DBMS MINI PROJECT

RATION CARD MANAGEMENT SYSTEM

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SECTION: G

Description and Scope

Today, if a person goes to ration shop for buying anything he has to wait in queue till his chance comes, and ration shop person starts investigating about his details manually, which is very time consuming.

In present system there are many draw backs. For example

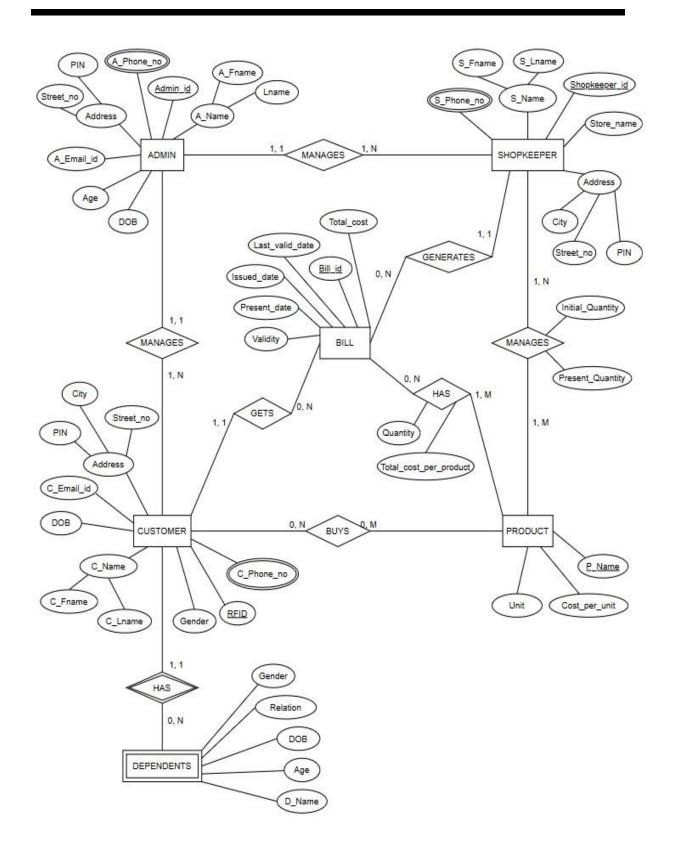
- Distributor undergoes illegal activities and fake transactions because of this reason end users are under loss and won't get their proper sock
- Government doesn't know how many users are there in particular city or district.
- All process done by manually using paper and this data can be lost in some accident like fire etc.
- Fast report generation is not possible.

ABOUT THIS PROJECT:

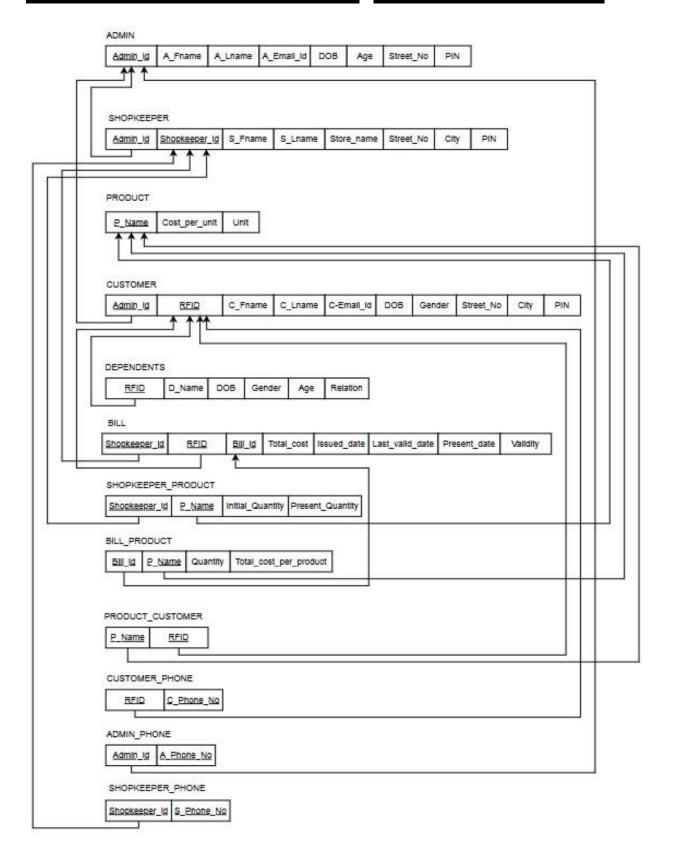
This "RATION CARS MANAGEMENT SYSTEM" is an efficient system to tackle the above problems. It has an interface for maintaining the database online. It provides services like rates of materials which is fixed by the state government and also provides the details of shopkeeper, customer and customer's past history about buying products and also the dependents of the customer.

It maintains all the details of distributors and his transaction, which will prevent the distributor from doing illegal activities. And government can easily access the whole data about customer and shopkeeper and any other data. Risk of losing data is less because of online data maintenance. And generation of report regarding any data is easy here.

