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Date:- 16 Feb 2022

DE Lab Assignment 04

1. ADD column “Cost” to Product_Detail Table. Calculate cost(Quantity*Price) for each “S.NO.” and return PRODUCT_DETAIL Table whose Cost greater than100 and Cost less than 600?

   Program:-

```
CREATE DATABASE Product_Details
Use Product_Details

Create Table Product_Details
(
SNO int,
Customer_First_Name varchar(10),
Customer_Last_Name varchar(10),
Product_ID int,
Product_Name varchar(15),
Price int,
Quantity int,
Manufacting_Date Date,
);
SELECT* From Product_Details

INSERT INTO Product_Details
VALUES(1,'Ravi','Sharma',101,'Chocolate',20,5,'2022-02-01');
Select* From Product_Details
INSERT INTO Product_Details
VALUES(2,'Jay','Patel',102,'Cookies',50,4,'2022-01-02');
INSERT INTO Product_Details VALUES(3,'Rani','Gupta',103,'Coffee',60,1,'12-
09-2021');
INSERT INTO Product_Details
VALUES(4,'Ravi','Sharma',103,'Coffee',60,2,'12-09-2021');
INSERT INTO Product_Details VALUES(5,'Jay','Patel',104,'Pen',10,10,'03-06-
2019');
INSERT INTO Product_Details
VALUES(6,'Rani','Gupta',101,'Chocolate',20,6,'01-02-2022');
INSERT INTO Product_Details
VALUES(7,'Priya','Patel',102,'Cookies',50,2,'02-01-2022');
INSERT INTO Product_Details
VALUES(8,'Jay','Patel',105,'Notebook',100,10,'04-04-2016');
INSERT INTO Product_Details VALUES(9,'Rani','Gupta',106,'Watch',600,1,'05-
12-2021');
INSERT INTO Product_Details
VALUES(10,'Ravi','Sharma',107,'Pencil',10,20,'06-12-2019');
```

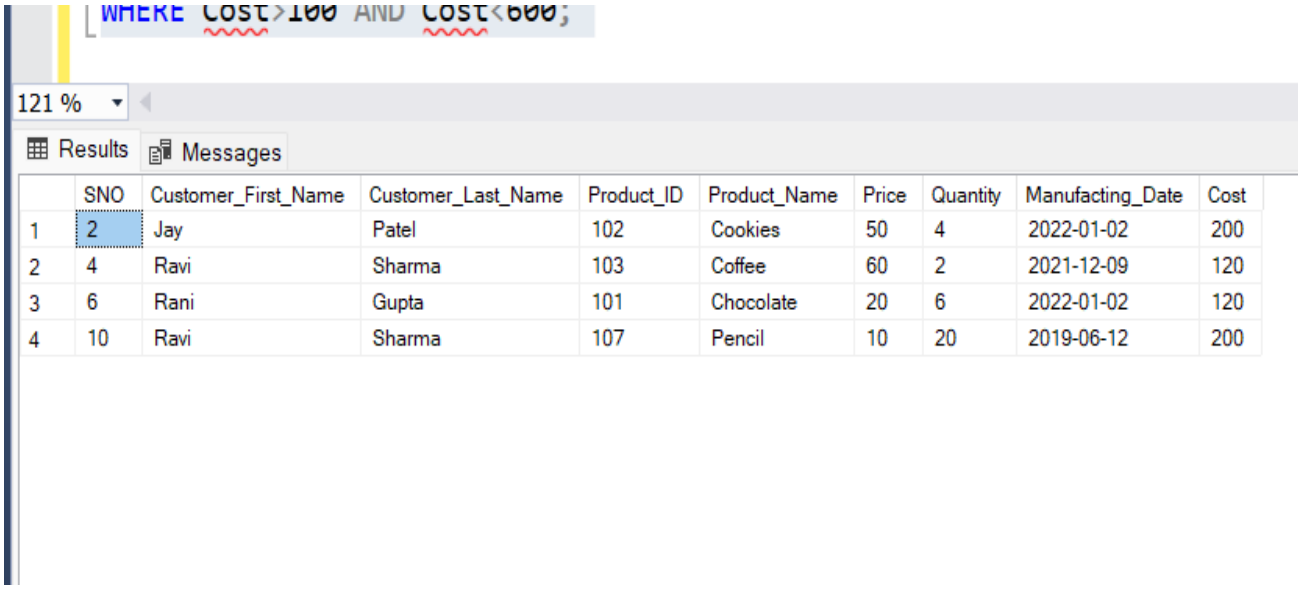
```
INSERT INTO Product_Details
VALUES(11,'Jay','Patel',101,'Chocolate',20,3,'01-02-2022');

SELECT* From Product_Details

ALTER TABLE Product_Details ADD
Cost INT;
UPDATE Product_Details SET
Cost=Quantity*Price;

SELECT * FROM Product_Details
WHERE Cost>100 AND Cost<600;
```

