**DBMS Lab 4 Solutions**

**CREATING TABLES : -**

**1(a)** CREATE TABLE supplier(

SUPP\_ID INT PRIMARY KEY,

SUPP\_NAME varchar(50) NOT NULL,

SUPP\_CITY varchar(50) NOT NULL,

SUPP\_PHONE varchar(50) NOT NULL);

**1(b)** CREATE TABLE customer(

CUS\_ID INT PRIMARY KEY,

CUS\_NAME VARCHAR(20) NOT NULL,

CUS\_PHONE VARCHAR(10) NOT NULL,

CUS\_CITY VARCHAR(30) NOT NULL,

CUS\_GENDER CHAR);

**1(c)** CREATE TABLE category(

CAT\_ID INT PRIMARY KEY,

CAT\_NAME VARCHAR(20) NOT NULL);

**1(d)** CREATE TABLE product(

PRO\_ID INT PRIMARY KEY,

PRO\_NAME VARCHAR(20) NOT NULL DEFAULT “Dummy”,

PRO\_DESC VARCHAR(60),

CAT\_ID INT,

FOREIGN KEY (CAT\_ID) REFERENCES category(CAT\_ID));

**1(e)** CREATE TABLE supplier\_pricing(

PRICING\_ID INT PRIMARY KEY,

PRO\_ID INT,

FOREIGN KEY (PRO\_ID) REFERENCES product(PRO\_ID),

SUPP\_ID INT,

FOREIGN KEY (SUPP\_ID) REFERENCES supplier(SUPP\_ID),

SUPP\_PRICE INT DEFAULT 0);

**1(e)** CREATE TABLE `order`(

ORD\_ID INT PRIMARY KEY,

ORD\_AMOUNT INT NOT NULL,

ORD\_DATE DATE NOT NULL,

CUS\_ID INT,

FOREIGN KEY (CUS\_ID) REFERENCES customer(CUS\_ID),

PRICING\_ID INT,

FOREIGN KEY (PRICING\_ID) REFERENCES supplier\_pricing(PRICING\_ID));

**1(f)** CREATE TABLE rating(

RAT\_ID INT PRIMARY KEY,

ORD\_ID INT,

FOREIGN KEY (ORD\_ID) REFERENCES `order`(ORD\_ID),

RAT\_RATSTARS INT NOT NULL);

**INSERTING DATA :-**

**2(a)** INSERT INTO supplier(SUPP\_ID, SUPP\_NAME, SUPP\_CITY, SUPP\_PHONE) VALUES

(1, ‘Rajesh Retails’, ‘Delhi’, ‘1234567890’),

(2, ‘Appario Ltd.’, ‘Mumbai’, ‘2589631470’),

(3, ‘Knome Products’, ‘Bangalore’, ‘9785462315’),

(4, ‘Bansal Retails’, ‘Kochi’, ‘8975463285’),

(5, ‘Mittal Ltd.’, ‘Lucknow’, ‘7898456532’);

**2(b)** INSERT INTO customer(CUS\_ID, CUS\_NAME, CUS\_PHONE CUS\_CITY, CUS\_GENDER) VALUES

(1, ‘Aakash’, ‘9999999999’, ‘Delhi’, ‘M’),

(2, ‘Aman’, ‘9785463215’, ‘Noida’, ‘M’),

(3, ‘Neha’, ‘9999999999’, ‘Mumbai’, ‘F’),

(4, ‘Megha’, ‘9994562399’, ‘Kolkata’, ‘F’),

(5, ‘Pulkit’, ‘7895999999’, ‘Lucknow’, ‘M’);

**2(c)** INSERT INTO category(CAT\_ID, CAT\_NAME) VALUES

(1, ‘Books’),

(2, ‘Games’),

(3, ‘Groceries’),

(4, ‘Electronics’),

(5, ‘Clothes’);

**2(d)** INSERT INTO product(PRO\_ID, PRO\_NAME, PRO\_DESC, CAT\_ID) VALUES

(1, ‘GTA V’, ‘Windows 7 and above with i5 processor and 8GB RAM’, 2),

(2, ‘T-Shirt’, ‘Size-L with black, blue and white variations’, 5),

(3, ‘ROG Laptop’, ‘Windows 10 with 15-inch screen, i7 processor, 1TB SSD’, 4),

(4, ‘Oats’, ‘Highly nutritious from Nestle’, 3),

(5, ‘Harry Potter’, ‘Best collection of all time by J.K Rowling’, 1),

(6, ‘Milk’, ‘1L toned milk’, 3),

(7, ‘Boat Earphones’, ‘1.5 meter long Dolby Atmos’, 4),

(8, ‘Jeans’, ‘Stretchable denim jeans with various sizes and color’, 5),

(9, ‘Project IGI’, ‘Compatible with Windows 7 and above’, 2),

(10, ‘Hoodie’, ‘Black Gucci for 13 yrs and above’, 5),

(11, ‘Rich Dad Poor Dad’, ‘Written by Robert Kiyosaki’, 1),

(12, ‘Train Your Brain’, ‘By Shireen Stephen’, 1);

