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DBMS Lab-6(Assignment)

Question-1

Create two table student1 and Student2 in database person with 10 records as per the following table

Student1

ID	First_name	last_name	location	roll_no	department	percentage
101	Rakesh	sharma	chennai	Cs1234	cse	40
102	Rajesh	gupta	chennai	Ec123	ece	60
103	Mahesh	varma	delhi	Ec234	ece	60
104	Rajeev	patel	mumbai	Cs123	cse	80
105	Prithivi	kumar	hyderabad	Me123	mechanical	85

Student2

ID	First_name	last_name	location	roll_no	department	percentage
101	Ram	kumar	chennai	Cs112	cse	50
102	Sham	singh	nagpur	Ec112	ece	60
113	Mukesh	patel	delhi	Ec113	ece	65
114	Rohit	rana	hyderabad	Cs1234	cse	85
105	Partha	sharma	vijayawada	Me113	mechanical	40

i. Display department name which is similar for students in table 1 whose percentage is >60 and for students in table 2 whose percentage is<60 using INTERSECT. Display department name for students in table 1 whose percentage is >60 and not similar for students in table 2 whose percentage is<60 using EXCEPT.

Program:-

```
SELECT DEPARTMENT FROM STUDENT01  WHERE PERCENTAGE > 60 INTERSECT SELECT
DEPARTMENT FROM STUDENT02 WHERE PERCENTAGE < 60;

SELECT DEPARTMENT FROM STUDENT02 WHERE PERCENTAGE > 60 EXCEPT SELECT DEPARTMENT
FROM STUDENT02 WHERE PERCENTAGE < 60;
```
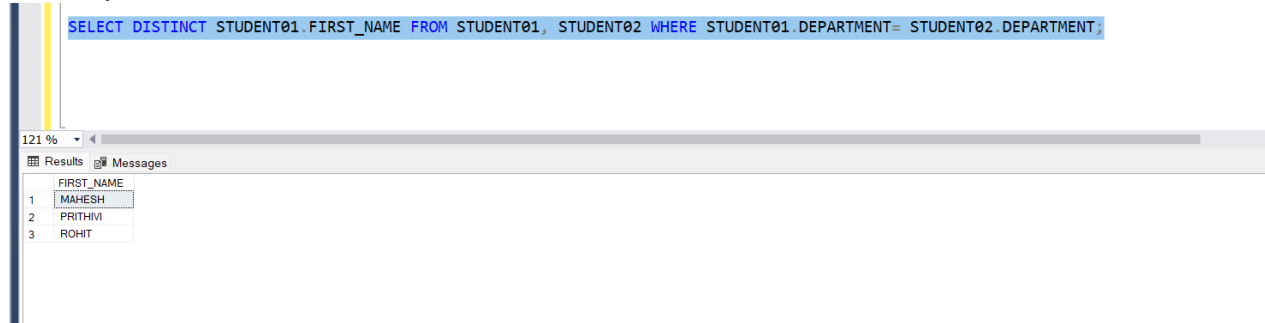
Output:-

ii.   Display distinct first_name of table1 whose department is equal to department of table2.

Program:-
```sql
SELECT DISTINCT STUDENT01.FIRST_NAME FROM STUDENT01, STUDENT02 WHERE STUDENT01.DEPARTMENT=
STUDENT02.DEPARTMENT;
```
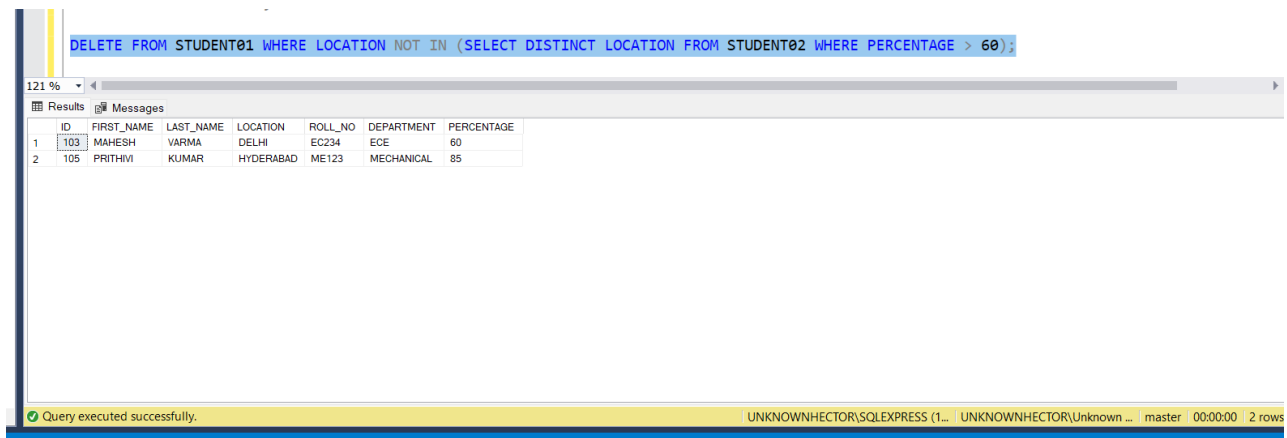
Output:-

