SQL ASSIGNMENT – 2

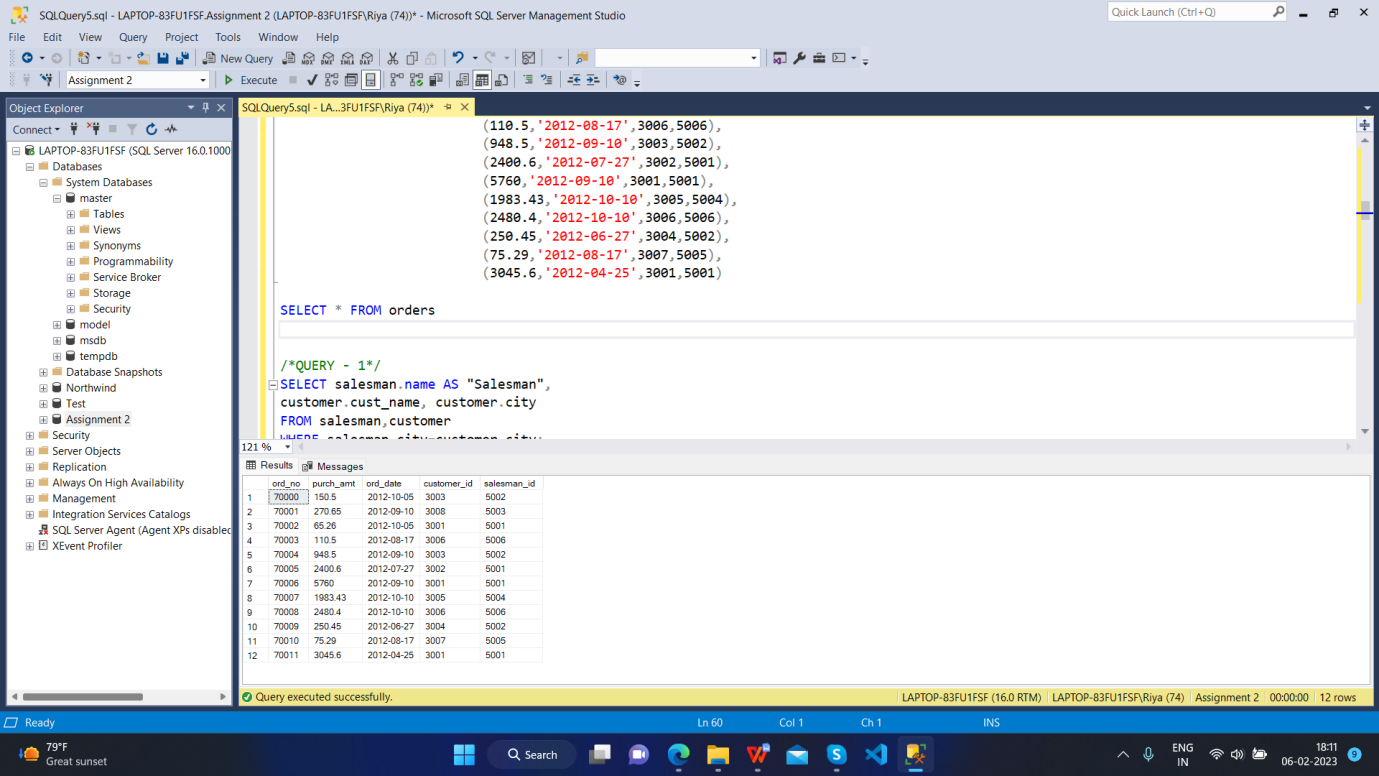
Salesman Table :



Customer table :



Orders table :



Creating and inserting in salesman table :

CREATE TABLE salesman(

salesmanID int PRIMARY KEY IDENTITY(5001,1),

name NCHAR(50) not null,

city NCHAR(50) not null,

commision FLOAT not null

)

INSERT INTO salesman VALUES ('James Hoog','New York',0.15),

('Nail Knite','Paris',0.13),

('Pit Alex','London',0.11),

('Mc Lyon','Paris',0.14),

('Paul Adam','Rome',0.13),

('Lauson Hen','San Jose',0.12)

Creating and inserting in Customer table :

CREATE TABLE [customer](

customer\_id int PRIMARY KEY IDENTITY(3001,1),

cust\_name NCHAR(50) NOT NULL,

city NCHAR(50) NOT NULL,

grade INT ,

salesmanID INT NOT NULL

FOREIGN KEY (salesmanID) REFERENCES salesman(salesmanID)

)

INSERT INTO customer values ('Nick Rimando','New York',100,5001),

('Nick Rimando','New York',100,5001),

('Brad Davis','New York',200,5001),

('Graham Zusi','California',200,5002),

('Julian Green','London',300,5002),

('Fabian Johnson','Paris',300,5004),

('Geoff Cameron','Berlin',100,5006),

('Jozy Altidor','Moscow',200,5005)

Creating and inserting in Orders table :

CREATE TABLE [orders] (

ord\_no int PRIMARY KEY IDENTITY(70000,1),

purch\_amt float NOT NULL,

ord\_date date NOT NULL,

customer\_id int not null foreign key references customer(customer\_id),

salesman\_id int not null foreign key references salesman(salesmanID)

)

INSERT INTO orders VALUES (150.5,'2012-10-05',3003,5002),

(270.65,'2012-09-10',3008,5003),

(65.26,'2012-10-05',3001,5001),

(110.5,'2012-08-17',3006,5006),

(948.5,'2012-09-10',3003,5002),

(2400.6,'2012-07-27',3002,5001),

(5760,'2012-09-10',3001,5001),

(1983.43,'2012-10-10',3005,5004),

(2480.4,'2012-10-10',3006,5006),

(250.45,'2012-06-27',3004,5002),

(75.29,'2012-08-17',3007,5005),

(3045.6,'2012-04-25',3001,5001)

**Q – 1 : write a SQL query to find the salesperson and customer who reside in the same city. Return Salesman, cust\_name and city**

/\*QUERY - 1\*/

SELECT salesman.name AS "Salesman",

customer.cust\_name, customer.city

FROM salesman,customer

WHERE salesman.city=customer.city;

****

**Q – 2 : write a SQL query to find those orders where the order amount exists between 500 and 2000. Return ord\_no, purch\_amt, cust\_name, city.**