ER - DIAGRAM



RELATIONAL SCHEMA



DDL Statements – **Building the database**

```
CREATE TABLE ADMIN(
    Admin id VARCHAR(10),
    A Fname VARCHAR(20),
    A Lname VARCHAR(20),
    A_Email_id VARCHAR(50),
    DOB DATE,
    Age INT(3),
    Street_no VARCHAR(40),
    PIN INT(6),
    PRIMARY KEY (Admin_id)
);
CREATE TABLE SHOPKEEPER(
    Shopkeeper_id VARCHAR(10),
    S_Fname VARCHAR(20),
    S Lname VARCHAR(20),
    Store name VARCHAR(20),
    Street_no VARCHAR(40),
    City VARCHAR(20),
    PIN INT(6),
    Admin id VARCHAR(10),
    PRIMARY KEY (Shopkeeper_id),
    FOREIGN KEY (Admin id) REFERENCES ADMIN (Admin id)
);
CREATE TABLE PRODUCT(
    P Name VARCHAR(20),
    Cost_per_unit float(5, 2),
    Unit VARCHAR(20),
    PRIMARY KEY (P Name)
);
CREATE TABLE CUSTOMER(
    RFID BIGINT(20),
    C_Fname VARCHAR(20),
    C Lname VARCHAR(20),
    C Email id VARCHAR(50),
    DOB DATE,
    Gender VARCHAR(10),
    Street no VARCHAR(40),
    City VARCHAR(20),
    PIN INT(6),
    Admin id VARCHAR(10),
    PRIMARY KEY (RFID),
    FOREIGN KEY (Admin id) REFERENCES ADMIN (Admin id)
```

```
CREATE TABLE DEPENDENT(
    RFID BIGINT(10),
    D Name VARCHAR(20),
    DOB DATE,
    Gender VARCHAR(10),
   Age INT(3),
    Relation VARCHAR(20),
    FOREIGN KEY (RFID) REFERENCES CUSTOMER (RFID)
    ON DELETE CASCADE
);
CREATE TABLE BILL(
    Bill id VARCHAR(10),
    Total cost float(5, 2),
    Issued date DATE,
    Last valid date DATE,
    Present date DATE,
   Validity VARCHAR(20),
    Shopkeeper_id VARCHAR(10),
   RFID BIGINT(10),
    PRIMARY KEY (Bill_id),
    FOREIGN KEY (Shopkeeper id) REFERENCES SHOPKEEPER
(Shopkeeper id),
    FOREIGN KEY (RFID) REFERENCES CUSTOMER (RFID)
    ON DELETE CASCADE
);
CREATE TABLE SHOPKEEPER PRODUCT(
    Shopkeeper id VARCHAR(10),
    P Name VARCHAR(20),
    Initial Quantity float(5, 2),
   Present_Quantity float(5, 2),
    PRIMARY KEY (Shopkeeper id, P Name),
    FOREIGN KEY (Shopkeeper_id) REFERENCES SHOPKEEPER
(Shopkeeper id),
    FOREIGN KEY (P_Name) REFERENCES PRODUCT (P_Name)
    ON DELETE CASCADE
);
CREATE TABLE BILL PRODUCT(
    Bill id VARCHAR(10),
    P Name VARCHAR(20),
    Quantity float(5, 2),
    Total_cost_per_product float(5, 2),
   PRIMARY KEY (Bill_id, P_Name),
    FOREIGN KEY (Bill id) REFERENCES BILL (Bill id),
    FOREIGN KEY (P_Name) REFERENCES PRODUCT (P Name)
    ON DELETE CASCADE);
```

```
CREATE TABLE PRODUCT CUSTOMER(
        P Name VARCHAR(10),
        RFID BIGINT(20),
        PRIMARY KEY (P_Name, RFID),
        FOREIGN KEY (P Name) REFERENCES PRODUCT (P Name),
        FOREIGN KEY (RFID) REFERENCES CUSTOMER (RFID)
        ON DELETE CASCADE
);
CREATE TABLE CUSTOMER PHONE(
        RFID BIGINT(20),
        Phone no BIGINT(10),
        PRIMARY KEY (RFID, Phone_no),
        FOREIGN KEY (RFID) REFERENCES CUSTOMER (RFID)
        ON DELETE CASCADE
);
CREATE TABLE ADMIN PHONE(
        Admin id VARCHAR(10),
        Phone no BIGINT(10),
        PRIMARY KEY (Admin_id, Phone_no),
        FOREIGN KEY (Admin id) REFERENCES ADMIN (Admin id)
        ON DELETE CASCADE
);
CREATE TABLE SHOPKEEPER PHONE(
        Shopkeeper_id VARCHAR(10),
        Phone_no BIGINT(10),
        PRIMARY KEY (Shopkeeper id, Phone no),
        FOREIGN KEY (Shopkeeper_id) REFERENCES SHOPKEEPER
(Shopkeeper_id)
        ON DELETE CASCADE
CREATE TABLE ADMIN( Admin_id VARCHAR(10), A_Fname VARCHAR(20), A_Lname VARCHAR(20), A_Email_id VARCHAR(20), DOB DATE, Age INT(3), Street_No VARCHAR(20), PIN INT(6), PRIMARY KEY (Admin_id));
[Edit inline][Edit][Create PHP code]
 MySQL returned an empty result set (i.e. zero rows). (Query took 0.0087 seconds.)
CREATE TABLE SHOPKEEPER( Shopkeeper_id VARCHAR(10), S_Fname VARCHAR(20), S_Lname VARCHAR(20), Store_name VARCHAR(20), Street_No VARCHAR(20), City VARCHAR(20), PIN INT(6), Admin_id VARCHAR(10), PRIMARY KEY (Shopkeeper_id), FOREIGN KEY (Admin_id) REFERENCES ADMIN (Admin_id) );
[ Edit inline ] [ Edit ] [ Create PHP code ]
 MySQL returned an empty result set (i.e. zero rows). (Query took 0.0105 seconds.)
 CREATE TABLE PRODUCT( P_Name VARCHAR(20), Cost_per_unit INT(5), Unit VARCHAR(20), PRIMARY KEY (P_Name) );
[Edit inline][Edit][Create PHP code]
CREATE TABLE CUSTOMER( RFID BIGINT(20), C_Fname VARCHAR(20), C_Lname VARCHAR(20), C_Email_id VARCHAR(20), DOB DATE, Gender VARCHAR(10), Street_No VARCHAR(20), City VARCHAR(20), PIN INT(6), Admin_id VARCHAR(10), PRIMARY KEY (RFID), FOREIGN KEY (Admin_id) REFERENCES ADMIN (Admin_id) );
[Edit inline][Edit][Create PHP code]
 MvSQI, returned an empty result set (i.e. zero rows). (Query took 0.0077 seconds.)
 CREATE TABLE DEPENDENTS( RFID BIGINT(10), D_Name VARCHAR(20), DOB DATE, Gender VARCHAR(10), Age INT(3), Relation VARCHAR(20), FOREIGN KEY (RFID) REFERENCES CUSTOMER (RFID) );
[Edit inline][Edit][Create PHP code]
CREATE TABLE BILL( Bill_id VARCHAR(10), Total_cost INT(5), Issued_date DATE, Last_valid_date DATE, Present_date DATE, Validity VARCHAR(20), Shopkeeper_id VARCHAR(10), RFID BIGINT(10), PRIMARY KEY (Bill_id), FOREIGN KEY (Shopkeeper_id) REFERENCES SHOPKEEPER (Shopkeeper_id), FOREIGN KEY (RFID) REFERENCES CUSTOMER (RFID));
[ Edit inline ] [ Edit ] [ Create PHP code ]
```

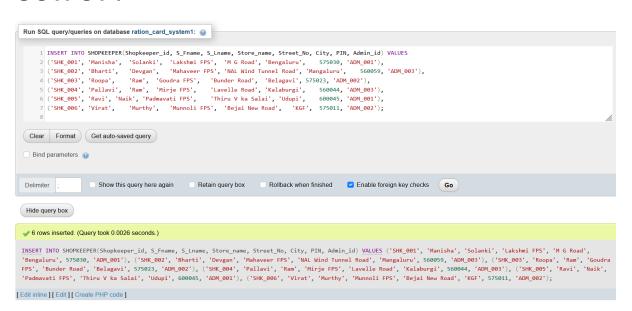
Populating the Database

Using INSERT command:

Query:

```
INSERT INTO SHOPKEEPER(Shopkeeper_id, S_Fname, S_Lname, Store_name,
Street_No, City, PIN, Admin_id) VALUES
('SHK_001', 'Manisha', 'Solanki', 'Lakshmi FPS', 'M G Road',
'Bengaluru', 575030, 'ADM_001'),
('SHK_002', 'Bharti', 'Devgan', 'Mahaveer FPS', 'NAL Wind Tunnel
Road', 'Mangaluru', 560059, 'ADM_003'),
('SHK_003', 'Roopa', 'Ram', 'Goudra FPS', 'Bunder
Road', 'Belagavi', 575023, 'ADM_002'),
('SHK_004', 'Pallavi', 'Ram', 'Mirje FPS', 'Lavelle Road',
'Kalaburgi', 560044, 'ADM_003'),
('SHK_005', 'Ravi', 'Naik', 'Padmavati FPS', 'Thiru V ka Salai',
'Udupi', 600045, 'ADM_001'),
('SHK_006', 'Virat', 'Murthy', 'Munnoli FPS', 'Bejai New
Road', 'KGF', 575011, 'ADM_002');
```

OUTPUT:



Using IMPORT:

OUTPUT:

```
√ 1 row inserted. (Query took 0.0019 seconds.)

 INSERT INTO `customer` VALUES ('3453484810', 'Ajit', 'Ullal', 'ullalajit@gmail.com', '1971-01-01', 'M', '10 Janpath', 'Bengaluru', '560001', 'ADM_001');
[ Edit inline ] [ Edit ] [ Create PHP code ]

√ 1 row inserted. (Query took 0.0014 seconds.)

 INSERT INTO `customer` VALUES ('6815974590', 'Muhammed ', 'Ali', 'alimihammed@gmail.com', '2000-10-09', 'M', '10 Downing', 'Mangaluru', '560003', 'ADM_002');
[ Edit inline ] [ Edit ] [ Create PHP code ]
 ▲ Warning: #1265 Data truncated for column 'C_Email_id' at row 1
 INSERT INTO `customer` VALUES ('5483807477', 'Sai Deepak', 'Reddy', 'reddysai@gmail.com', '1996-12-12', 'F', '14 Kailsh Marg', 'Belagavi', '600001', 'ADM_002');
[ Edit inline ] [ Edit ] [ Create PHP code ]

√ 1 row inserted. (Query took 0.0011 seconds.)
 INSERT INTO `customer` VALUES ('9187065308', 'Rudra', 'Agarwal', 'agarwalrudra@gmail.com', '1996-12-13', 'F', '5 Lohia Garden', 'Bengaluru', '600042', 'ADM_001');
[ Edit inline ] [ Edit ] [ Create PHP code ]
  ▲ Warning: #1265 Data truncated for column 'C_Email_id' at row 1
Console

1 row inserted. (Query took 0.0017 seconds.)
 INSERT INTO `customer` VALUES ('1700494946', 'Rahul', 'Khanna', 'khannarahul@gmail.com', '1997-12-14', 'M', '1 Pink Street', 'Belagavi', '600067', 'ADM_001');
[Edit inline][Edit][Create PHP code]
  ▲ Warning: #1265 Data truncated for column 'C_Email_id' at row 1

√ 1 row inserted. (Query took 0.0015 seconds.)

 INSERT INTO `customer` VALUES ('4478160351', 'Nirmala', 'Seturaman', 'seturamanirmala@gmail.com', '1998-12-15', 'F', '3 Blue Avenue', 'Mangaluru', '560105', 'ADM_002');
[ Edit inline ] [ Edit ] [ Create PHP code ]
  ▲ Warning: #1265 Data truncated for column 'C_Email_id' at row 1

√ 1 row inserted. (Query took 0.0009 seconds.)

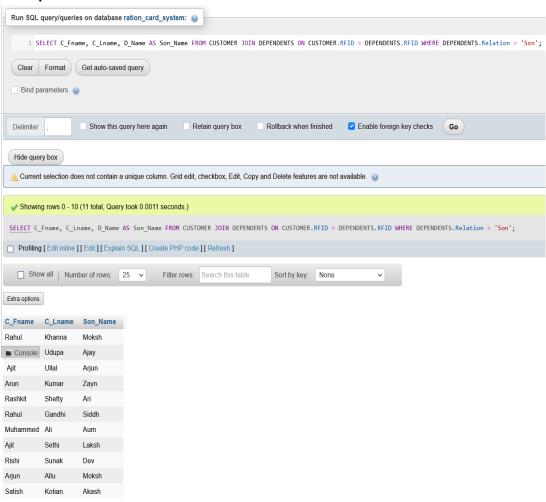
 INSERT INTO `customer` VALUES ('6977990400', 'Smriti', 'Irani', 'iranismriti@gmail.com', '1999-12-16', 'F', '4 Banyan Avenie', 'Mangaluru', '575014', 'ADM_003');
[ Edit inline ] [ Edit ] [ Create PHP code ]
  ▲ Warning: #1265 Data truncated for column 'C_Email_id' at row 1
```

JOIN Queries

1. Retrieve Customer name and son name iff customer has a son.

Query:

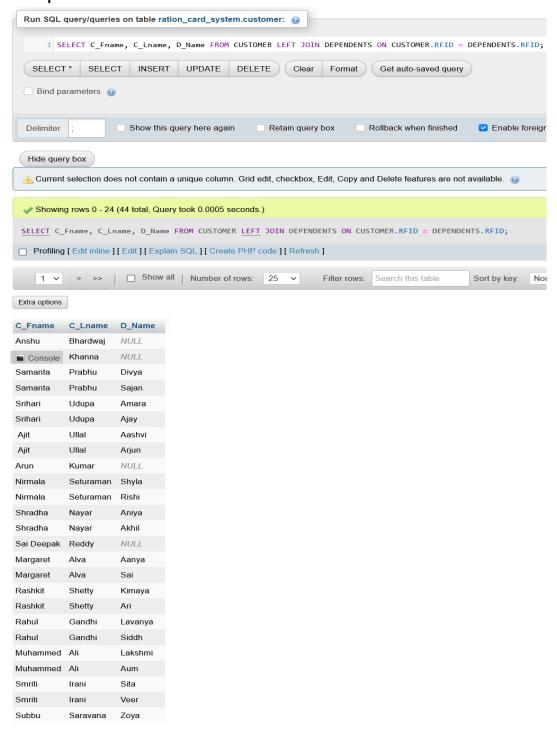
SELECT C_Fname, C_Lname, D_Name AS Son_Name FROM CUSTOMER JOIN DEPENDENTS ON CUSTOMER.RFID = DEPENDENTS.RFID WHERE DEPENDENTS.Relation = 'Son';



2. Retrieve Customer name and dependent name if customer has a dependent.

Query:

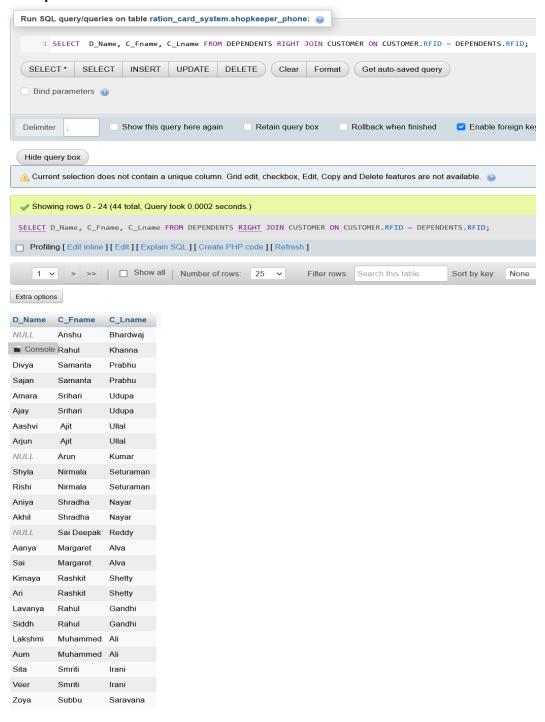
SELECT C_Fname, C_Lname, D_Name FROM CUSTOMER LEFT JOIN DEPENDENTS ON CUSTOMER.RFID = DEPENDENTS.RFID;



3. Retrieve Dependent and Customer name if customer has a dependent.

Query:

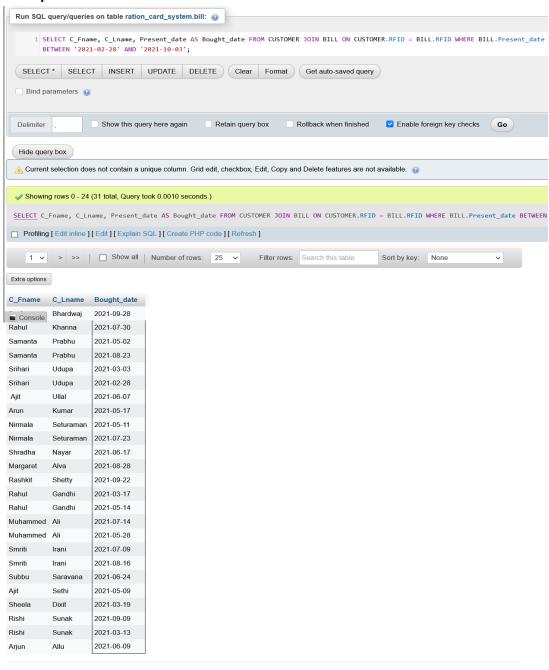
SELECT D_Name, C_Fname, C_Lname FROM DEPENDENTS RIGHT JOIN CUSTOMER
ON CUSTOMER.RFID = DEPENDENTS.RFID;



4. Retrieve customer name and product bought date for those customers who bought the products between 28th February 2021 and 3rd October 2021.

Query:

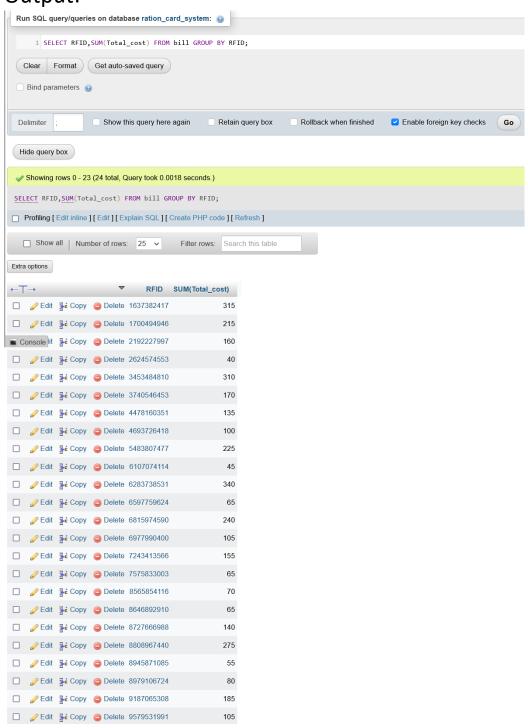
SELECT C_Fname, C_Lname, Present_date AS Bought_date FROM CUSTOMER JOIN BILL ON CUSTOMER.RFID = BILL.RFID WHERE BILL.Present_date BETWEEN '2021-02-28' AND '2021-10-03';



Aggregate Functions

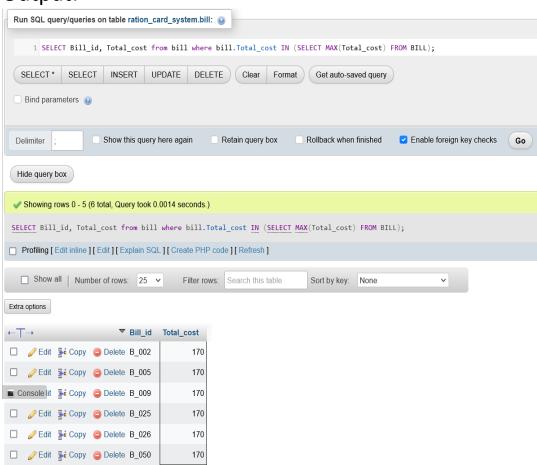
1. Retrieve the total amount spent by each customer. Query:

SELECT SUM(Total_cost) FROM bill GROUP BY RFID;



Retrieve the bill id and total cost for bill which have the maximum value for total cost.Query :

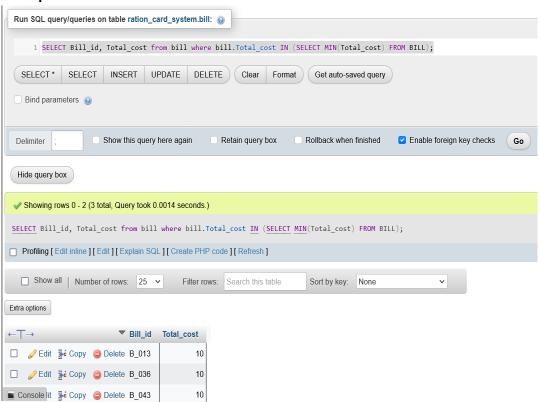
SELECT Bill_id, Total_cost from bill where bill.Total_cost IN (SELECT MAX(Total cost) FROM BILL);



3. Retrieve the bill id and total cost for bill which have the minimum value for total cost.

Query:

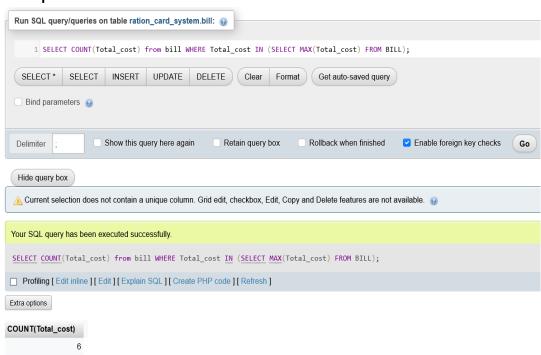
SELECT Bill_id, Total_cost from bill where bill.Total_cost IN
(SELECT MIN(Total cost) FROM BILL);



4. Retrieve the number of bills which have the total cost equal to maximum value for total cost.

Query:

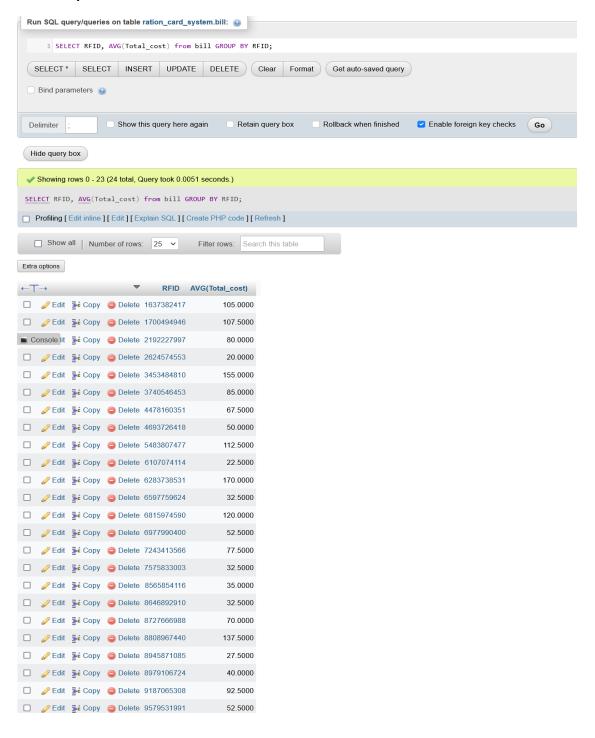
SELECT COUNT(Total_cost) from bill WHERE Total_cost IN
(SELECT MAX(Total cost) FROM BILL);



5. Retrieve the RFID of the customer and average cost spent by them.

Query:

SELECT RFID, AVG(Total_cost) from bill GROUP BY RFID;

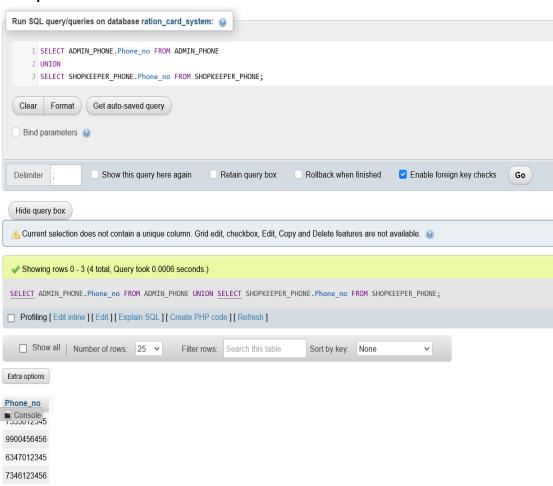


SET Operations

1. Retrieve the phone numbers that are either of admin or shopkeeper table.

Query:

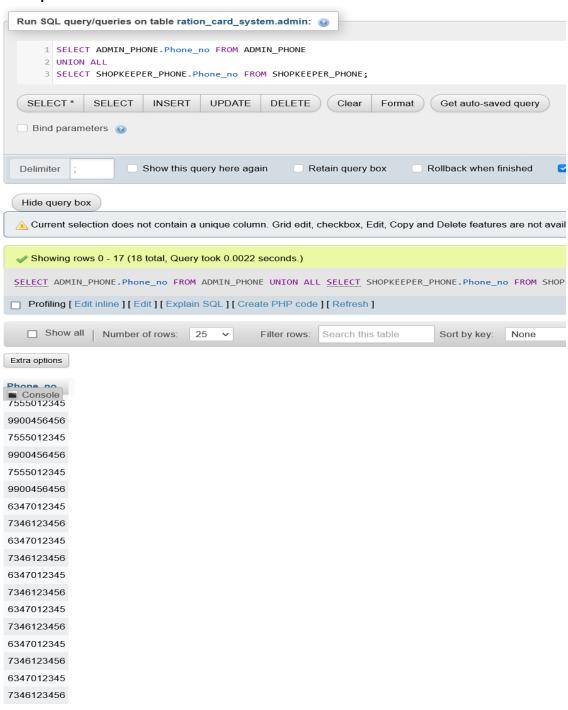
```
SELECT ADMIN_PHONE.Phone_no FROM ADMIN_PHONE
UNION
SELECT SHOPKEEPER_PHONE.Phone_no FROM SHOPKEEPER_PHONE;
```



2. Retrieve all the phone numbers that are in admin or shopkeeper table.

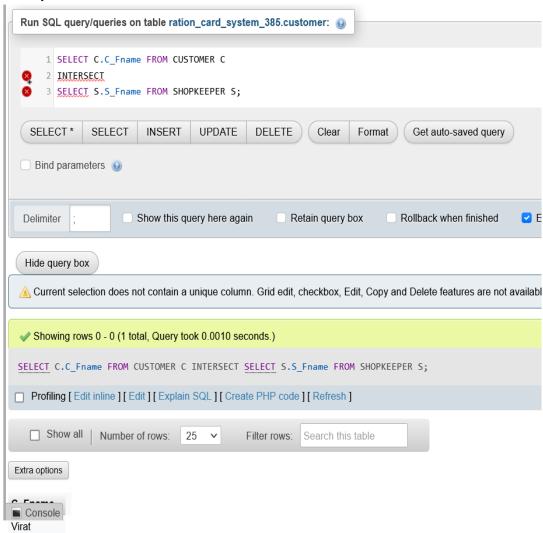
Query:

```
SELECT ADMIN_PHONE.Phone_no FROM ADMIN_PHONE
UNION ALL
SELECT SHOPKEEPER PHONE.Phone no FROM SHOPKEEPER PHONE;
```



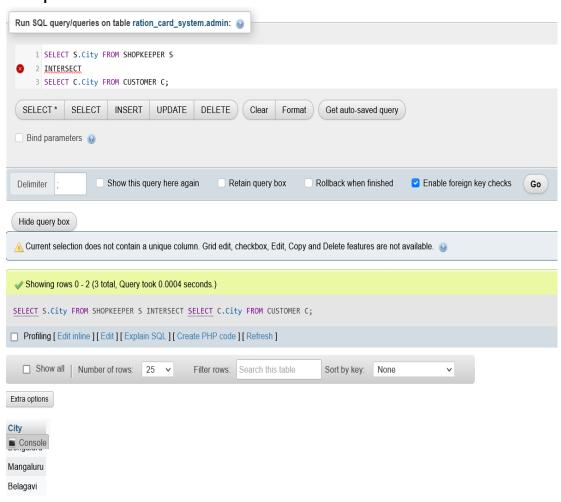
Retrieve the first name which are present in both customer and shopkeeper table.Query :

```
SELECT C.C_Fname FROM CUSTOMER C
INTERSECT
SELECT S.S_Fname FROM SHOPKEEPER S;
```



4. Retrieve the city names which are present in both customer and shopkeeper table.
Query:

```
SELECT S.City FROM SHOPKEEPER S
INTERSECT
SELECT C.City FROM CUSTOMER C;
```