iii. Delete students of table1 whose location is not match with the location of students whose percentage >60 in table1.

Program:-
```sql
DELETE FROM STUDENT01 WHERE LOCATION NOT IN (SELECT DISTINCT LOCATION FROM
STUDENT02 WHERE PERCENTAGE > 60);
```

Output:-

iv.   Insert Student from table 2 whose percentage is 85 into table 1.

Program:-
```sql
INSERT INTO STUDENT01 SELECT *FROM STUDENT02 WHERE PERCENTAGE = 85;
SELECT *FROM STUDENT01;
```
Output:-

```
INSERT INTO STUDENT01 SELECT *FROM STUDENT02 WHERE PERCENTAGE = 85;
SELECT *FROM STUDENT01;
```

	ID	FIRST_NAME	LAST_NAME	LOCATION	ROLL_NO	DEPARTMENT	PERCENTAGE
1	104	ROHIT	RANA	HYDERABAD	CS1234	CSE	85
2	103	MAHESH	VARMA	DELHI	EC234	ECE	60
3	105	PRITHIVI	KUMAR	HYDERABAD	ME123	MECHANICAL	85

Query executed successfully.   UNKNOWNHECTOR\SQLEXPRESS (1...   UNKNOWNHECTOR\Unknown ...   master   00:00:00   3 rows

v.   Increment percentage of students by 5 in table2 whose percentage is equal to students in table 1 and >60.

Program:-
```
UPDATE STUDENT02 SET PERCENTAGE = PERCENTAGE + 5 WHERE PERCENTAGE IN (SELECT PERCENTAGE
FROM STUDENT01 WHERE PERCENTAGE > 60);

SELECT *FROM STUDENT02;
```

Output:-

```
UPDATE STUDENT02 SET PERCENTAGE = PERCENTAGE + 5 WHERE PERCENTAGE IN (SELECT PERCENTAGE FROM STUDENT01 WHERE PERCENTAGE > 60);
SELECT *FROM STUDENT02;
```

	ID	FIRST_NAME	LAST_NAME	LOCATION	ROLL_NO	DEPARTMENT	PERCENTAGE
1	101	RAM	KUMAR	CHENNAI	CS112	CSE	50
2	102	SHAM	SINGH	NAGPUR	EC112	ECE	60
3	103	MUKESH	PATEL	DELHI	EC113	ECE	65
4	104	ROHIT	RANA	HYDERABAD	CS1234	CSE	90
5	105	PARTHA	SHARMA	VIJAYAWADA	ME113	MECHANICAL	40

Query executed successfully.   UNKNOWNHECTOR\SQLEXPRESS (1...   UNKNOWNHECTOR\Unknown ...   master   00:00:00   5 rows

Question-2

id	name	cost	year	city
1	chair	245.00	2017	Chicago
2	armchair	500.00	2018	Chicago
3	desk	900.00	2019	Los Angeles
4	lamp	85.00	2017	Cleveland
5	bench	2000.00	2018	Seattle
6	stool	2500.00	2020	Austin
7	tv table	2000.00	2020	Austin