/\*QUERY - 2\*/

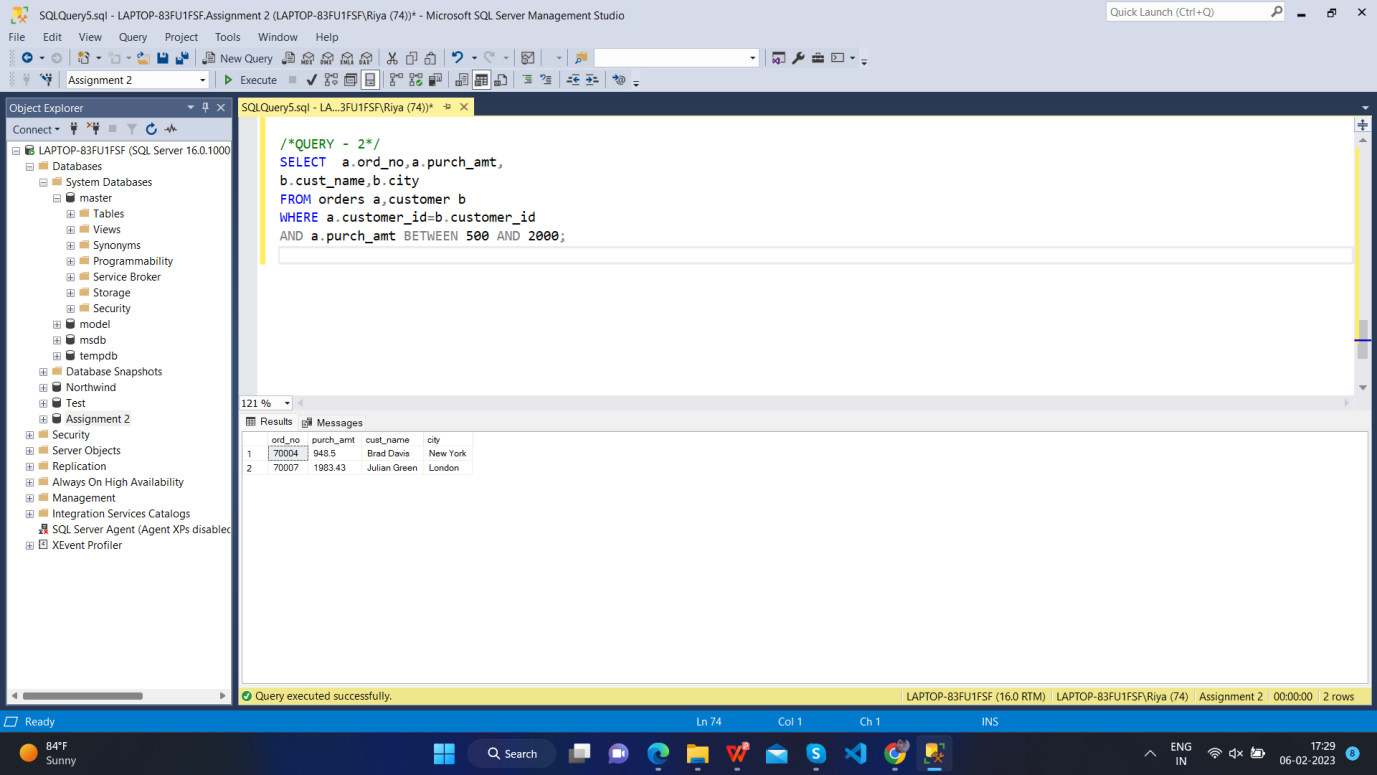
SELECT a.ord\_no,a.purch\_amt,

b.cust\_name,b.city

FROM orders a,customer b

WHERE a.customer\_id=b.customer\_id

AND a.purch\_amt BETWEEN 500 AND 2000;

****

**Q – 3 : write a SQL query to find the salesperson(s) and the customer(s) he represents. Return Customer Name, city, Salesman, commission.**

/\*QUERY - 3\*/

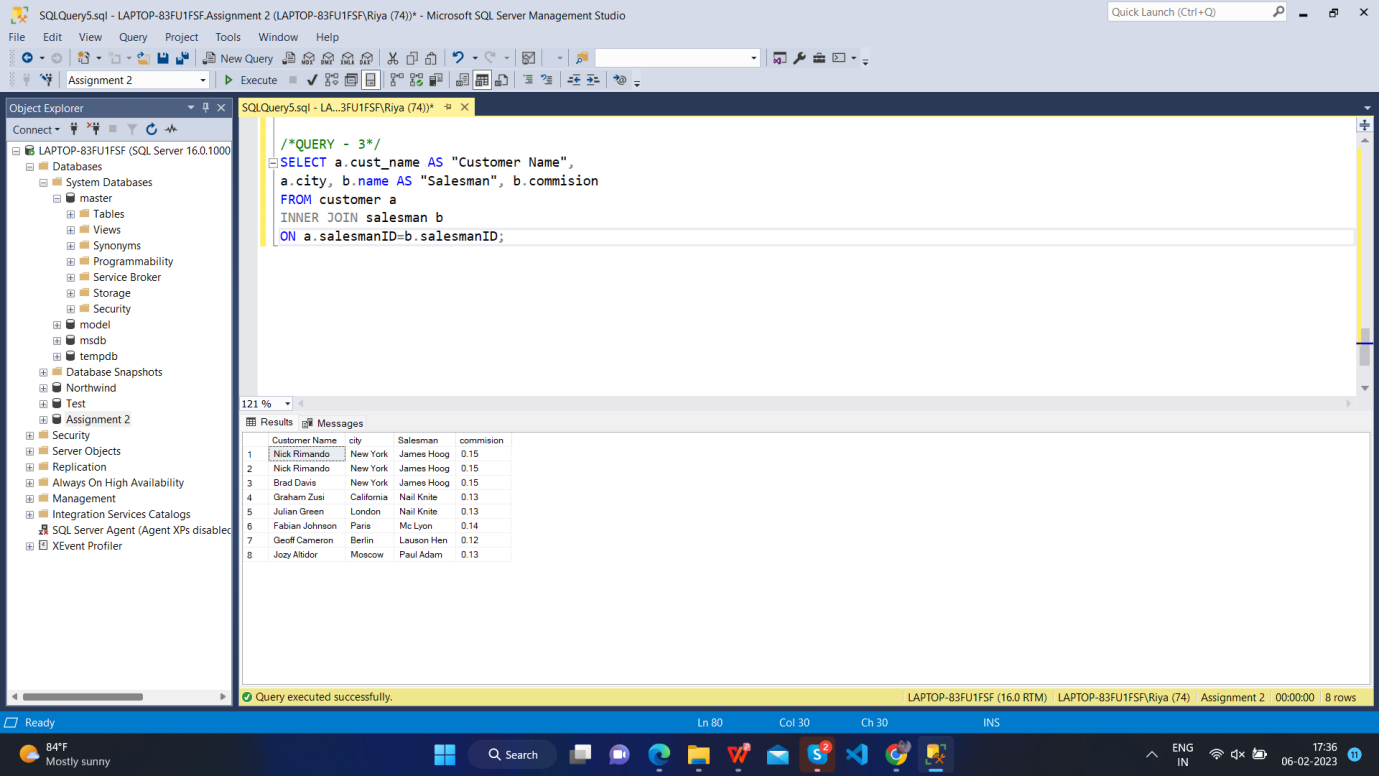
SELECT a.cust\_name AS "Customer Name",

a.city, b.name AS "Salesman", b.commision

FROM customer a

INNER JOIN salesman b

ON a.salesmanID=b.salesmanID;

****

**Q – 4 : write a SQL query to find salespeople who received commissions of more than 12 percent from the company. Return Customer Name, customer city, Salesman,commission.**

/\*QUERY - 4\*/

SELECT a.cust\_name AS "Customer Name",

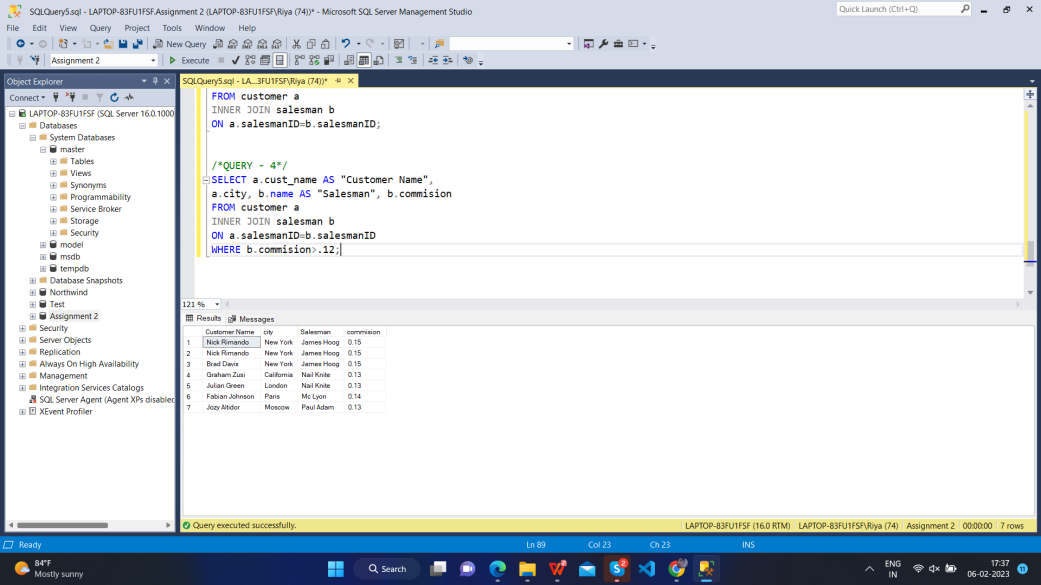
a.city, b.name AS "Salesman", b.commision

FROM customer a

INNER JOIN salesman b

ON a.salesmanID=b.salesmanID

WHERE b.commision>.12;

****

**Q – 5 :** **write a SQL query to locate those salespeople who do not live in the same city where their customers live and have received a commission of more than 12% from the company. Return Customer Name, customer city, Salesman, salesman city,commission.**