Functions and Procedures

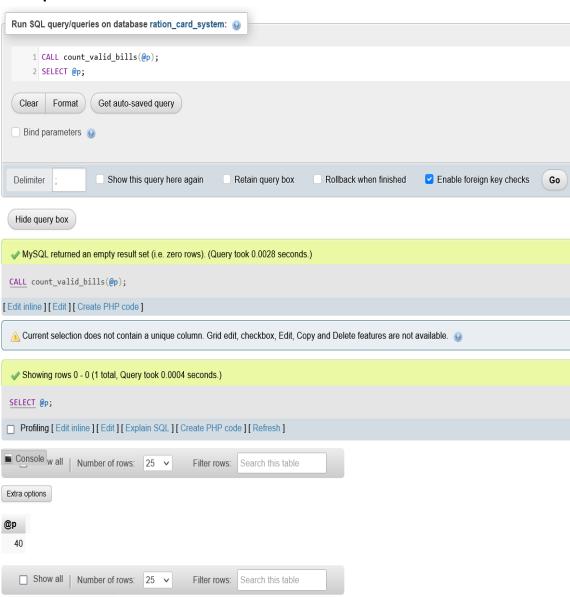
1. Create a function to check the eligibility of a particular are for ration card.

Query:

```
DELIMITER $$
create function eligible(Age int)
   RETURNS varchar(20)
   DETERMINISTIC
   BEGIN
   IF Age > 10 THEN
   RETURN ("yes");
   ELSE
   RETURN ("No");
   END IF;
   end$$
DELIMITER;
```

2. Create a procedure to count valid bills. Query:

```
DELIMITER $$
CREATE PROCEDURE count_valid_bills(OUT p1 INT)
    BEGIN
    select COUNT(Bill_id)INTO p1 from BILL WHERE Validity = 'Valid';
    END $$
DELIMITER;
```



3. Create a procedure to retrieve given number of customers (Number of customer to be retrieved should be given as input).

Query:

```
DELIMITER $$
CREATE PROCEDURE get_customer_limit(IN var1 INT)
    BEGIN
    select * from CUSTOMER limit var1;
    select count(RFID) as total_customer from CUSTOMER;
    END $$
DELIMITER;
```

```
mysql> CALL get_customer_limit(10);
                          C_Lname
                                     C_Email_id
                                                                  DOB
                                                                              | Gender | Street_no
                                                                                                            City
                                                                                                                        PIN
                                                                                                                                 Admin_id
  RFID
              C_Fname
  1637382417 | Anshu
                           Bhardwai
                                       bhardwajanshu@gmail.com
                                                                   1978-04-14 | F
                                                                                        KSR Road
                                                                                                             Hubbali
                                                                                                                         575001
                                                                                                                                 ADM_003
  1700494946 | Rahul
                                                                                                                                  ADM_001
                           Khanna
                                       khannarahul@gmail.com
                                                                   1997-12-14 | M
                                                                                        1 Pink Street
                                                                                                             Belagavi
                                                                                                                         600067
                                                                                         8 Clone Colony
                                                                                                                         600042
  2192227997 | Samanta
                           Prabhu
                                       prabhusamanta@gmail.com
                                                                   1968-04-14 | F
                                                                                                             Belagavi
                                                                                                                                 ADM_001
                                                                                                             Hubbali
  2624574553 | Srihari
                                       udupasrihari@gmail.com
                                                                   1980-04-14 | M
                                                                                         Suranjan Das Road
                                                                                                                         560015
                                                                                                                                 ADM_001
                           Udupa
  3453484810 | Ajit
                           Ullal
                                       ullalajit@gmail.com
                                                                   1971-01-01 | M
                                                                                        10 Janpath
                                                                                                             Bengaluru | 560001
                                                                                                                                 ADM_001
  3740546453 | Arun
                                       kumararun@gmail.com
                                                                   1977-04-14 | M
                                                                                        Mint Street
                                                                                                             Bengaluru | 600046
                                                                                                                                 ADM_003
                           Kumar
  4478160351 | Nirmala
                           Seturaman |
                                       seturamannirmala@gmail.com | 1998-12-15 | F
                                                                                        3 Blue Avenue
                                                                                                             Mangaluru | 560105
                                                                                                                                 ADM 002
  4693726418 | Shradha
                                       nayarshradha@gmail.com
                                                                   1982-04-08 | F
                                                                                        M G Road Bangalore | Belagavi
                                                                                                                         560006
                                                                                                                                 ADM_003
                           Nayar
  5483807477 | Sai Deepak |
                           Reddy
                                       reddysai@gmail.com
                                                                   1996-12-12 | F
                                                                                        14 Kailsh Marg
                                                                                                             Belagavi
                                                                                                                         600001
                                                                                                                                 ADM_002
                                       alvamargaret@gmail.com
                                                                                        New BEL Road
                                                                                                             Hubbali
                                                                                                                         560008 | ADM 003
  6107074114 | Margaret
                           Alva
                                                                   1976-04-14 | F
10 rows in set (0.00 sec)
 total_customer
             24 |
 row in set (0.03 sec)
Query OK, 0 rows affected (0.04 sec)
```

4. Create a procedure to retrieve all the customers managed by given admin (Admin id should be given as input).

Query:

```
DELIMITER $$
CREATE PROCEDURE get_customer_admin(in Adm varchar(10))
    BEGIN
    select C_Fname, C_Lname, RFID
    from CUSTOMER WHERE CUSTOMER.Admin_id = Adm;
end $$
DELIMITER;
```

```
mysql> CALL get_customer_admin('ADM_001');
  C_Fname
            | C_Lname |
                       RFID
  Rahul
            Khanna
                       1700494946
             Prabhu
  Samanta
                     | 2192227997
 Srihari
            Udupa
                       2624574553
  Ajit
             Ullal
                     3453484810
  Sheela
             Dixit
                     8565854116
            Sampat
  Suma
                     l 8808967440
            | Agarwal | 9187065308
  Rudra
 Vedavalli | Srinath | 9579531991
8 rows in set (0.00 sec)
Query OK, 0 rows affected (0.01 sec)
mysql>
```

Triggers and Cursors

1. Create a trigger to check and update the validity of newly inserting bills.

Query:

```
DELIMITER $$
CREATE TRIGGER buying_date
BEFORE INSERT
ON BILL
FOR EACH ROW
BEGIN
    IF new.Present_date > new.Last_valid_date THEN SET new.Validity
= 'Invalid';
    END IF;
END$$
DELIMITER;
INSERT INTO BILL VALUES('B_049', 160, '2022-11-114', '2022-11-17', '2022-11-18', 'Valid', 'SHK_003', 3453484810);
```

```
75 | 2021-01-28 | 2021-01-31
                                                      2021-01-28
                                                                    Valid
                                                                               SHK_004
                                                                                              4693726418
 B_047
 B_048
                                                                               SHK_004
                  25 | 2021-06-14 | 2021-06-17
                                                      2021-06-17
                                                                    Valid
                                                                                              4693726418
                  160 | 2022-11-14 | 2022-11-17
 B_049
                                                      2022-11-18
                                                                   | Invalid | SHK_003
                                                                                              3453484810
49 rows in set (0.002 sec)
```

