1. Display the Supplier code and name of those suppliers who are from Mumbai.
   SELECT SCODE,SUPPLIERNAME FROM SUPPLIER WHERE LOCATION="MUMBAI";

SCODE	SUPPLIERNAME
S03	Ganesh Books
S04	Classic Plastics

2. Display Scode, Location and Last Buy of Suppliers who are in Delhi.
   SELECT SUPPLIER.SCODE, LOCATION, LASTBUY FROM SUPPLIER,STORE WHERE SUPPLIER.SCODE=STORE.SCODE AND LOCATION="DELHI";

SCODE	LOCATION	LASTBUY
S01	Delhi	1991-09-01
S01	Delhi	1992-03-31
S02	Delhi	1985-02-07

3. Display the Sum of rate and average of rate for each supplier.
   SELECT SCODE, SUM(RATE),AVG(RATE) FROM STORE GROUP BY SCODE;

SCODE	SUM(RATE)	AVG(RATE)
S01	19	9.5000
S02	10	10.0000
S03	27	27.0000
S04	15	15.0000
S05	13	6.5000

4. Display the Store Table whose quantity is in the range 50 to 110.
   SELECT * FROM STORE WHERE QTY >= 50 AND QTY<= 110;

itemno	itemname	qty	rate	lastbuy	scode
1001	Ball Pen	100	12	1991-09-01	S01
1003	Gel Pen Soft	75	5	1987-09-04	S05
1007	Gel Pen Classic	105	15	1984-10-03	S04
1004	Sharpener	82	7	1992-03-31	S01

5. **SELECT ITEMNAME,QTY,RATE FROM STORE WHERE ITEMNAME=”BALL PEN” AND ITEMNO=1001;**

ITEMNAME	QTY	RATE
Ball Pen	100	12

6. **SELECT SUPPLIERNAME,QTY,RATE FROM SUPPLIER,STORE WHERE SUPPLIER.SCODE=STORE.SCODE;**

SUPPLIERNAME	QTY	RATE
Premium Stationers	100	12
Ganesh Books	25	27
Tetra Supply	75	5
Classic Plastics	105	15
Premium Stationers	82	7
Soft Plastics	30	10
Tetra Supply	150	8

SET – 4

Observe the given the table (Staff) carefully and attempt the questions that follow:

```
mysql> select * from staff;
```

CODE	NAME	DOJ	DEPT	SALARY	COMM
T01	Ravi Shankar	1990-01-05	Purchase	30000.00	300
T02	Yash Raj	1992-06-01	Accounts	35000.00	500
T03	Gagan	1985-07-05	Sales	28000.00	200
T04	Raj Kumar	1990-07-01	Sales	25000.00	200
T05	Rajeev	1988-02-04	Accounts	32000.00	600
T06	Meghna	1993-04-05	Accounts	40000.00	NULL

Write SQL Queries for Q 1 to 4 and Outputs for Q 5 to 6:

1. Display the staff name, date of join of those staff whose salary is in the range 25000 to 30000.
   SELECT NAME,DOJ FROM STAFF WHERE SALARY BETWEEN 25000 AND 30000;

NAME	DOJ
Ravi Shankar	1990-01-05
Gagan	1985-07-05
Raj Kumar	1990-07-01

2. Display the number of various departments.
   SELECT COUNT(DISTINCT(DEPT)) FROM STAFF;

```
+-----------------------+
| COUNT(DISTINCT(DEPT)) |
+-----------------------+
|                     3 |
+-----------------------+
```

3. Display the Code and Name of those staffs whose name starts with ‘R’ and ends with ‘r’.
   SELECT CODE,NAME FROM STAFF WHERE NAME LIKE ”R%r”;

```
+------+--------------+
| CODE | NAME         |
+------+--------------+
| T01  | Ravi Shankar |
| T04  | Raj Kumar    |
+------+--------------+
```

4. Display the number of staffs in each department.
   SELECT DEPT, COUNT(*) FROM STAFF GROUP BY DEPT;

```
+----------+----------+
| DEPT     | COUNT(*) |
+----------+----------+
| Accounts |        3 |
| Purchase |        1 |
| Sales    |        2 |
+----------+----------+
```

5. **SELECT * FROM STAFF WHERE COMM IS NULL;**

```
+------+--------+------------+----------+----------+------+
| CODE | NAME   | DOJ        | DEPT     | SALARY   | COMM |
+------+--------+------------+----------+----------+------+
| T06  | Meghna | 1993-04-05 | Accounts | 40000.00 | NULL |
+------+--------+------------+----------+----------+------+
```

6. **SELECT CODE, NAME,DOJ FROM STAFF WHERE DOJ<”1990-01-01”;**

```
+------+--------+------------+
| CODE | NAME   | DOJ        |
+------+--------+------------+
| T03  | Gagan  | 1985-07-05 |
| T05  | Rajeev | 1988-02-04 |
+------+--------+------------+
```

SET-5

Write SQL Queries for Q 1 to 4 and Outputs for Q 5 to 6:

1. Display the sum and average salary of each department.
   SELECT DEPT, SUM(SALARY),AVG(SALARY) FROM STAFF GROUP BY DEPT;

```
+----------+-------------+--------------+
| DEPT     | SUM(SALARY) | AVG(SALARY)  |
+----------+-------------+--------------+
| Accounts |   107000.00 | 35666.666667 |
| Purchase |    30000.00 | 30000.000000 |
| Sales    |    53000.00 | 26500.000000 |
+----------+-------------+--------------+
```

2. Display the staff table ascending order of Date of join.

   SELECT * FROM STAFF ORDER BY DOJ;

CODE	NAME	DOJ	DEPT	SALARY	COMM
T03	Gagan	1985-07-05	Sales	28000.00	200
T05	Rajeev	1988-02-04	Accounts	32000.00	600
T01	Ravi Shankar	1990-01-05	Purchase	30000.00	300
T04	Raj Kumar	1990-07-01	Sales	25000.00	200
T02	Yash Raj	1992-06-01	Accounts	35000.00	500
T06	Meghna	1993-04-05	Accounts	40000.00	NULL

3. Display the details of those staffs whose commission is Null.

   SELECT * FROM STAFF WHERE COMM IS NULL;

CODE	NAME	DOJ	DEPT	SALARY	COMM
T06	Meghna	1993-04-05	Accounts	40000.00	NULL

4. Display the details of “T01, T03, T06”.

   SELECT * FROM STAFF WHERE CODE IN ("T03","T01","T06");

CODE	NAME	DOJ	DEPT	SALARY	COMM
T01	Ravi Shankar	1990-01-05	Purchase	30000.00	300
T03	Gagan	1985-07-05	Sales	28000.00	200
T06	Meghna	1993-04-05	Accounts	40000.00	NULL

5. **SELECT COMM+500 FROM STAFF WHERE DEPT=”PURCHASE”;**

comm+500
800

6. **SELECT CODE,DEPT FROM STAFF WHERE CODE="T01" OR "T02" AND DEPT="PURCHASE";**

CODE	DEPT
T01	Purchase

****