Output:-



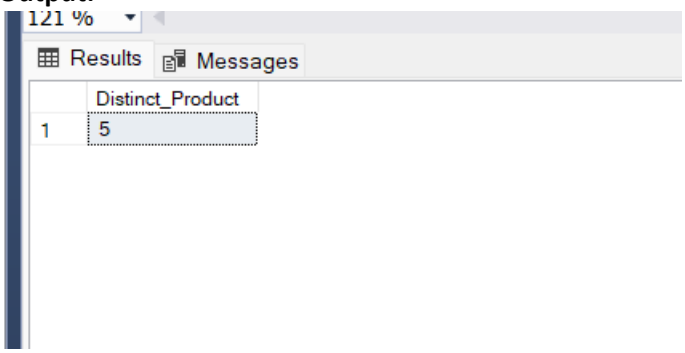
	SNO	Customer_First_Name	Customer_Last_Name	Product_ID	Product_Name	Price	Quantity	Manufacting_Date	Cost
1	2	Jay	Patel	102	Cookies	50	4	2022-01-02	200
2	4	Ravi	Sharma	103	Coffee	60	2	2021-12-09	120
3	6	Rani	Gupta	101	Chocolate	20	6	2022-01-02	120
4	10	Ravi	Sharma	107	Pencil	10	20	2019-06-12	200

2. . Return count of distinct product column name as Distinct_Product from PRODUCT_DETAIL whose Quantity is greater than 2 and Price greater than 10.

Program:-

```
SELECT COUNT(*)
AS Distinct_Product
FROM Product_Details
WHERE Quantity > 2 AND Price > 10;
```