2. Create the trigger to show error when age of the newly inserting dependent is less than 10.

Query:

```
DELIMITER $$
CREATE TRIGGER dependent_age
BEFORE INSERT
ON DEPENDENT
FOR EACH ROW
BEGIN
    DECLARE error_msg VARCHAR(300);
    SET error_msg = ("Age of the dependent should be 10 or more");
    If new.Age < 10 THEN
        SIGNAL SQLSTATE '45000'
        SET MESSAGE_TEXT = error_msg;
        END IF;
END $$
DELIMITER;
INSERT INTO DEPENDENT VALUES(3453484810, 'Aniket', '2000-11-3', 'M', '9', 'Son');</pre>
```

```
MariaDB [ration_card_system]> INSERT INTO DEPENDENTS VALUES(3453484810, 'Aniket', '2000-11-3', 'M', '9', 'Son');
ERROR 1644 (45000): Age of the dependent should be 10 or more
MariaDB [ration_card_system]>
```

3. Use cursor to add valid bills to new table. Query:

```
CREATE TABLE VALID BILLS(
    Bill id VARCHAR(10),
    Total cost INT(5),
    Issued date DATE,
    Last valid date DATE,
    Present date DATE,
    Validity VARCHAR(20),
    Shopkeeper id VARCHAR(10),
    RFID BIGINT(10)
);
DELIMITER $$
CREATE PROCEDURE get_valid_bills()
BEGIN
    DECLARE done int default 0;
    DECLARE b_total_cost INTEGER;
    DECLARE b_RFID bigint;
    DECLARE b bill id, b validity, b shopkeeper id varchar(20);
    DECLARE b_issued_date, b_last_valid_date, b_present_date date;
    DECLARE cur cursor for select * from BILL WHERE BILL.VALIDITY =
'Valid':
    DECLARE continue handler for not found set done = 1;
    OPEN cur;
    label: LOOP
    fetch cur into b bill id, b total cost, b issued date,
b last valid date, b present date, b validity, b shopkeeper id,
b RFID;
    if done = 1 then leave label;
    end if;
    INSERT INTO VALID BILLS VALUES(b bill id, b total cost,
b issued date, b last valid date, b present date, b validity,
b shopkeeper id, b RFID);
    end loop;
    close cur;
end$$
DELIMITER:
```

Output:

MariaDB [ration_card_system]> CALL get_valid_bills; Query OK, 41 rows affected (0.047 sec)

MariaDB [ration_card_system]> select * from valid_bills;

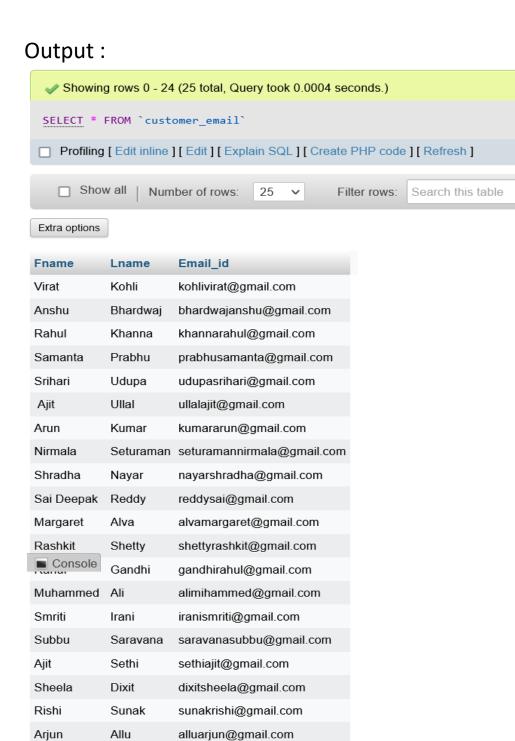
Bill_id	Total_cost	Issued_date	Last_valid_date	Present_date	Validity 	Shopkeeper_id	 RFID +
B_001	140	2021-06-07	2021-06-09	2021-06-07	Valid	SHK_001	3453484810
B_002	170	2021-02-14	2021-02-17	2021-02-16	Valid	SHK_001	3453484810
B_003	105	2021-07-13	2021-07-16	2021-07-14	Valid	SHK_003	6815974590
B_005	170	2021-10-10	2021-10-13	2021-10-10	Valid	SHK_004	5483807477
B_006	55	2021-12-22	2021-12-25	2021-12-24	Valid	SHK_004	5483807477
B_007	70	2021-11-09	2021-11-12	2021-11-10	Valid	SHK_001	9187065308
B_008	115	2021-07-29	2021-08-01	2021-07-29	Valid	SHK_001	9187065308
B_009	170	2021-01-06	2021-01-09	2021-01-09	Valid	SHK_005	1700494946
B_011	100	2021-05-08	2021-05-11	2021-05-11	Valid	SHK_006	4478160351
B_012	35	2021-07-23	2021-07-26	2021-07-23	Valid	SHK_006	4478160351
B_013	10	2021-07-08	2021-07-11	2021-07-09	Valid	SHK_001	6977990400
B_014	95	2021-08-16	2021-08-19	2021-08-16	Valid	SHK_001	6977990400
B_016	35	2021-05-06	2021-05-09	2021-05-09	Valid	SHK_005	7575833003
B_017	65	2021-11-29	2021-12-02	2021-11-30	Valid	SHK_002	8727666988
B_018	75	2021-06-09	2021-06-12	2021-06-09	Valid	SHK_002	8727666988
B_019	30	2021-05-02	2021-05-05	2021-05-02	Valid	SHK_006	2192227997
B_021	40	2021-01-03	2021-01-06	2021-01-03	Valid	SHK_003	8979106724
B_022	40	2021-06-25	2021-06-28	2021-06-28	Valid	SHK_003	8979106724
B_023	30	2021-03-15	2021-03-18	2021-03-17	Valid	SHK_004	6597759624
B_024	35	2021-05-14	2021-05-17	2021-05-14	Valid	SHK_004	6597759624
B_025	170	2021-02-16	2021-02-19	2021-02-19	Valid	SHK_001	6283738531
B_026	170	2021-09-21	2021-09-24	2021-09-22	Valid	SHK_001	6283738531
B_027	25	2021-09-08	2021-09-11	2021-09-09	Valid	SHK_005	8646892910
B_028	40	2021-03-11	2021-03-14	2021-03-13	Valid	SHK_005	8646892910
B_030	75	2021-02-01	2021-02-04	2021-02-01	Valid	SHK_002	9579531991
B_031	55	2021-12-12	2021-12-15	2021-12-12	Valid	SHK_003	7243413566
B_032	100	2021-06-24	2021-06-27	2021-06-24	Valid	SHK_003	7243413566
B_033	40	2021-03-19	2021-03-22	2021-03-19	Valid	SHK_006	8565854116
B_034	30	2021-10-10	2021-10-13	2021-10-11	Valid	SHK_006	8565854116
B_035	35	2021-08-28	2021-08-31	2021-08-28	Valid	SHK_001	6107074114
B_037	30	2021-01-29	2021-02-01	2021-01-29	Valid	SHK_004	3740546453
B_038	140	2021-05-17	2021-05-20	2021-05-17	Valid	SHK_004	3740546453
B_039	70	2021-09-25	2021-09-28	2021-09-28	Valid	SHK_002	1637382417
B_040	75	2021-12-10	2021-12-13	2021-12-10	Valid	SHK_002	1637382417
B_041	115	2021-06-12	2021-06-15	2021-06-14	Valid	SHK_006	8808967440
B_042	160	2021-07-12	2021-07-15	2021-07-12	Valid	SHK_006	8808967440
B_043	10	2021-03-02	2021-03-05	2021-03-03	Valid	SHK_002	2624574553
B_045	25	2021-02-07	2021-02-10	2021-02-09	Valid	SHK_005	8945871085
B_046	30	2021-09-20	2021-09-23	2021-09-23	Valid	SHK_005	8945871085
B_047	75	2021-01-28	2021-01-31	2021-01-28	Valid	SHK_004	4693726418
B_048	25	2021-06-14	2021-06-17	2021-06-17	Valid	SHK_004	4693726418
t							