/\*QUERY - 5\*/

SELECT a.cust\_name AS "Customer Name",

a.city, b.name AS "Salesman", b.city,b.commision

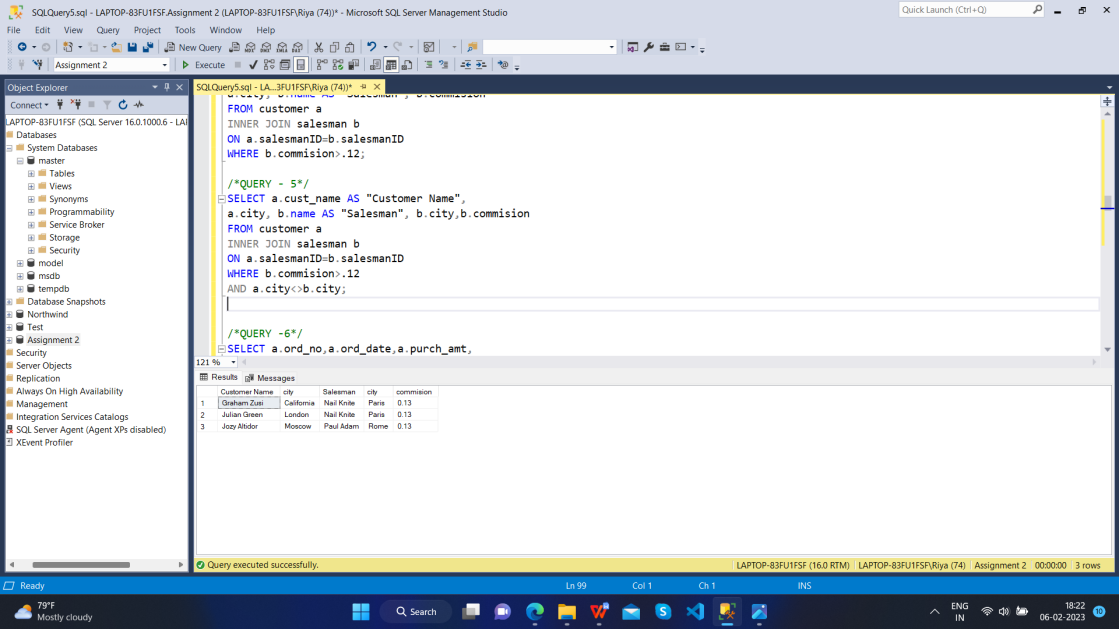
FROM customer a

INNER JOIN salesman b

ON a.salesmanID=b.salesmanID

WHERE b.commision>.12

AND a.city<>b.city;

****

**Q – 6 : write a SQL query to find the details of an order. Return ord\_no, ord\_date, purch\_amt, Customer Name, grade, Salesman, commission.**

/\*QUERY -6\*/

SELECT a.ord\_no,a.ord\_date,a.purch\_amt,

b.cust\_name AS "Customer Name", b.grade,

c.name AS "Salesman", c.commision

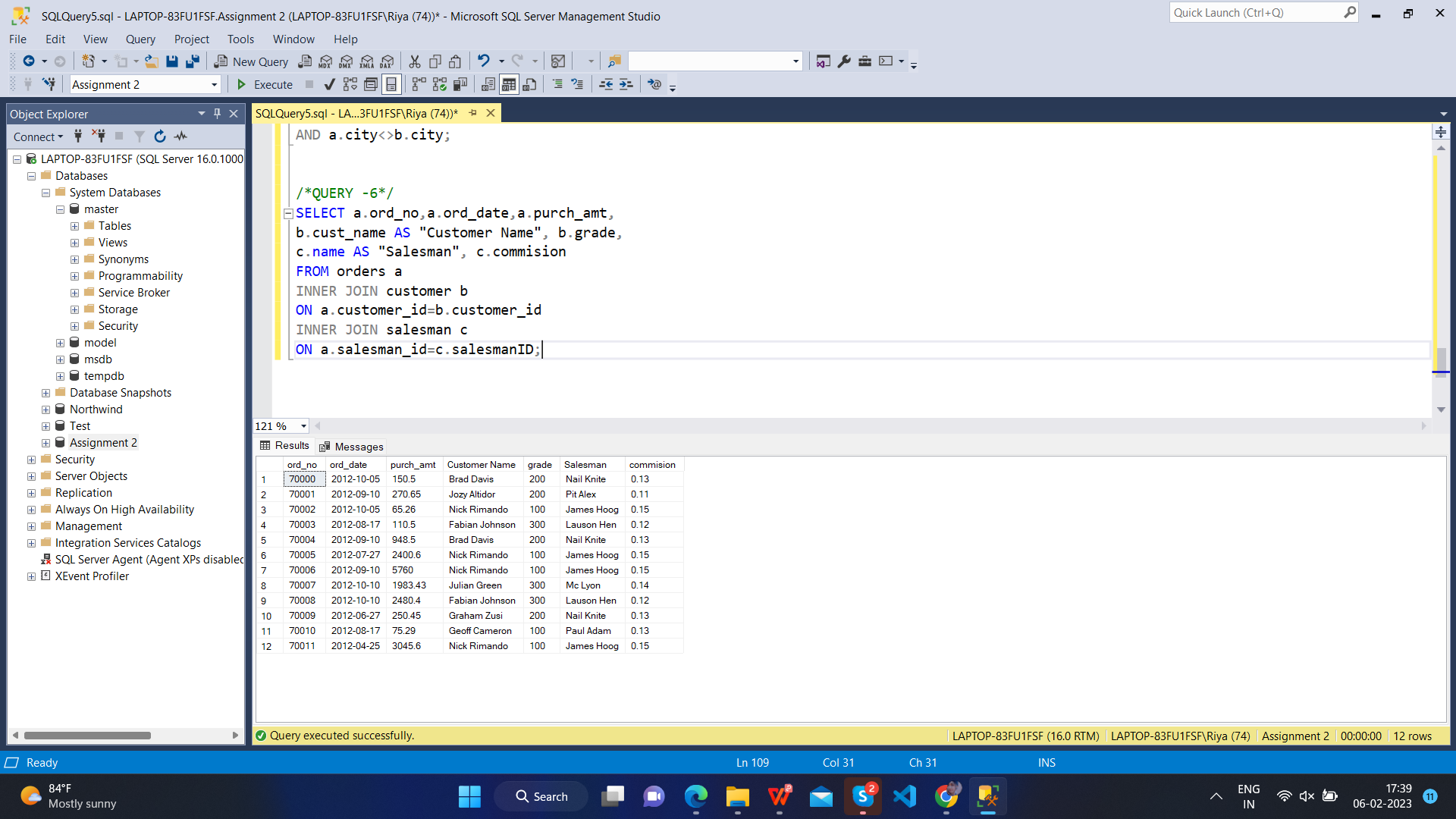
FROM orders a

INNER JOIN customer b

ON a.customer\_id=b.customer\_id

INNER JOIN salesman c

ON a.salesman\_id=c.salesmanID;



**Q – 7 : Write a SQL statement to join the tables salesman, customer and orders so that the same column of each table appears once and only the relational rows are returned.**