PRODUCT TABLE

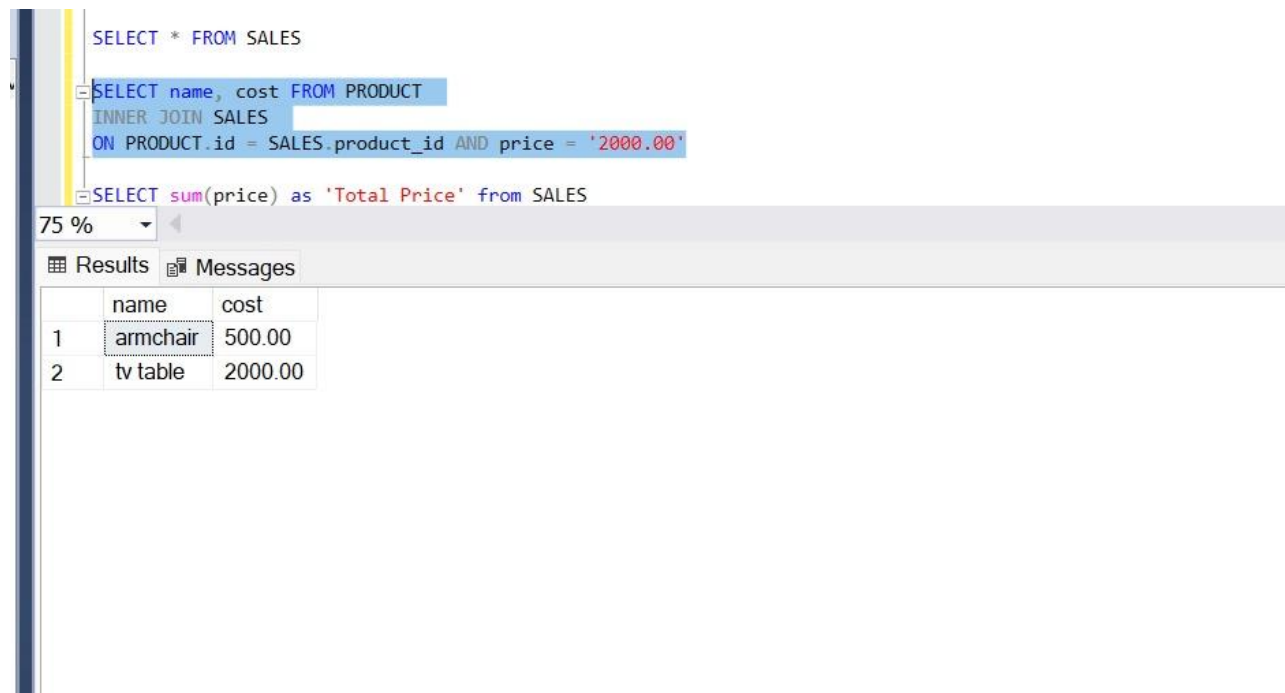| id	product_id	price	year	city
1	2	2000.00	2020	Chicago
2	2	590.00	2020	New York
3	2	790.00	2020	Cleveland
5	3	800.00	2019	Cleveland
6	4	100.00	2020	Detroit
7	5	2300.00	2019	Seattle
8	7	2000.00	2020	New York

Sales Table

i. Display names and the costs of the products that were sold for 2,000.

Program:-
```
SELECT NAME, COST FROM PRODUCT INNER JOIN SALES
ON PRODUCT.ID = SALES.PRODUCT_ID AND PRICE = '2000.00
```
Output:-

```
SELECT * FROM SALES

SELECT name, cost FROM PRODUCT
INNER JOIN SALES
ON PRODUCT.id = SALES.product_id AND price = '2000.00'

SELECT sum(price) as 'Total Price' from SALES
```
75 %

⊞ Results ◰ Messages

	name	cost
1	armchair	500.00
2	tv table	2000.00

ii. Find the total price of products sold in the year 2020 & 2019.

Program:
```
SELECT SUM(PRICE) AS 'TOTAL PRICE' FROM SALES
WHERE YEAR = 2020 OR YEAR = 2019
```
Output:

```
SELECT * FROM SALES

SELECT name, cost FROM PRODUCT
INNER JOIN SALES
ON PRODUCT.id = SALES.product_id AND price = '2000.00'

SELECT sum(price) as 'Total Price' from SALES
```

75 %

Results | **Messages**

	name	cost
1	armchair	500.00
2	tv table	2000.00

iii. Display the products with the sale year other than 2020 as well as the products without any records in the **SALES** table.

Program:-

```
SELECT * FROM PRODUCT
INNER JOIN SALES
ON SALES.year != 2020
```

Output:

```
SELECT name, cost FROM PRODUCT
INNER JOIN SALES
ON PRODUCT.id = SALES.product_id AND price = '2000.00'

SELECT sum(price) as 'Total Price' from SALES
WHERE year = 2020 OR year = 2019
z
SELECT * FROM PRODUCT
INNER JOIN SALES
ON SALES.year != 2020
```

75 %

Results | **Messages**

	Total Price
1	8580.00