**Solutions →**

1)

Create Database if not exists `order-directory` ;

use `order-directory`;

create table if not exists `supplier`(

`SUPP\_ID` int primary key,

`SUPP\_NAME` varchar(50) ,

`SUPP\_CITY` varchar(50),

`SUPP\_PHONE` varchar(10)

);

CREATE TABLE IF NOT EXISTS `customer` (

`CUS\_ID` INT NOT NULL,

`CUS\_NAME` VARCHAR(20) NULL DEFAULT NULL,

`CUS\_PHONE` VARCHAR(10),

`CUS\_CITY` varchar(30) ,

`CUS\_GENDER` CHAR,

PRIMARY KEY (`CUS\_ID`));

CREATE TABLE IF NOT EXISTS `category` (

`CAT\_ID` INT NOT NULL,

`CAT\_NAME` VARCHAR(20) NULL DEFAULT NULL,

PRIMARY KEY (`CAT\_ID`)

);

CREATE TABLE IF NOT EXISTS `product` (

`PRO\_ID` INT NOT NULL,

`PRO\_NAME` VARCHAR(20) NULL DEFAULT NULL,

`PRO\_DESC` VARCHAR(60) NULL DEFAULT NULL,

`CAT\_ID` INT NOT NULL,

PRIMARY KEY (`PRO\_ID`),

FOREIGN KEY (`CAT\_ID`) REFERENCES CATEGORY (`CAT\_ID`)

);

CREATE TABLE IF NOT EXISTS `product\_details` (

`PROD\_ID` INT NOT NULL,

`PRO\_ID` INT NOT NULL,

`SUPP\_ID` INT NOT NULL,

`PROD\_PRICE` INT NOT NULL,

PRIMARY KEY (`PROD\_ID`),

FOREIGN KEY (`PRO\_ID`) REFERENCES PRODUCT (`PRO\_ID`),

FOREIGN KEY (`SUPP\_ID`) REFERENCES SUPPLIER(`SUPP\_ID`)

);

CREATE TABLE IF NOT EXISTS `order` (

`ORD\_ID` INT NOT NULL,

`ORD\_AMOUNT` INT NOT NULL,

`ORD\_DATE` DATE,

`CUS\_ID` INT NOT NULL,

`PROD\_ID` INT NOT NULL,

PRIMARY KEY (`ORD\_ID`),

FOREIGN KEY (`CUS\_ID`) REFERENCES CUSTOMER(`CUS\_ID`),

FOREIGN KEY (`PROD\_ID`) REFERENCES PRODUCT\_DETAILS(`PROD\_ID`)

);

CREATE TABLE IF NOT EXISTS `rating` (

`RAT\_ID` INT NOT NULL,

`CUS\_ID` INT NOT NULL,

`SUPP\_ID` INT NOT NULL,

`RAT\_RATSTARS` INT NOT NULL,

PRIMARY KEY (`RAT\_ID`),

FOREIGN KEY (`SUPP\_ID`) REFERENCES SUPPLIER (`SUPP\_ID`),

FOREIGN KEY (`CUS\_ID`) REFERENCES CUSTOMER(`CUS\_ID`)

);

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2)

insert into `supplier` values(1,"Rajesh Retails","Delhi",'1234567890');

insert into `supplier` values(2,"Appario Ltd.","Mumbai",'2589631470');

insert into `supplier` values(3,"Knome products","Banglore",'9785462315');

insert into `supplier` values(4,"Bansal Retails","Kochi",'8975463285');

insert into `supplier` values(5,"Mittal Ltd.","Lucknow",'7898456532');

INSERT INTO `CUSTOMER` VALUES(1,"AAKASH",'9999999999',"DELHI",'M');

INSERT INTO `CUSTOMER` VALUES(2,"AMAN",'9785463215',"NOIDA",'M');

INSERT INTO `CUSTOMER` VALUES(3,"NEHA",'9999999999',"MUMBAI",'F');

INSERT INTO `CUSTOMER` VALUES(4,"MEGHA",'9994562399',"KOLKATA",'F');

INSERT INTO `CUSTOMER` VALUES(5,"PULKIT",'7895999999',"LUCKNOW",'M');

INSERT INTO `CATEGORY` VALUES( 1,"BOOKS");

INSERT INTO `CATEGORY` VALUES(2,"GAMES");

INSERT INTO `CATEGORY` VALUES(3,"GROCERIES");

INSERT INTO `CATEGORY` VALUES (4,"ELECTRONICS");

INSERT INTO `CATEGORY` VALUES(5,"CLOTHES");

INSERT INTO `PRODUCT` VALUES(1,"GTA V","DFJDJFDJFDJFDJFJF",2);

INSERT INTO `PRODUCT` VALUES(2,"TSHIRT","DFDFJDFJDKFD",5);

INSERT INTO `PRODUCT` VALUES(3,"ROG LAPTOP","DFNTTNTNTERND",4);

INSERT INTO `PRODUCT` VALUES(4,"OATS","REURENTBTOTH",3);

INSERT INTO `PRODUCT` VALUES(5,"HARRY POTTER","NBEMCTHTJTH",1);

INSERT INTO PRODUCT\_DETAILS VALUES(1,1,2,1500);

INSERT INTO PRODUCT\_DETAILS VALUES(2,3,5,30000);

INSERT INTO PRODUCT\_DETAILS VALUES(3,5,1,3000);

INSERT INTO PRODUCT\_DETAILS VALUES(4,2,3,2500);

INSERT INTO PRODUCT\_DETAILS VALUES(5,4,1,1000);

INSERT INTO `ORDER` VALUES (50,2000,"2021-10-06",2,1);

INSERT INTO `ORDER` VALUES(20,1500,"2021-10-12",3,5);

INSERT INTO `ORDER` VALUES(25,30500,"2021-09-16",5,2);

INSERT INTO `ORDER` VALUES(26,2000,"2021-10-05",1,1);

INSERT INTO `ORDER` VALUES(30,3500,"2021-08-16",4,3);

INSERT INTO `RATING` VALUES(1,2,2,4);

INSERT INTO `RATING` VALUES(2,3,4,3);

INSERT INTO `RATING` VALUES(3,5,1,5);

INSERT INTO `RATING` VALUES(4,1,3,2);

INSERT INTO `RATING` VALUES(5,4,5,4);

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3)

-- Display the number of the customer group by their genders who have placed any order of amount greater than or equal to Rs.3000.