/\*QUERY-7\*/

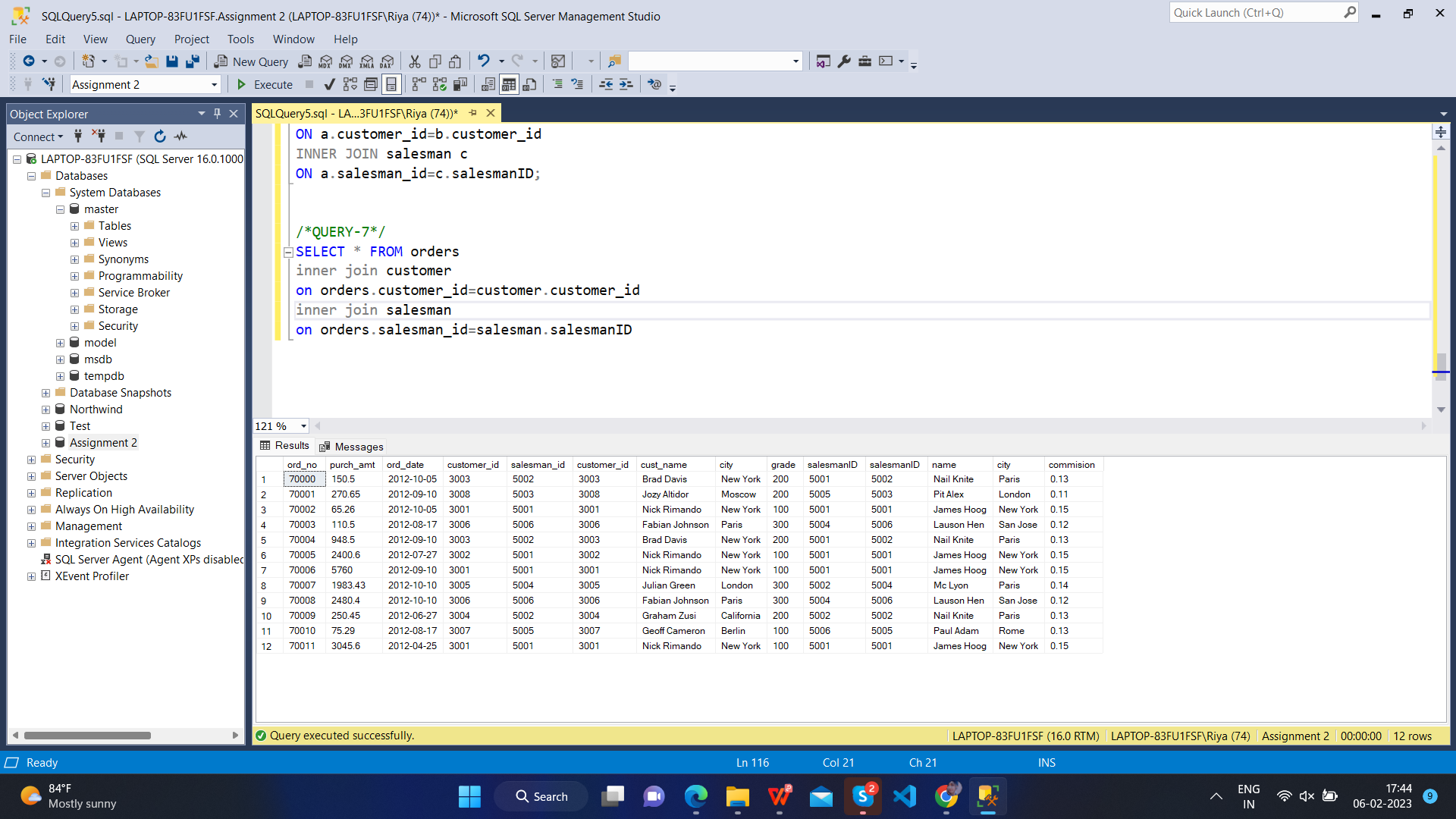
SELECT \* FROM orders

inner join customer

on orders.customer\_id=customer.customer\_id

inner join salesman

on orders.salesman\_id=salesman.salesmanID



**Q – 8 :** **write a SQL query to display the customer name, customer city, grade, salesman, salesman city. The results should be sorted by ascending customer\_id.**

/\*QUERY - 8\*/

SELECT a.cust\_name,a.city,a.grade,

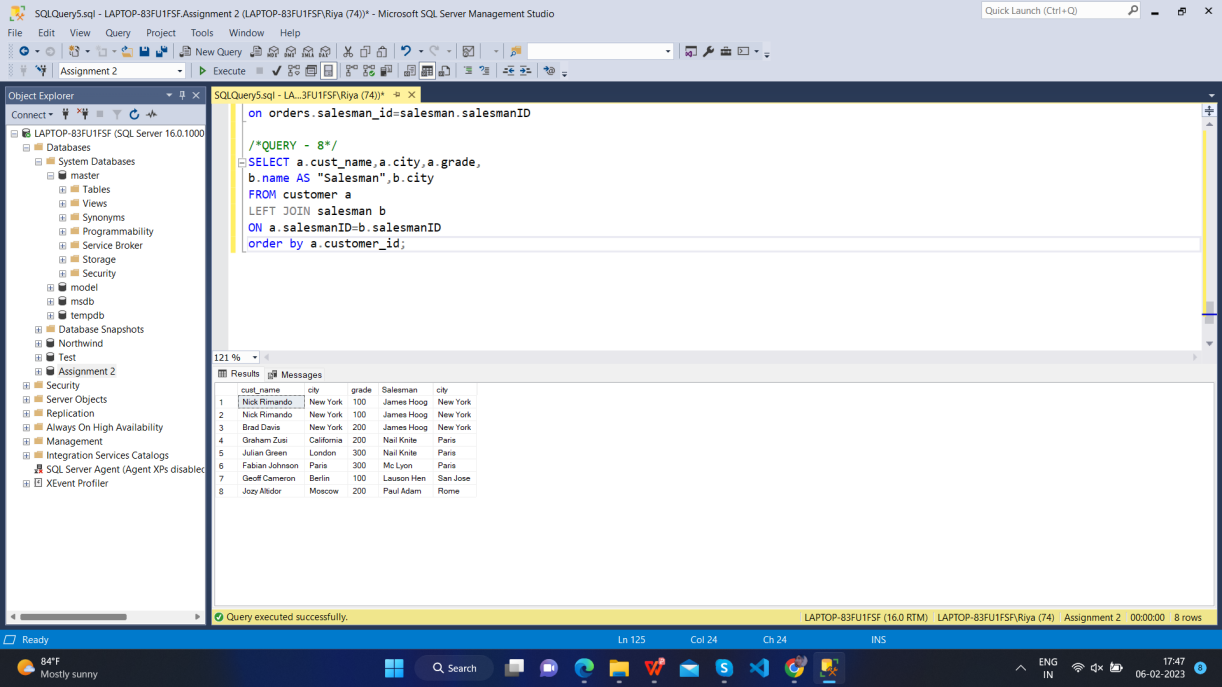
b.name AS "Salesman",b.city

FROM customer a

LEFT JOIN salesman b

ON a.salesmanID=b.salesmanID

order by a.customer\_id;



**Q – 9: write a SQL query to find those customers with a grade less than 300. Return cust\_name, customer city, grade, Salesman, salesmancity. The result should be ordered by ascending customer\_id.**