41 rows in set (0.001 sec)

4. Use cursor to add name and email id of customers to new table.

Query:

```
CREATE TABLE CUSTOMER EMAIL(
    Fname varchar(10),
    Lname varchar(10),
    Email id VARCHAR(50)
);
DELIMITER $$
CREATE PROCEDURE create email list ()
BEGIN
    DECLARE done INTEGER DEFAULT 0;
    DECLARE Fname varchar(10) ;
    DECLARE Lname varchar(10) ;
    DECLARE emailAddress varchar(100) ;
    DECLARE curEmail CURSOR FOR SELECT C_Fname, C_Lname, C_Email_id
FROM CUSTOMER;
    DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;
    OPEN curEmail;
    LABLE: LOOP
    FETCH curEmail INTO Fname, Lname, emailAddress;
    IF done = 1 THEN
    LEAVE LABLE;
    END IF:
    INSERT INTO CUSTOMER_EMAIL VALUES(Fname, Lname, emailAddress);
    END LOOP;
    CLOSE curEmail;
END$$
DELIMITER ;
```



sampatsuma@gmail.com

kotiansatish@gmail.com

agarwalrudra@gmail.com

srinathvedavalli@gmail.com

bedikiran@gmail.com

Suma

Satish

Kiran

Rudra

Vedavalli

Sampat

Kotian

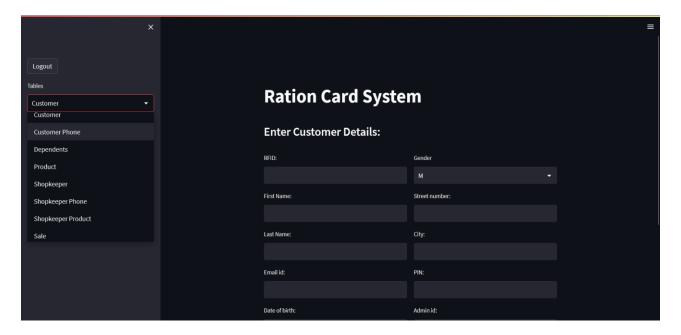
Bedi

Agarwal

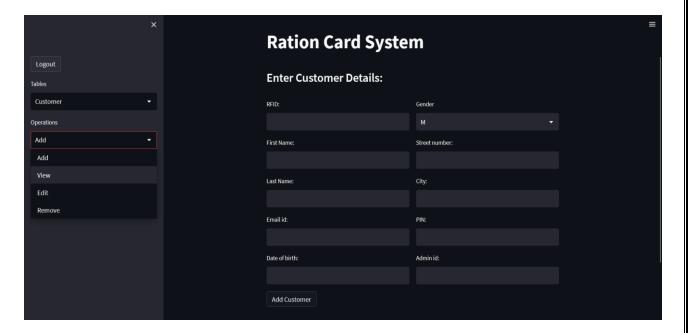
Srinath

FRONT END

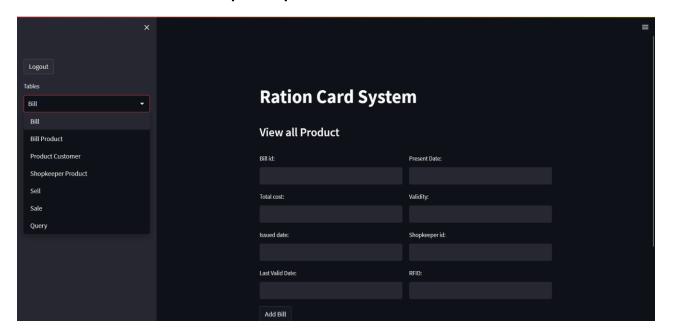
1. Tables that admin have the access.



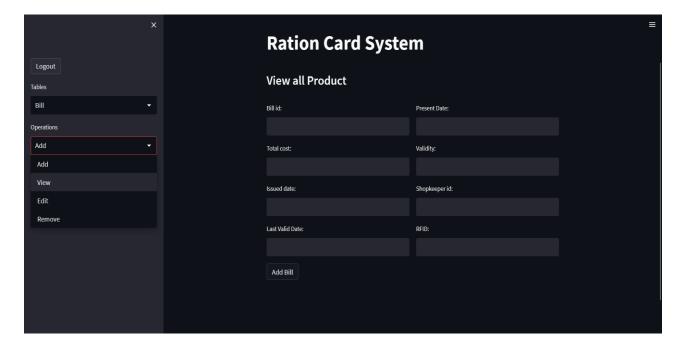
2. Operations that admin can perform on these tables.



3. Tables that shopkeeper have the access.

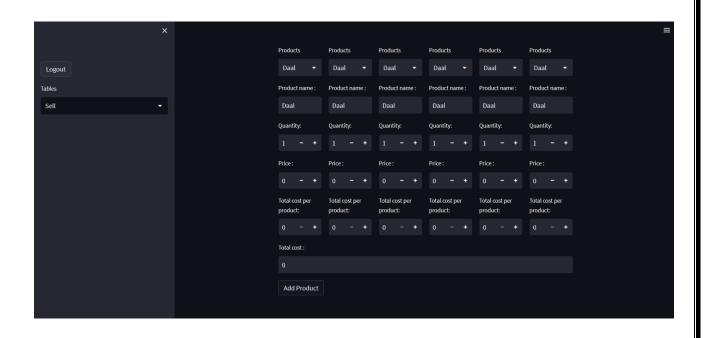


4. Operations that shopkeeper can perform on these tables.



5. Selling products.





6. Pie Chart for Sales between given Dates.

