PRACTICAL - 1

Table 1 - ITEMS:

CODE	INAME	QTY	PRICE	COMPANY	TCODE
1001	DIGITAL PAD 12i	120	11000	XENITA	T01
1003	DIGITAL CAMERA 12X	160	8000	DIGICLICK	T02
1004	CAR GPS SYSTEM	50	21500	GEOKNOW	T01
1005	PEN DRIVE 32GB	600	1200	STOREHOME	T03
1006	LED SCREEN 40	70	38000	SANTORA	T02

5 rows in set (0.00 sec)

Table 2 - TRADERS:

TCODE	TNAME	CITY
T01	ELECTRONIC SALES	MUMBAI
T02	DISP HOUSE INC	CHENNAI
T03	BUSY STORE CORP	DELHI

3 rows in set (0.00 sec)

For the above table, write queries for the following questions:

Query 1:

To display the details of all the items in the ascending order of item names (i.e. INAME).

```
mysql> select * from ITEMS
    -> order by INAME;
+------+--------------------+------+-------+-----------+-------+
| CODE | INAME              | QTY  | PRICE | COMPANY   | TCODE |
+------+--------------------+------+-------+-----------+-------+
| 1004 | CAR GPS SYSTEM     |   50 | 21500 | GEOKNOW   | T01   |
| 1003 | DIGITAL CAMERA 12X |  160 |  8000 | DIGICLICK | T02   |
| 1001 | DIGITAL PAD 12i    |  120 | 11000 | XENITA    | T01   |
| 1006 | LED SCREEN 40      |   70 | 38000 | SANTORA   | T02   |
| 1005 | PEN DRIVE 32GB     |  600 |  1200 | STOREHOME | T03   |
+------+--------------------+------+-------+-----------+-------+
5 rows in set (0.00 sec)
```

Query 2:

To display item name and price of all those items, whose price is in range of 10,000 and 22,000 (both values inclusive).

```
mysql> select INAME, PRICE from ITEMS
    -> where PRICE between 10000 and 22000;
+-----------------+-------+
| INAME           | PRICE |
+-----------------+-------+
| DIGITAL PAD 12i | 11000 |
| CAR GPS SYSTEM  | 21500 |
+-----------------+-------+
2 rows in set (0.00 sec)
```

Query 3:

To display the number of items, which are traded by each trader. The expected output of this query should be:

T01 2
T02 2
T03 1

```
mysql> select TCODE, count(*) from ITEMS
    -> group by TCODE;
+-------+----------+
| TCODE | count(*) |
+-------+----------+
| T01   |        2 |
| T02   |        2 |
| T03   |        1 |
+-------+----------+
3 rows in set (0.00 sec)
```

Query 4:

To display the price, item name and quantity (i.e. qty) of those items which have quantity more than 150.

```
mysql> select PRICE, INAME, QTY from ITEMS
    -> where QTY>150;
+-------+-------------------+------+
| PRICE | INAME             | QTY  |
+-------+-------------------+------+
|  8000 | DIGITAL CAMERA 12X |  160 |
|  1200 | PEN DRIVE 32GB     |  600 |
+-------+-------------------+------+
2 rows in set (0.00 sec)
```

Query 5:

To display the names of those traders, who are either from DELHI or from MUMBAI.

```
mysql> select TNAME, CITY from TRADERS
    -> where CITY='DELHI' or CITY='MUMBAI';
+------------------+--------+
| TNAME            | CITY   |
+------------------+--------+
| ELECTRONIC SALES | MUMBAI |
| BUSY STORE CORP  | DELHI  |
+------------------+--------+
2 rows in set (0.00 sec)
```

PRACTICAL - 2

Table 1 - STUDENT:

```
mysql> select * from STUDENT;
+-----+-------+---------+-------+------+------+--------+------+
| SNO | FNAME | LNAME   | CLASS | SEC  | AGE  | TMARKS | DIV  |
+-----+-------+---------+-------+------+------+--------+------+
| 301 | AMIT  | KUMAR   |     8 | A    |   14 |    389 |    1 |
| 302 | RAVI  | SHANKAR |     9 | C    |   15 |    255 |    3 |
| 303 | RAHUL | TRIVEDI |     8 | B    |   14 |    290 |    3 |
| 304 | AMAN  | RAJPUT  |     6 | C    |   12 |    198 |    3 |
| 305 | TARUN | SETH    |     7 | B    |   13 |    275 |    3 |
| 306 | ANANT | KUMAR   |     6 | C    |   12 |    355 |    1 |
+-----+-------+---------+-------+------+------+--------+------+
6 rows in set (0.00 sec)
```