/\*QUERY - 9\*/

SELECT a.cust\_name,a.city,a.grade,

b.name AS "Salesman", b.city

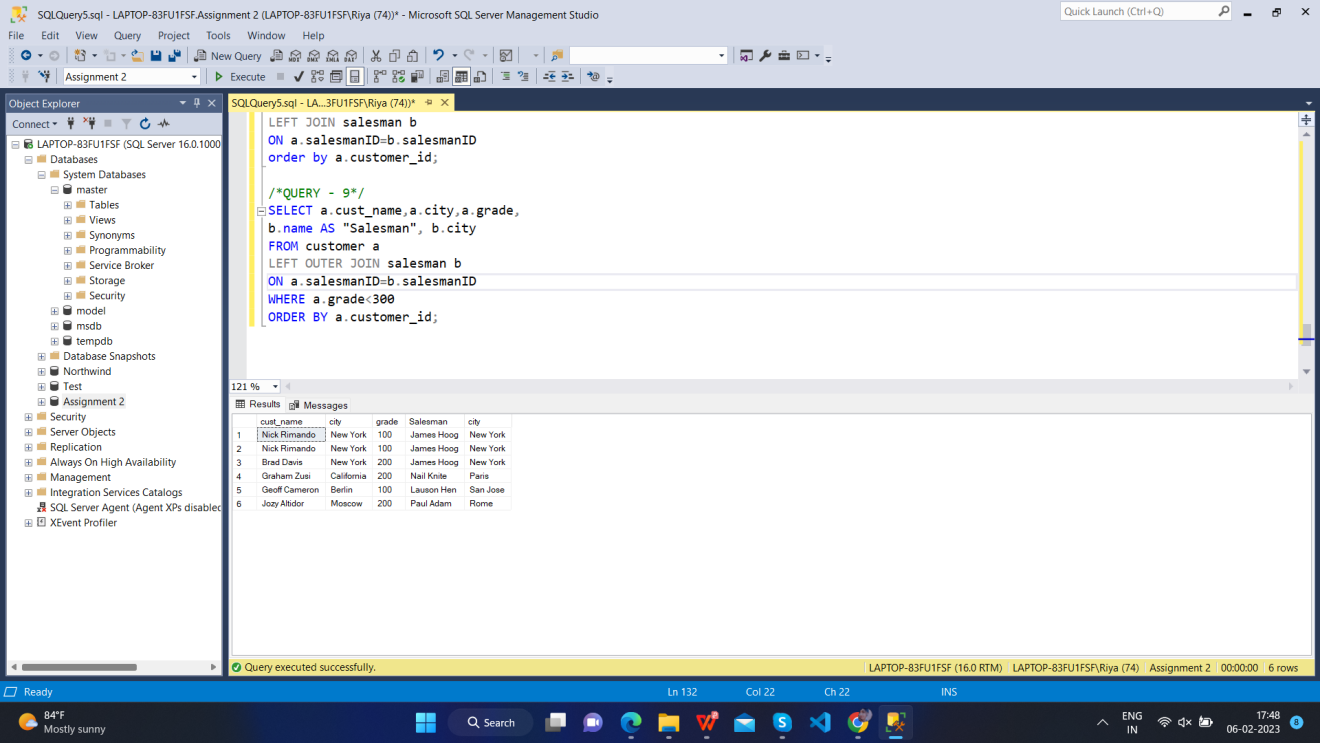
FROM customer a

LEFT OUTER JOIN salesman b

ON a.salesmanID=b.salesmanID

WHERE a.grade<300

ORDER BY a.customer\_id;



**Q – 10: Write a SQL statement to make a report with customer name, city, order number,order date, and order amount in ascending order according to the order date to determine whether any of the existing customers have placed an order or not.**

/\*QUERY - 10\*/

SELECT a.cust\_name,a.city, b.ord\_no,

b.ord\_date,b.purch\_amt AS "Order Amount"

FROM customer a

LEFT OUTER JOIN orders b

ON a.customer\_id=b.customer\_id

order by b.ord\_date;

****

**Q-11 : Write a SQL statement to generate a report with customer name, city, order number,order date, order amount, salesperson name, and commission to determine if any of the existing customers have not placed orders or if they have placed orders through their salesman or by themselves.**

/\*QUERY - 11\*/

SELECT a.cust\_name,a.city, b.ord\_no,

b.ord\_date,b.purch\_amt AS "Order Amount",

c.name,c.commision

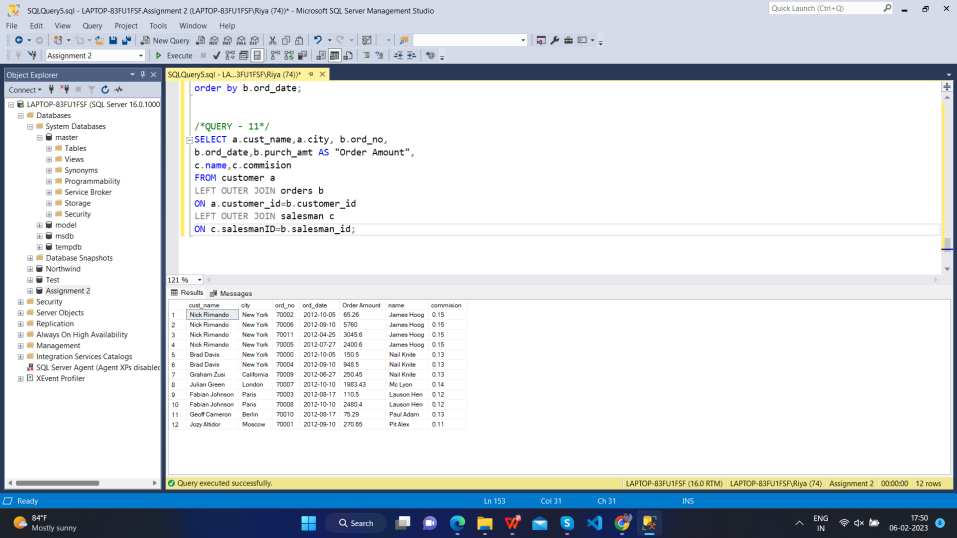
FROM customer a

LEFT OUTER JOIN orders b

ON a.customer\_id=b.customer\_id

LEFT OUTER JOIN salesman c

ON c.salesmanID=b.salesman\_id;

****

**Q-12 : Write a SQL statement to generate a list in ascending order of salespersons who work either for one or more customers or have not yet joined any of the customers.**

/\*QUERY - 12\*/

SELECT a.cust\_name,a.city,a.grade,

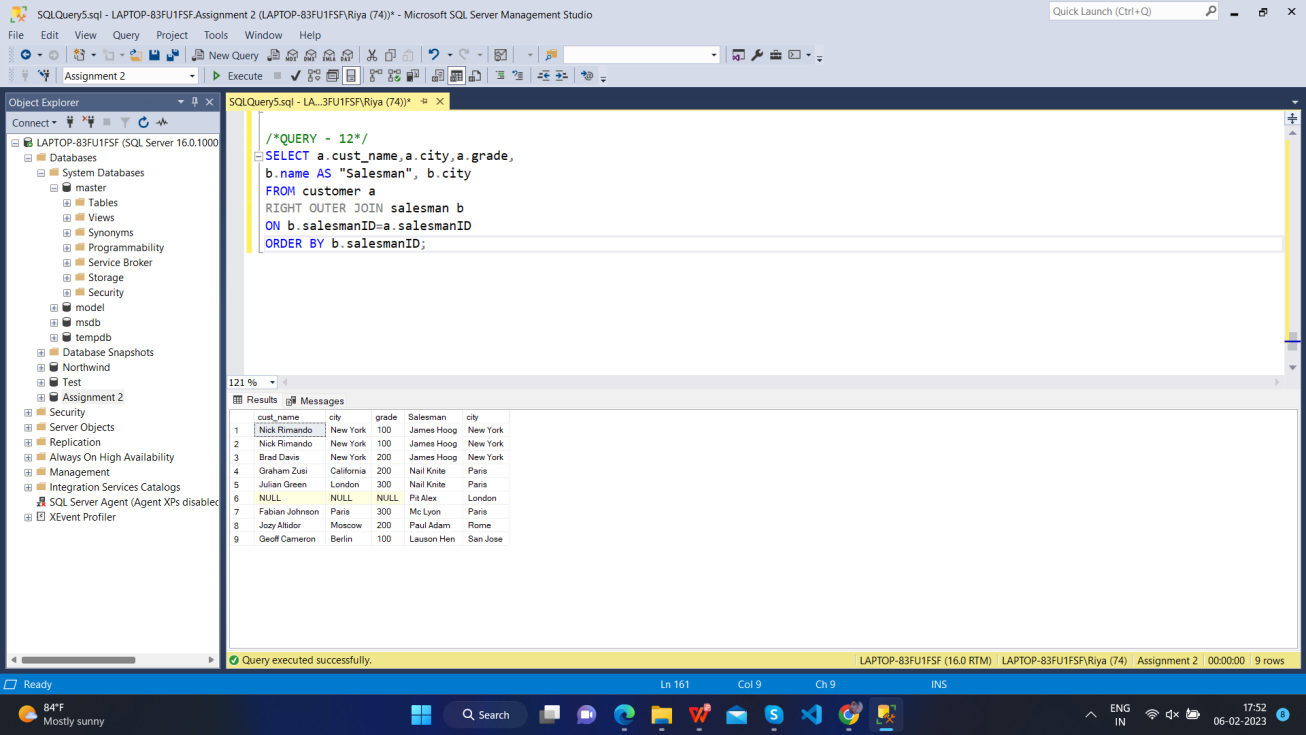
b.name AS "Salesman", b.city

FROM customer a

RIGHT OUTER JOIN salesman b

ON b.salesmanID=a.salesmanID

ORDER BY b.salesmanID;

****

**Q-13 : write a SQL query to list all salespersons along with customer name, city, grade, order number, date, and amount.**