Output:-



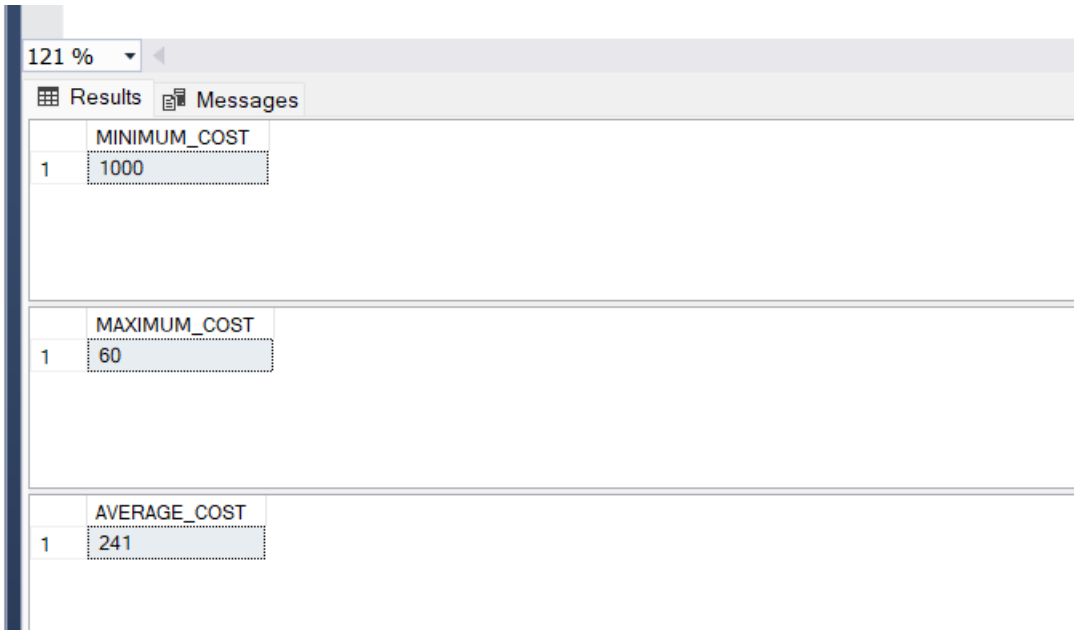
	Distinct_Product
1	5

3. Find and return the maximum Cost column name as MINIMUM_COST,minimum Cost column name as MAXIMUM_COST, Average Cost column name as AVERAGE_COST for Cost Attribute from PRODUCT_DETAIL table.

Program:-

```
SELECT MAX(Cost) AS MINIMUM_COST FROM Product_Details;
SELECT MIN(Cost) AS MAXIMUM_COST FROM Product_Details;
SELECT AVG(Cost) AS AVERAGE_COST FROM Product_Details;
```

Output:-



4. Add a column name Date_of_expire and calculate the Date of expire of all the Product from Manufacture_Date column (best before 6 months from manufacturing for each product). Return Product_ID, Product_Name, Manufacture_Date, Date_of_expire from PRODUCT_DETAIL TABLE.

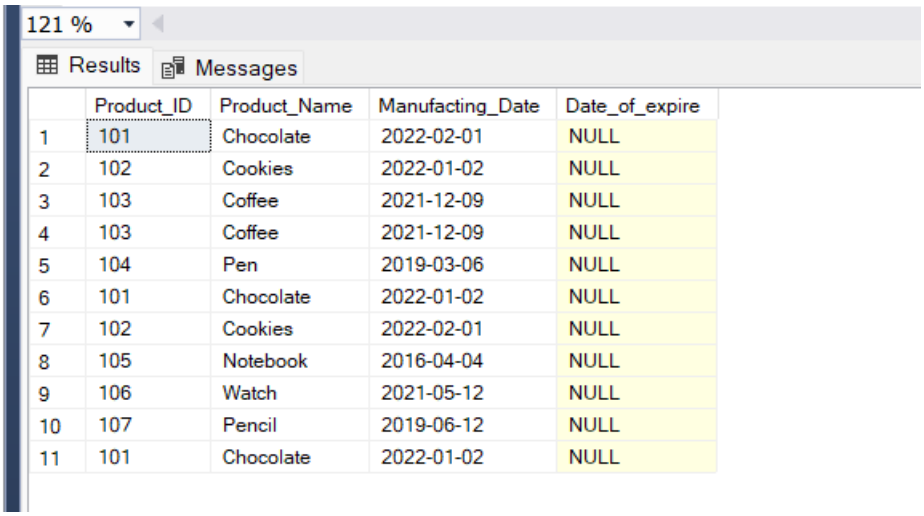
Program:-

```
ALTER TABLE Product_Details ADD Date_of_expire date;

UPDATE Product_Details SET Date_of_expire = DATEADD('month',6,'Manufacture_Date');

SELECT Product_ID,Product_Name,Manufacting_Date,Date_of_expire from Product_Details;
```