**2(e)** INSERT INTO supplier\_pricing(PRICING\_ID, PRO\_ID, SUPP\_ID, SUPP\_PRICE) VALUES

(1, 1, 2, 1500),

(2, 3, 5, 30000),

(3, 5, 1, 3000),

(4, 2, 3, 2500),

(5, 4, 1, 1000);

**2(f)** INSERT INTO `order`(ORD\_ID, ORD\_AMOUNT, ORD\_DATE, CUS\_ID, PRICING\_ID) VALUES

(101, 1500, ‘2021-10-06’, 2, 1),

(102, 1000, ‘2021-10-12’, 3, 5),

(103, 30000, ‘2021-09-16’, 5,2),

(104, 1500, ‘2021-10-05’, 1, 1),

(105, 3000, ‘2021-08-16’, 4, 3),

(106, 1450, ‘2021-08-18’, 1, 2),

(107, 789, ‘2021-09-01’, 3, 1),

(108, 780, ‘2021-09-07’, 5, 5),

(109, 3000, ‘2021-09-10’, 5, 3),

(110, 2500, ‘2021-09-10’, 2, 4),

(111, 1000, ‘2021-09-15’, 4, 5),

(112, 789, ‘2021-09-16’, 4, 2),

(113, 31000, ‘2021-09-16’, 1, 1),

(114, 1000, ‘2021-09-16’, 3, 5),

(115, 3000, ‘2021-09-16’, 5, 3),

(116, 99, ‘2021-09-17’, 2, 4);

**2(g)** INSERT INTO rating(RAT\_ID, ORD\_ID, RAT\_RATSTARS) VALUES

(1,101,4),

(2,102,3),

(3,103,1),

(4,104,2),

(5,105,4),

(6,106,3),

(7,107,4),

(8,108,4),

(9,109,3),

(10,110,5),

(11,111,3),

(12,112,4),

(13,113,2),

(14,114,1),

(15,115,1),

(16,116,0);

**QUERIES :-**

**3** SELECT COUNT(c.CUS\_ID) AS TotalCustomers, c.CUS\_GENDER, o.ORD\_AMOUNT FROM customer c INNER JOIN `order` o ON c.CUS\_ID = o.CUS\_ID WHERE o.ORD\_AMOUNT >= 3000 GROUP BY c.CUS\_GENDER;

**4.** SELECT o.\*, c.CUS\_NAME FROM customer c INNER JOIN `order` o ON c.CUS\_ID = o.CUS\_ID WHERE c.CUS\_ID = 2;

**5**. SELECT \* FROM supplier sp

INNER JOIN

(

SELECT SUPP\_ID, COUNT(PRO\_ID) AS Count

FROM supplier\_pricing

GROUP BY SUPP\_ID

) AS sup ON sup.SUPP\_ID = sp.SUPP\_ID

WHERE sup.Count > 2;

**6.** SELECT c.CAT\_ID, c.CAT\_NAME

, MIN(t1.minPrice)

FROM category c

INNER JOIN

(

SELECT prd.CAT\_ID, prd.PRO\_NAME, t2.\* FROM product prd

INNER JOIN (

SELECT sp.PRO\_ID, MIN(sp.SUPP\_PRICE) AS MinPrice FROM supplier\_pricing sp

GROUP BY sp.PRO\_ID

) AS t2 ON prd.PRO\_ID = t2.PRO\_ID

) AS t1 ON t1.CAT\_ID = c.CAT\_ID

GROUP BY t1.CAT\_ID;

**7.** SELECT p.PRO\_ID, p.PRO\_NAME, o.ORD\_DATE FROM `order` o INNER JOIN supplier\_pricing sp ON sp.PRICING\_ID = o.PRICING\_ID INNER JOIN product p ON p.PRO\_ID = sp.PRO\_ID WHERE o.ORD\_DATE >= ‘2021-10-05’;

**8.** SELECT c.CUS\_NAME, c.CUS\_GENDER FROM customer c WHERE c.CUS\_NAME LIKE ‘a%’ OR c.CUS\_NAME LIKE ‘%a’;

**9.** CREATE PROCEDURE details()

BEGIN

SELECT report.supp\_id

, report.supp\_name

, report.rating

, CASE

WHEN report.rating > 4 THEN ‘Genuine Supplier’

WHEN report.rating > 2 THEN ‘Average Supplier’

ELSE

‘Supplier should not be considered’

END AS Type\_of\_service

FROM

(

SELECT s.SUPP\_ID, s.SUPP\_NAME, v.avg AS Rating FROM supplier s

INNER JOIN

(

SELECT sp.SUPP\_ID, AVG(rt.RAT\_RATSTARS) AS avg

FROM `order` ord

INNER JOIN rating rt ON rt.ORD\_ID = ord.ORD\_ID

INNER JOIN supplier\_pricing sp ON sp.PRICING\_ID = ord.PRICING\_ID

GROUP BY sp.SUPP\_ID

) AS v ON v.SUPP\_ID = s.SUPP\_ID

) AS report;

END

CALL details()