Ans-

select customer.cus\_gender,count(customer.cus\_gender) as count from customer inner join `order` on customer.cus\_id=`order`.cus\_id where `order`.ord\_amount>=3000 group by customer.cus\_gender;

cus\_gender count

M 1

F 1

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4)

-- Display all the order along with product name ordered by a customer having Customer\_Id=2;

Ans-

select `order`.\*,product.pro\_name from `order` ,product\_details,product where `order`.cus\_id=2 and `order`.prod\_id=product\_details.prod\_id and product\_details.prod\_id=product.pro\_id;

ORD\_ID ORD\_AMOUNT ORD\_DATE CUS\_ID PROD\_ID pro\_name

50 2000 2021-10-06 2 1 GTA V

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5)

-- Display the Supplier details who can supply more than one product.

Ans-

select supplier.\* from supplier,product\_details where supplier.supp\_id in (select product\_details.supp\_id from product\_details group by product\_details.supp\_id having count(product\_details.supp\_id)>1) group by supplier.supp\_id;

SUPP\_ID SUPP\_NAME SUPP\_CITY SUPP\_PHONE

1 Rajesh Retails Delhi 1234567890

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6)

-- Find the category of the product whose order amount is minimum.

Ans-

select category.\* from `order` inner join product\_details on `order`.prod\_id=product\_details.prod\_id inner join product on product.pro\_id=product\_details.pro\_id inner join category on category.cat\_id=product.cat\_id having min(`order`.ord\_amount);

CAT\_ID CAT\_NAME

3 GROCERIES

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7)

-- Display the Id and Name of the Product ordered after “2021-10-05”.

Ans-

select product.pro\_id,product.pro\_name from `order` inner join product\_details on product\_details.prod\_id=`order`.prod\_id inner join product on product.pro\_id=product\_details.pro\_id where `order`.ord\_date>"2021-10-05";

pro\_id pro\_name

4 OATS

1 GTA V

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8)

-- Print the top 3 supplier name and id and rating on the basis of their rating along with the customer name who has given the rating.

Ans-

select supplier.supp\_id,supplier.supp\_name,customer.cus\_name,rating.rat\_ratstars from rating inner join supplier on rating.supp\_id=supplier.supp\_id inner join customer on rating.cus\_id=customer.cus\_id order by rating.rat\_ratstars desc limit 3;

supp\_id supp\_name cus\_name rat\_ratstars

1 Rajesh Retails PULKIT 5

2 Appario Ltd. AMAN 4

5 Mittal Ltd. MEGHA 4

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9)

-- Display customer name and gender whose names start or end with character 'A'.

Ans-

select customer.cus\_name ,customer.cus\_gender from customer where customer.cus\_name like 'A%' or customer.cus\_name like '%A';

cus\_name cus\_gender

AAKASH M

AMAN M

NEHA F

MEGHA F

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10)

-- Display the total order amount of the male customers.

Ans-

select sum(`order`.ord\_amount) as Amount from `order` inner join customer on `order`.cus\_id=customer.cus\_id where customer.cus\_gender='M';

Amount

34500

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11)

-- Display all the Customers left outer join with the orders.

Ans-

select \* from customer left outer join `order` on customer.cus\_id=`order`.cus\_id;

CUS\_ID CUS\_NAME CUS\_PHONE CUS\_CITY CUS\_GENDER ORD\_ID ORD\_AMOUNT ORD\_DATE CUS\_ID PROD\_ID

1 AAKASH 9999999999 DELHI M 26 2000 2021-10-05 1 1

2 AMAN 9785463215 NOIDA M 50 2000 2021-10-06 2 1

3 NEHA 9999999999 MUMBAI F 20 1500 2021-10-12 3 5

4 MEGHA 9994562399 KOLKATA F 30 3500 2021-08-16 4 3

5 PULKIT 7895999999 LUCKNOW M 25 30500 2021-09-16 5 2

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12)

-- Create a stored procedure to display the Rating for a Supplier if any along with the Verdict on that rating if any like if rating >4 then “Genuine Supplier” if rating >2 “Average Supplier” else “Supplier should not be considered”.

Ans-

DELIMITER &&

CREATE PROCEDURE proc()

BEGIN

select supplier.supp\_id,supplier.supp\_name,rating.rat\_ratstars,

CASE

WHEN rating.rat\_ratstars >4 THEN 'Genuine Supplier'

WHEN rating.rat\_ratstars>2 THEN 'Average Supplier'

ELSE 'Supplier should not be considered'

END AS verdict from rating inner join supplier on supplier.supp\_id=rating.supp\_id;

END &&

DELIMITER ;

call proc();

supp\_id supp\_name rat\_ratstars verdict

2 Appario Ltd. 4 Average Supplier

4 Bansal Retails 3 Average Supplier

1 Rajesh Retails 5 Genuine Supplier

3 Knome products 2 Supplier should not be considered

5 Mittal Ltd. 4 Average Supplier