Table 2 - DETAILS:

```
mysql> select * from DETAILS;
+-----+----------+--------+-------------+------------+
| SNO | FATHER   | MOTHER | ADDRESS     | MOB        |
+-----+----------+--------+-------------+------------+
| 301 | PAWAN    | AARTI  | VIKAS PURI  | 9899565641 |
| 302 | ANUJ     | KAVITA | KIRTI NAGAR | 9999568599 |
| 303 | TEJAS    | ANJU   | PATEL NAGAR | 9888155511 |
| 304 | PRIYANSH | SAKSHI | MAYA PURI   | 9899958415 |
| 305 | RAJESH   | MANJU  | KIRTI NAGAR | 9559555155 |
+-----+----------+--------+-------------+------------+
5 rows in set (0.00 sec)
```

For the above table, write queries for the following questions:

Query 1:

To show Fname, class and div of those students who are in class 8 in descending order of Tmarks.

```
mysql> select FNAME, CLASS, `DIV` from STUDENT
    -> where CLASS=8
    -> order by TMARKS desc;
+-------+-------+------+
| FNAME | CLASS | DIV  |
+-------+-------+------+
| AMIT  |     8 |    1 |
| RAHUL |     8 |    3 |
+-------+-------+------+
2 rows in set (0.00 sec)
```

Query 2:

To count and display the number of students class wise.

```
mysql> select CLASS, count(*) from STUDENT
    -> group by CLASS;
+-------+----------+
| CLASS | count(*) |
+-------+----------+
|     8 |        2 |
|     9 |        1 |
|     6 |        2 |
|     7 |        1 |
+-------+----------+
4 rows in set (0.00 sec)
```

Query 3:

To display details of students whose fname starts with 'T'.

```
mysql> select * from STUDENT
    -> where FNAME like 'T%';
+-----+-------+-------+-------+------+------+--------+------+
| SNO | FNAME | LNAME | CLASS | SEC  | AGE  | TMARKS | DIV  |
+-----+-------+-------+-------+------+------+--------+------+
| 305 | TARUN | SETH  |     7 | B    |   13 |    275 |    3 |
+-----+-------+-------+-------+------+------+--------+------+
1 row in set (0.01 sec)
```

Query 4:

To show Fname, class, address of those students who got more than 300 marks.

```
mysql> select S.FNAME, S.CLASS, D.ADDRESS
    -> from STUDENT S, DETAILS D
    -> where S.SNO=D.SNO and TMARKS>300;
+-------+-------+------------+
| FNAME | CLASS | ADDRESS    |
+-------+-------+------------+
| AMIT  |     8 | VIKAS PURI |
+-------+-------+------------+
1 row in set (0.00 sec)
```

Query 5:

To display details of students with 2nd div in ascending order of their class.

```
mysql> select * from STUDENT
    -> where `DIV`=2
    -> order by CLASS;
Empty set (0.00 sec)
```

PRACTICAL - 3

Table - EXAM:

```
mysql> select * from 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    |
+----+----------+---------+-------------+---------+----------+
6 rows in set (0.00 sec)
```

For the above table, write queries for the following questions:

Query 1:

To list the names of those students, who have obtained Division as FIRST in the ascending order of NAME.

```
mysql> select NAME from EXAM
    -> where DIVISION='FIRST'
    -> order by NAME;
+-------+
| NAME  |
+-------+
| Aman  |
| Javed |
| Karan |
+-------+
3 rows in set (0.00 sec)
```

Query 2:

To display a report listing NAME, SUBJECT, and annual stipend received assuming that the stipend column has monthly stipend.

```
mysql> select NAME, SUBJECT, STIPEND as MONTHLY_STIPEND, STIPEND*12 as ANNUAL_STIPEND from EXAM;
+---------+------------+----------------+---------------+
| NAME    | SUBJECT    | MONTHLY_STIPEND | ANNUAL_STIPEND |
+---------+------------+----------------+---------------+
| Karan   | English    |             400 |          4800 |
| Aman    | Mathematics |             680 |          8160 |
| Javed   | Accounts   |             500 |          6000 |
| Bishakh | Informatics |             200 |          2400 |
| Sugandha | History    |             400 |          4800 |
| Suparna | Geography  |             550 |          6600 |
+---------+------------+----------------+---------------+
6 rows in set (0.00 sec)
```

Query 3:

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

```
mysql> select count(*) from EXAM
    -> where SUBJECT='ACCOUNTS' or SUBJECT='INFORMATICS';
+----------+
| count(*) |
+----------+
|        2 |
+----------+
1 row in set (0.01 sec)
```

Query 4:

To insert a new row in the table EXAM:
6, 'Mohan', 500, 'English', 73, 'Second'.

```
mysql> insert into EXAM
    -> values(6, 'Mohan', 500, 'English', 73, 'Second');
ERROR 1062 (23000): Duplicate entry '6' for key 'exam.PRIMARY'
```

Query 5:

To show records of students who have 5 letters in name.

```
mysql> select * from EXAM
    -> where NAME like '_____';
+----+-------+---------+----------+---------+----------+
| NO | Name  | Stipend | Subject  | Average | Division |
+----+-------+---------+----------+---------+----------+
|  1 | Karan |     400 | English  |      68 | FIRST    |
|  3 | Javed |     500 | Accounts |      67 | FIRST    |
+----+-------+---------+----------+---------+----------+
2 rows in set (0.00 sec)
```

PRACTICAL – 4

Table - FITNESS:

PCODE	PNAME	PRICE	MANUFACTURER
P1	Threadmill	21000	Coscore
P2	Bike	20000	Aone
P3	Cross Trainer	14000	Reliable
P4	Multi Gym	34000	Coscore
P5	Massage chair	5500	Regrosene
P6	Belly Vibrator Belt	6500	Ambaway

For the above table, write queries for the following questions:

Query 1:

To display the names of all the products with price more than 20,000.

```
mysql> select PNAME, PRICE from FITNESS
    -> where PRICE>20000;
+------------+-------+
| PNAME      | PRICE |
+------------+-------+
| Threadmill | 21000 |
| Multi Gym  | 34000 |
+------------+-------+
2 rows in set (0.00 sec)
```

Query 2:

To display the names of all products by the manufacturer "Aone".

```
mysql> select PNAME from FITNESS
    -> where MANUFACTURER='AONE';
+-------+
| PNAME |
+-------+
| Bike  |
+-------+
1 row in set (0.00 sec)
```

Query 3:

To change the price data of all the products by applying 25% discount reduction.

```
mysql> select PNAME, PRICE, PRICE*0.25 as DISCOUNTED_PRICE from FITNESS;
+--------------------+-------+------------------+
| PNAME              | PRICE | DISCOUNTED_PRICE |
+--------------------+-------+------------------+
| Threadmill         | 21000 |          5250.00 |
| Bike               | 20000 |          5000.00 |
| Cross Trainer      | 14000 |          3500.00 |
| Multi Gym          | 34000 |          8500.00 |
| Massage chair      |  5500 |          1375.00 |
| Belly Vibrator Belt |  6500 |          1625.00 |
+--------------------+-------+------------------+
6 rows in set (0.00 sec)
```

Query 4:

To add a new row for product with the details: 'P7', 'Vibro Exerciser', 28000, 'Aone'.

```
mysql> insert into FITNESS
    -> values('P7', 'Vibro Exerciser', 28000, 'Aone');
Query OK, 1 row affected (0.01 sec)

mysql> select * from FITNESS;
+-------+--------------------+-------+--------------+
| PCODE | PNAME              | PRICE | MANUFACTURER |
+-------+--------------------+-------+--------------+
| P1    | Threadmill         | 21000 | Coscore      |
| P2    | Bike               | 20000 | Aone         |
| P3    | Cross Trainer      | 14000 | Reliable     |
| P4    | Multi Gym          | 34000 | Coscore      |
| P5    | Massage chair      |  5500 | Regrosene    |
| P6    | Belly Vibrator Belt |  6500 | Ambaway      |
| P7    | Vibro Exerciser    | 28000 | Aone         |
+-------+--------------------+-------+--------------+
7 rows in set (0.00 sec)
```

Query 5:

To add a new field Quantity in table.

```
mysql> alter table FITNESS
    -> add QTY int default(1);
Query OK, 7 rows affected (0.07 sec)
Records: 7  Duplicates: 0  Warnings: 0

mysql> select * from FITNESS;
+-------+--------------------+-------+--------------+------+
| PCODE | PNAME              | PRICE | MANUFACTURER | QTY  |
+-------+--------------------+-------+--------------+------+
| P1    | Threadmill         | 21000 | Coscore      |    1 |
| P2    | Bike               | 20000 | Aone         |    1 |
| P3    | Cross Trainer      | 14000 | Reliable     |    1 |
| P4    | Multi Gym          | 34000 | Coscore      |    1 |
| P5    | Massage chair      |  5500 | Regrosene    |    1 |
| P6    | Belly Vibrator Belt |  6500 | Ambaway      |    1 |
| P7    | Vibro Exerciser    | 28000 | Aone         |    1 |
+-------+--------------------+-------+--------------+------+
7 rows in set (0.00 sec)
```