/\*QUERY - 13\*/

SELECT a.cust\_name,a.city,a.grade,

b.name AS "Salesman",

c.ord\_no, c.ord\_date, c.purch\_amt

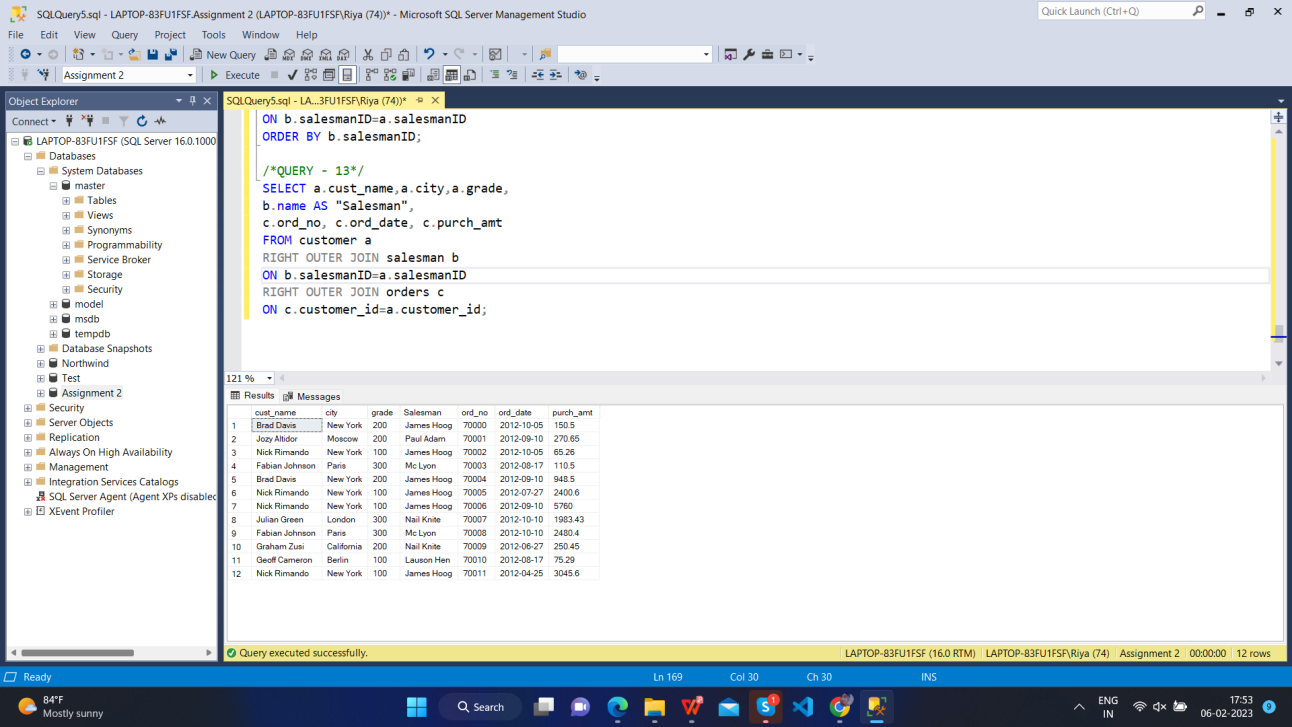
FROM customer a

RIGHT OUTER JOIN salesman b

ON b.salesmanID=a.salesmanID

RIGHT OUTER JOIN orders c

ON c.customer\_id=a.customer\_id;

****

**Q-14 :** **Write a SQL statement to make a list for the salesmen who either work for one or more customers or yet to join any of the customers. The customer may have placed,either one or more orders on or above order amount 2000 and must have a grade, or he may not have placed any order to the associated supplier.**

/\*QUERY - 14\*/

SELECT a.cust\_name,a.city,a.grade,

b.name AS "Salesman",

c.ord\_no, c.ord\_date, c.purch\_amt

FROM customer a

RIGHT OUTER JOIN salesman b

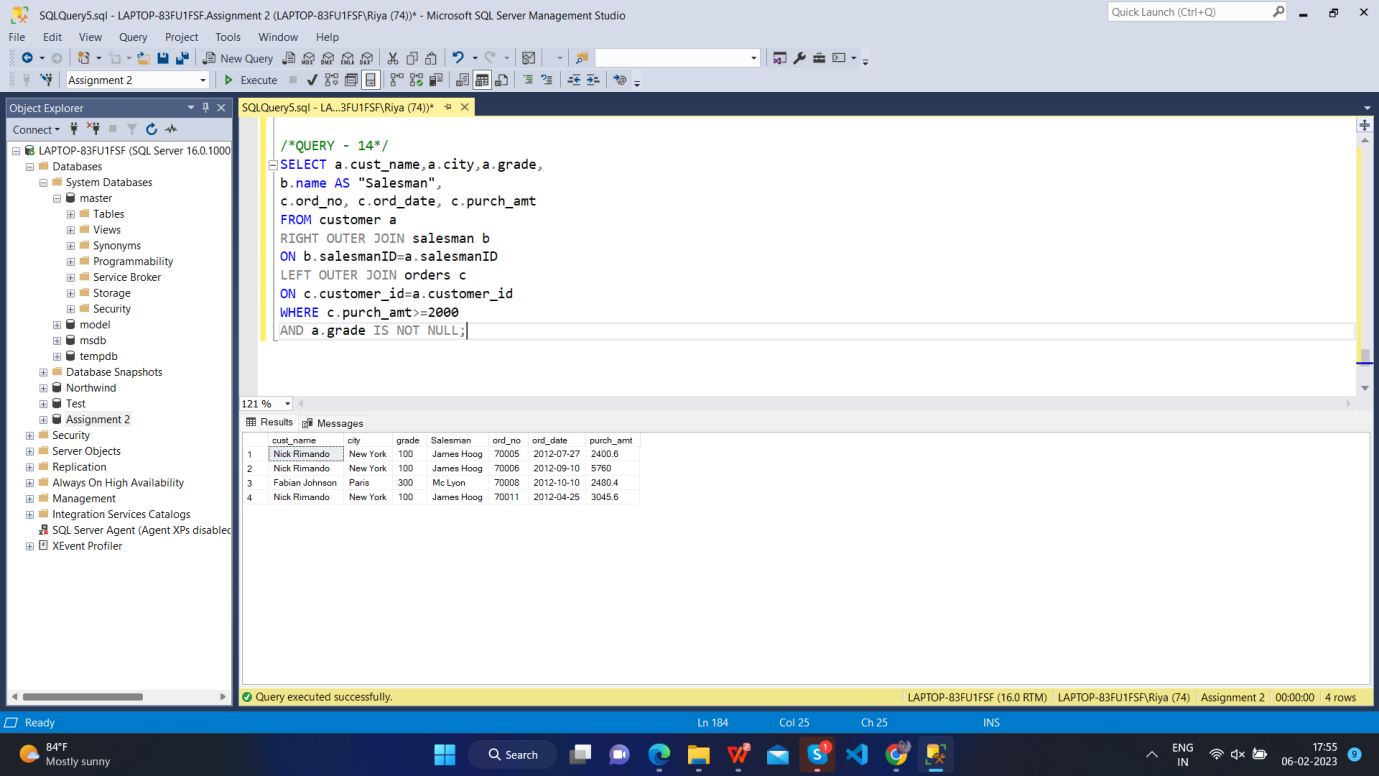
ON b.salesmanID=a.salesmanID

LEFT OUTER JOIN orders c

ON c.customer\_id=a.customer\_id

WHERE c.purch\_amt>=2000

AND a.grade IS NOT NULL;

****

**Q – 16 : Write a SQL statement to generate a report with the customer name, city, order no.order date, purchase amount for only those customers on the list who must have a grade and placed one or more orders or which order(s) have been placed by the customer who neither is on the list nor has a grade.**