Output:-



121 %

Results | Messages

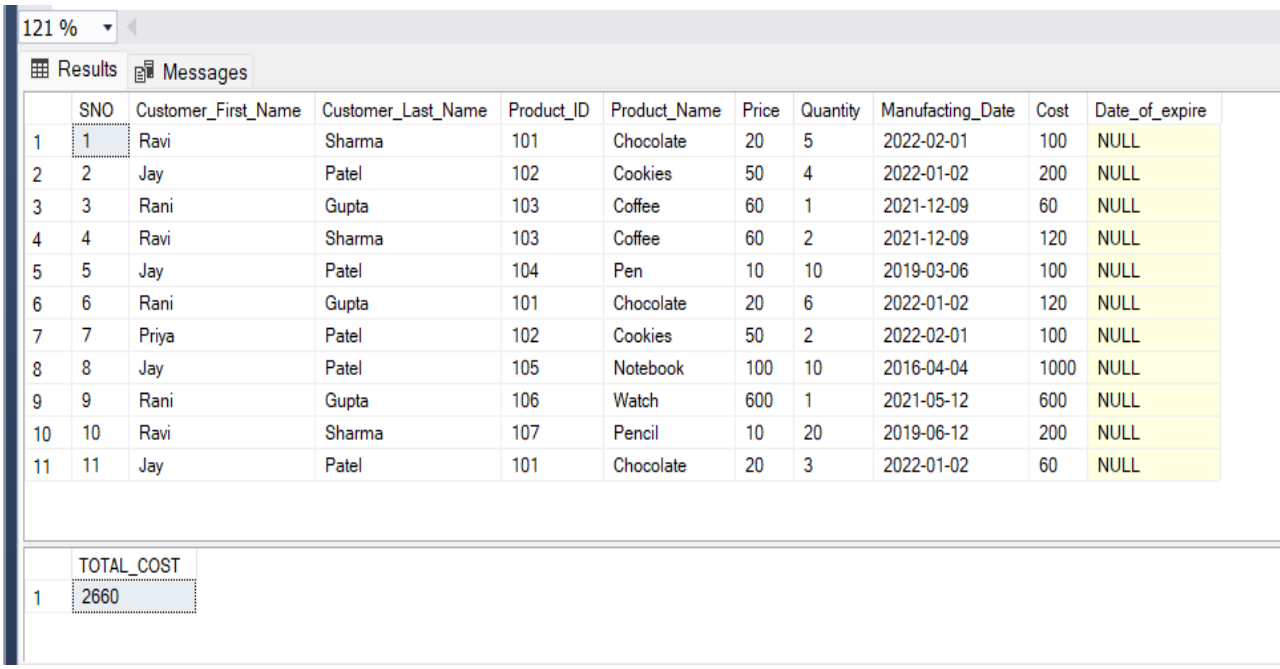
	Product_ID	Product_Name	Manufacting_Date	Date_of_expire
1	101	Chocolate	2022-02-01	NULL
2	102	Cookies	2022-01-02	NULL
3	103	Coffee	2021-12-09	NULL
4	103	Coffee	2021-12-09	NULL
5	104	Pen	2019-03-06	NULL
6	101	Chocolate	2022-01-02	NULL
7	102	Cookies	2022-02-01	NULL
8	105	Notebook	2016-04-04	NULL
9	106	Watch	2021-05-12	NULL
10	107	Pencil	2019-06-12	NULL
11	101	Chocolate	2022-01-02	NULL

5. Add a column COST_QUANTITY. Write a query to calculate Cost/Quantity and return PRUDUCT_DETAIL. Calculate Total_Cost to all Product. Return Total_cost column name as TOTAL_COST.

Program:-

```
ALTER TABLE Product_Details ADD COST_QUANTITY INT;
UPDATE Product_Details
SET COST_QUANTITY=Cost/Quantity;
SELECT * FROM Product_Details;
SELECT SUM(Cost) AS TOTAL_COST FROM Product_Details;
```

Output:-



121 %

Results | Messages

	SNO	Customer_First_Name	Customer_Last_Name	Product_ID	Product_Name	Price	Quantity	Manufacting_Date	Cost	Date_of_expire
1	1	Ravi	Sharma	101	Chocolate	20	5	2022-02-01	100	NULL
2	2	Jay	Patel	102	Cookies	50	4	2022-01-02	200	NULL
3	3	Rani	Gupta	103	Coffee	60	1	2021-12-09	60	NULL
4	4	Ravi	Sharma	103	Coffee	60	2	2021-12-09	120	NULL
5	5	Jay	Patel	104	Pen	10	10	2019-03-06	100	NULL
6	6	Rani	Gupta	101	Chocolate	20	6	2022-01-02	120	NULL
7	7	Priya	Patel	102	Cookies	50	2	2022-02-01	100	NULL
8	8	Jay	Patel	105	Notebook	100	10	2016-04-04	1000	NULL
9	9	Rani	Gupta	106	Watch	600	1	2021-05-12	600	NULL
10	10	Ravi	Sharma	107	Pencil	10	20	2019-06-12	200	NULL
11	11	Jay	Patel	101	Chocolate	20	3	2022-01-02	60	NULL

