SQL Queries
Create following tables with suitable constraints. Insert data and solve the following queries:
CUSTOMERS(CNo, Cname, Ccity, CMobile)
ITEMS(INo, Iname, Itype, Iprice, Icount)
PURCHASE(PNo, Pdate, Pquantity, Cno, INo)
1. List all stationary items with price between 400/- to 1000/-
2. Change the mobile number of customer “Gopal”
3. Display the item with maximum price
4. Display all purchases sorted from the most recent to the oldest
5. Count the number of customers in every city
6. Display all purchased quantity of Customer Maya
7. Create view which shows Iname, Price and Count of all stationary items in descending order of price.

```
-- Create tables with constraints
CREATE TABLE CUSTOMERS (
    CNo INT PRIMARY KEY,
    Cname VARCHAR(255),
    Ccity VARCHAR(255),
    CMobile VARCHAR(20)
);

CREATE TABLE ITEMS (
    INo INT PRIMARY KEY,
    Iname VARCHAR(255),
    Itype VARCHAR(255),
    Iprice DECIMAL(15, 2),
    Icount INT
);

CREATE TABLE PURCHASE (
    PNo INT PRIMARY KEY,
    Pdate DATE,
    Pquantity INT,
    Cno INT,
    INo INT,
    FOREIGN KEY (Cno) REFERENCES CUSTOMERS(CNo),
    FOREIGN KEY (INo) REFERENCES ITEMS(INo)
);

-- Insert data into tables
-- Add data as needed

-- Queries
-- 1. List all stationary items with a price between 400/- to 1000/-
SELECT * FROM ITEMS WHERE Itype = 'Stationary' AND Iprice BETWEEN 400 AND 1000;

-- 2. Change the mobile number of customer “Gopal”
UPDATE CUSTOMERS SET CMobile = '<new_mobile_number>' WHERE Cname = 'Gopal';

-- 3. Display the item with the maximum price
SELECT * FROM ITEMS WHERE Iprice = (SELECT MAX(Iprice) FROM ITEMS);
```

```sql
-- 4. Display all purchases sorted from the most recent to the oldest
SELECT * FROM PURCHASE ORDER BY Pdate DESC;

-- 5. Count the number of customers in every city
SELECT Ccity, COUNT(*) AS customer_count FROM CUSTOMERS GROUP BY Ccity;

-- 6. Display all purchased quantity of Customer Maya
SELECT P.Pquantity, I.Iname
FROM PURCHASE P
JOIN CUSTOMERS C ON P.Cno = C.CNo
JOIN ITEMS I ON P.INo = I.INo
WHERE C.Cname = 'Maya';

-- 7. Create a view that shows Iname, Price, and Count of all stationary items
-- in descending order of price.
CREATE VIEW StationaryView AS
SELECT Iname, Iprice, Icount
FROM ITEMS
WHERE Itype = 'Stationary'
ORDER BY Iprice DESC;
```