/\*QUERY - 16\*/

SELECT a.cust\_name,a.city, b.ord\_no,

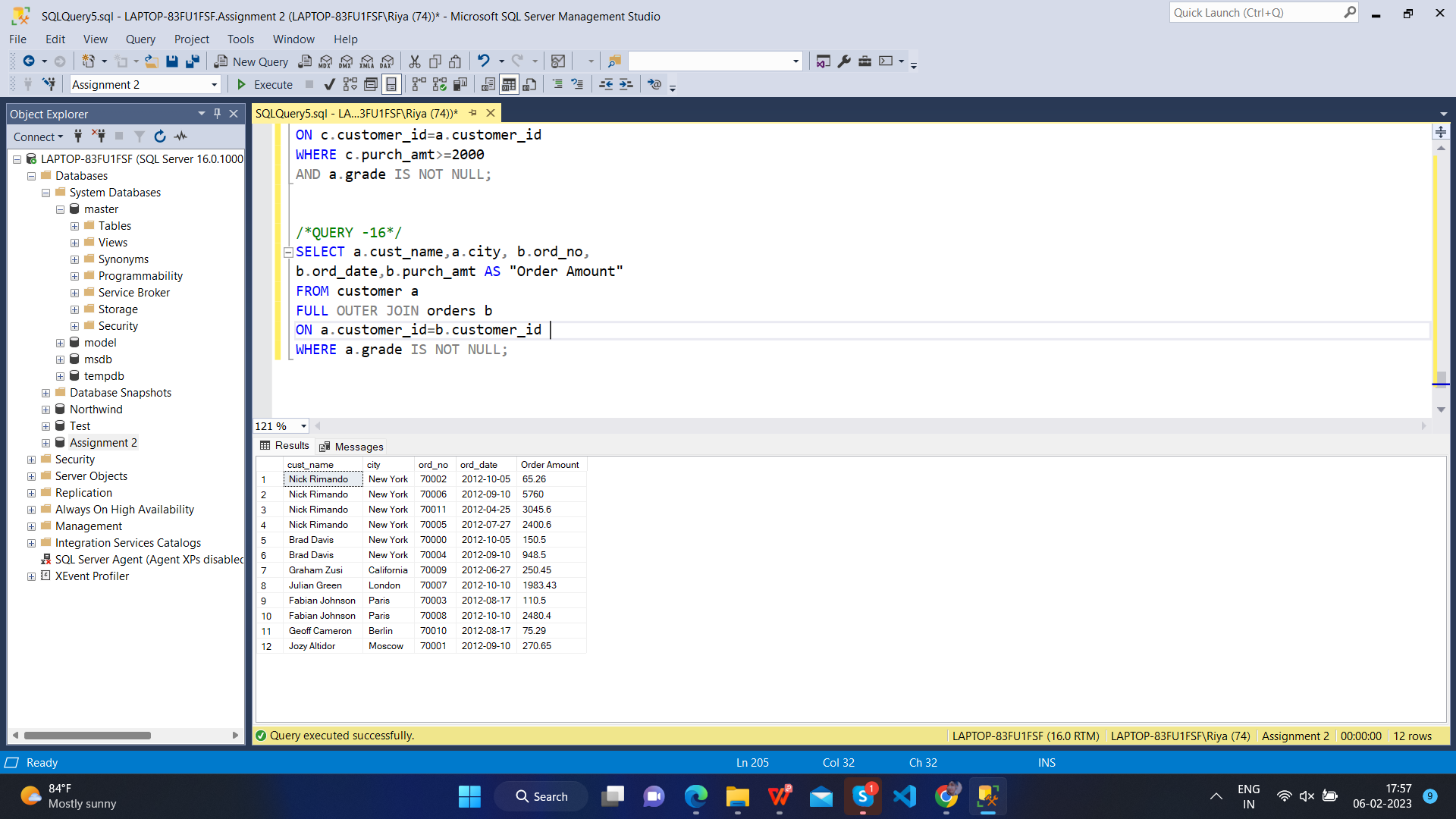
b.ord\_date,b.purch\_amt AS "Order Amount"

FROM customer a

FULL OUTER JOIN orders b

ON a.customer\_id=b.customer\_id

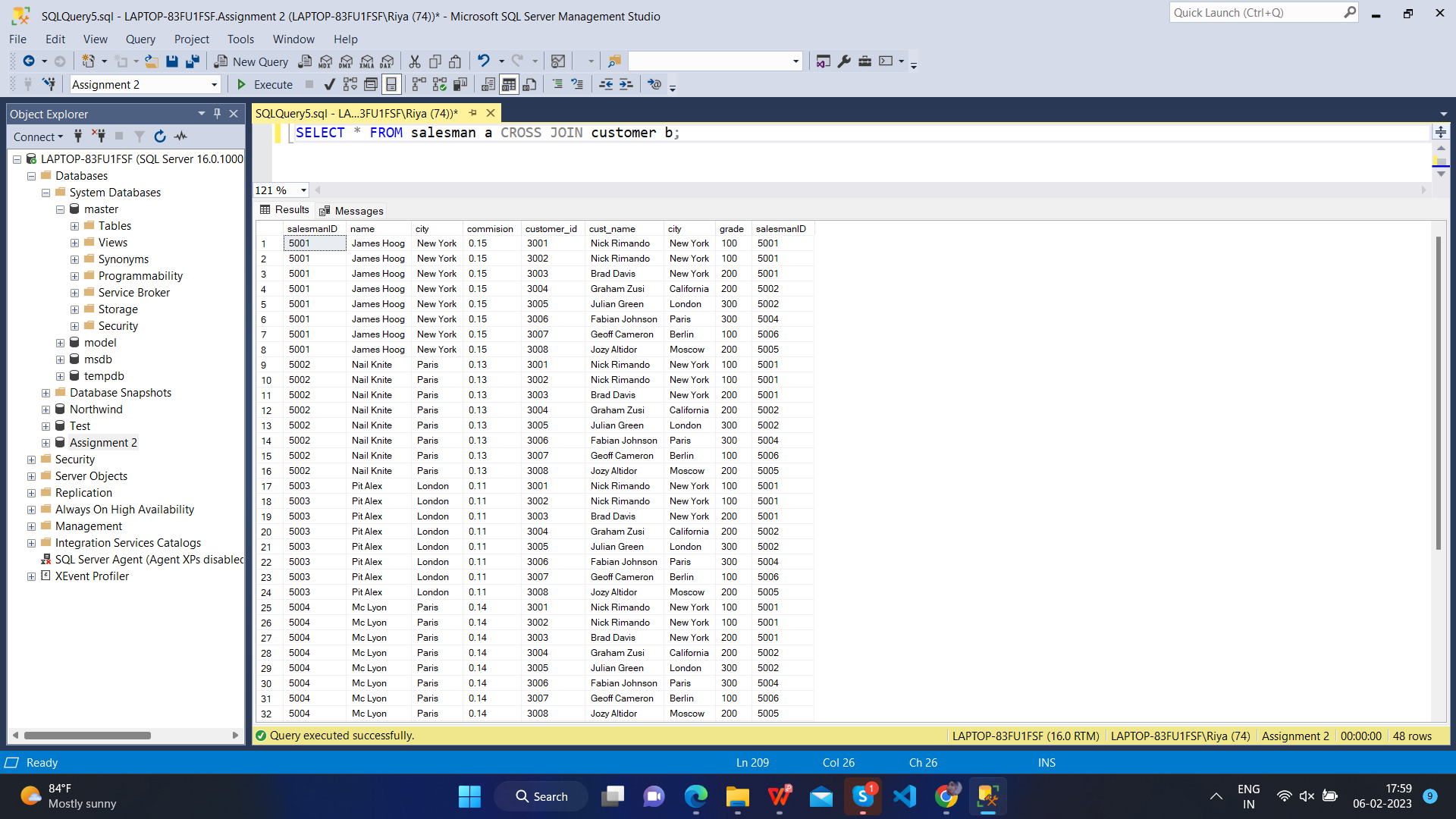
WHERE a.grade IS NOT NULL;

****

**Q – 17 : Write a SQL query to combine each row of the salesman table with each row of the customer table.**

/\*QUERY - 17\*/

SELECT \* FROM salesman a CROSS JOIN customer b;

****

**Q – 18 :**

**Write a SQL statement to create a Cartesian product between salesperson and customer, i.e. each salesperson will appear for all customers and vice versa for that salesperson who belongs to that city.**