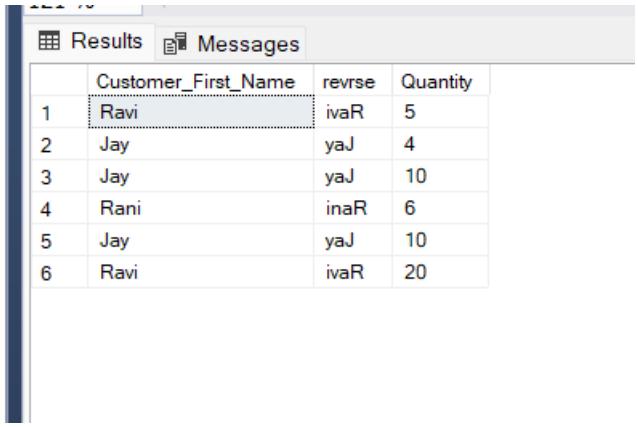
	TOTAL_COST
1	2660

6. Write a query to reverse Customer_First_Name column name as reverse and Quantity whose QTY>=4. Return Customer_First_Name, reverse and Quantity column.

Program:-

```
SELECT Customer_First_Name,
REVERSE(Customer_First_Name) as revrse,
        Quantity from Product_Details where Quantity>=4;
```

Output:-



Results | Messages

	Customer_First_Name	revrse	Quantity
1	Ravi	ivaR	5
2	Jay	yaJ	4
3	Jay	yaJ	10
4	Rani	inaR	6
5	Jay	yaJ	10
6	Ravi	ivaR	20

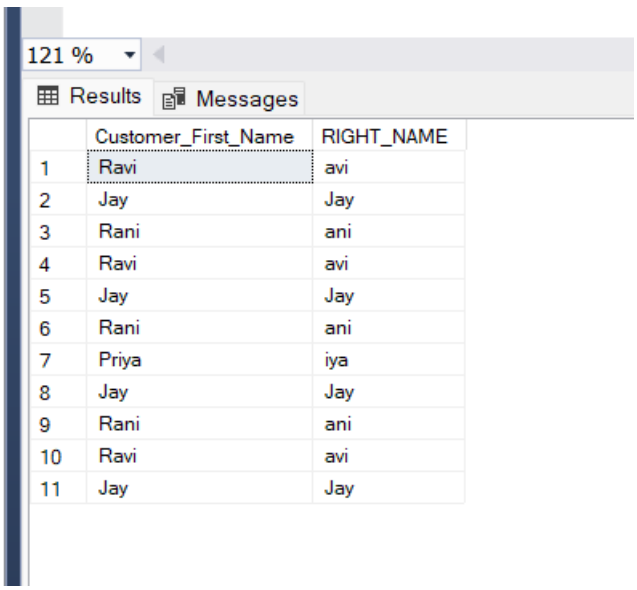
---

7. Return the Customer_First_ Name and right part of a character string with the three numbers of characters' column name as RIGHT_NAME from Customer_First_ Name attribute.

Program:-

```
SELECT Customer_First_Name,
RIGHT(Customer_First_Name,3) AS RIGHT_NAME
FROM Product_Details;
```

Output:-



121 %

Results | Messages

	Customer_First_Name	RIGHT_NAME
1	Ravi	avi
2	Jay	Jay
3	Rani	ani
4	Ravi	avi
5	Jay	Jay
6	Rani	ani
7	Priya	iya
8	Jay	Jay
9	Rani	ani
10	Ravi	avi
11	Jay	Jay

---

8. Add a column “FULL_NAME” Write a query to display full name of customer (format “Customer_First_Name Customer_Last_Name”) in single attribute name as Customer_Full_Name whose Customer_Name length>=8 and Quantity >=3.

Program:-

Output:-

9. Write a query to replace product_name “cookies” to “chocolate” and display count of customer who purchased chocolates (NOTE: use string function).

Program:-

Output:-

10. Add Customer_First_Name column and Write a query to concate “Customer_First_Name” in lower case and “Customer_Last_Name” in upper case as Customer_full_name and count the total length of string\

Program:-

Output:-