Set : 1

1>

```
create table Supplier(

id varchar(5)  not null check (substr(id,1,1)="P"),

sname varchar(255)  not null,

address varchar(255)  not null,

phone varchar(10) not null UNIQUE,

country varchar(50) not NULL,

 PRIMARY KEY(id)

);


 create table products(

 pid  varchar(5) not null,

  pname varchar(255)  not null,

 qty int not null check (qty<500),

 brand varchar(255) not null,

 category varchar(60) not null check (category="Grocery" or category = "Electronics" or category =
"Books" or category = "Lifestyle"),

 PRIMARY key(pid));


 create TABLE price(

  id varchar(5)  not null check (substr(id,1,1)="P"),

  pid  varchar(5) not null,

  cost int not null check (cost>=100 and cost<=250000),

  FOREIGN key (id) REFERENCES supplier(id),

 FOREIGN key (pid) REFERENCES products(pid));
```

 2>

ALTER table price add vat int not null check (vat<=5);

3>

insert into Supplier VALUES ("P1000","Kulvir","Syndicate Colony","7541097627","India");

insert into products values ("prod1","hello",200,"Nestle","Books");

insert into price values ("P1000","prod1",300,2);

```
mysql> select * from products;
+--------+--------+------+-----------+-------------+
| pid    | pname  | qty  | brand     | category    |
+--------+--------+------+-----------+-------------+
| prod1  | hello  | 200  | Nestle    | Books       |
| prod2  | world  | 400  | Britannia | Electronics |
| prod3  | moon   | 355  | Premship  | Grocery     |
+--------+--------+------+-----------+-------------+
3 rows in set (0.00 sec)
```

```
mysql> select * from price;
+--------+--------+------+------+
| id     | pid    | cost | vat  |
+--------+--------+------+------+
| P1000  | prod1  | 300  | 2    |
| P2000  | prod2  | 988  | 1    |
| P3000  | prod3  | 400  | 4    |
+--------+--------+------+------+
3 rows in set (0.00 sec)
```

```
mysql> select* from supplier;
+--------+-----------+------------------+------------+----------+
| id     | sname     | address          | phone      | country  |
+--------+-----------+------------------+------------+----------+
| P1000  | Kulvir    | Syndicate Colony | 7541097627 | India    |
| P2000  | Cristiano | Lisbon Area      | 9234611791 | Portugal |
| P3000  | Sarry     | Tottenham Colony | 9934570227 | England  |
+--------+-----------+------------------+------------+----------+
3 rows in set (0.00 sec)
```

4>

i

select pid from products where category="Books" or category = "Electronics"

 union

 select pname from products where category="Books" or category="Electronics";

```
mysql> select pid from products where category="Books" or category = "Electronics"
    -> union
    -> select pname from products where category="Books" or category="Electronics";
+-------+
| pid   |
+-------+
| prod1 |
| prod2 |
| hello |
| world |
+-------+
4 rows in set (0.01 sec)
```

iii

select products.pname from price inner join products on products.pid=price.pid where cost>500;

```
mysql> select products.pname from price inner join products on products.pid=price.pid where cost>500;
+-------+
| pname |
+-------+
| world |
+-------+
1 row in set (0.00 sec)
```

Iv

select qty from products inner join supplier on (substr(supplier.sname,1,1)="S") where brand="Nestle" or brand="Britannia";

```
mysql> select qty from products inner join supplier on (substr(supplier.sname,1,1)="S") where brand="Nestle" or brand="Britannia";
Empty set (0.00 sec)
```