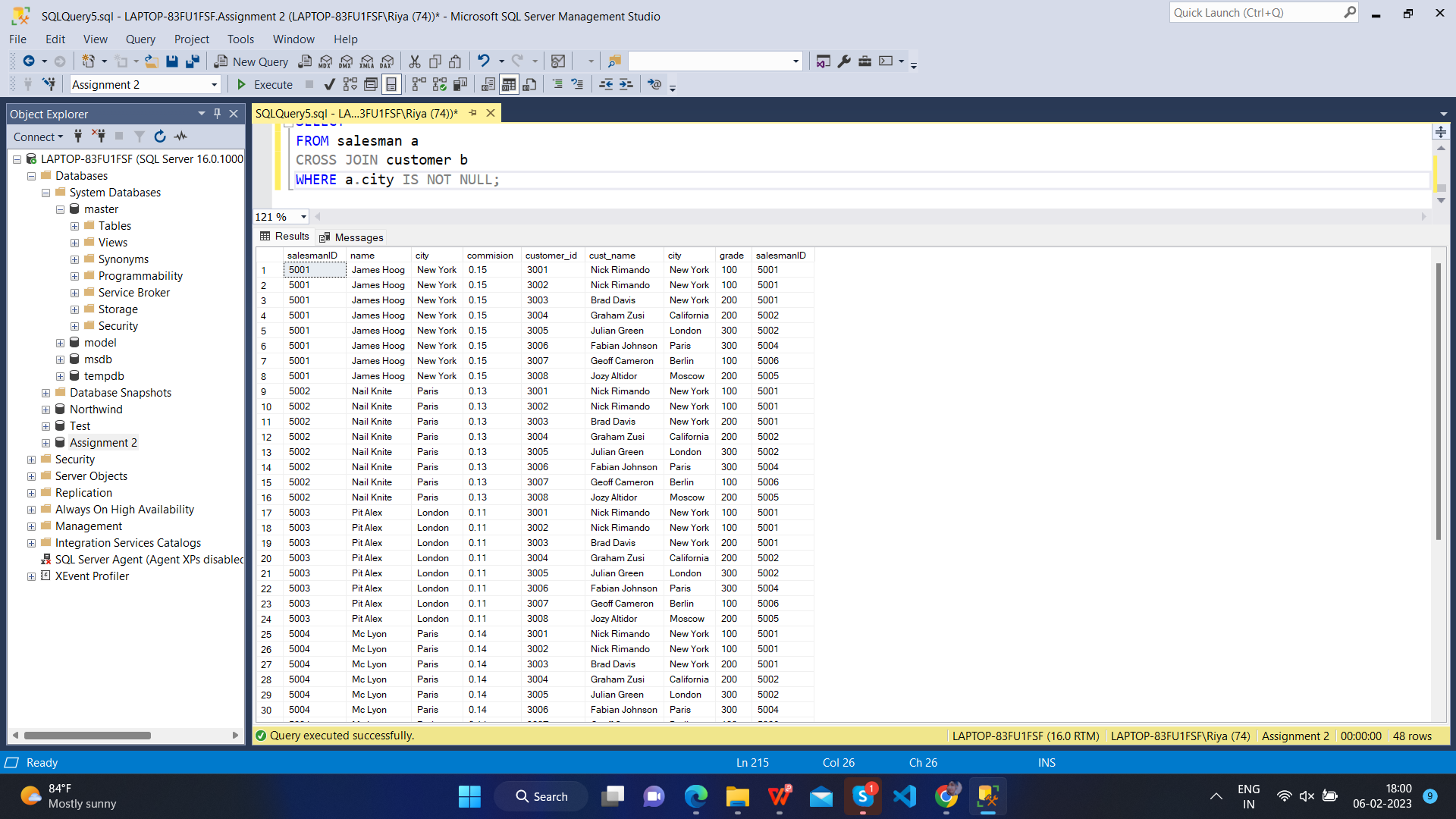
/\*QUERY - 18\*/

SELECT \*

FROM salesman a

CROSS JOIN customer b

WHERE a.city IS NOT NULL;

****

**Q – 19 :**

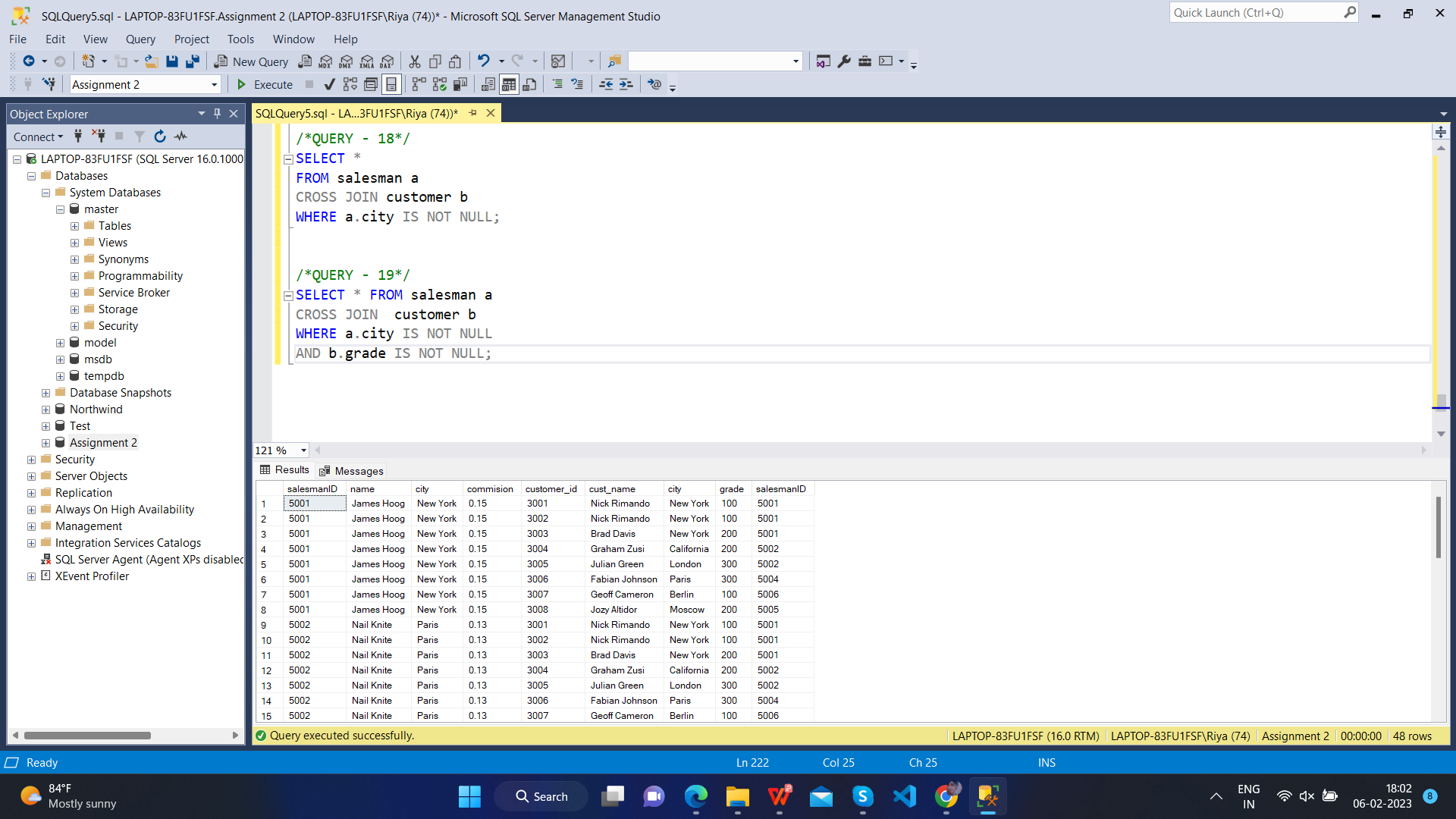
**Write a SQL statement to create a Cartesian product between salesperson and customer, i.e. each salesperson will appear for every customer and vice versa for those salesmen who belong to a city and customers who require a grade.**

/\*QUERY - 19\*/

SELECT \* FROM salesman a

CROSS JOIN customer b

WHERE a.city IS NOT NULL

AND b.grade IS NOT NULL;****

**Q – 20 :** **Write a SQL statement to make a Cartesian product between salesman and customer i.e. each salesman will appear for all customers and vice versa for those salesmen who must belong to a city which is not the same as his customer and the customers should have their own grade.**

/\*QUERY - 20\*/

SELECT \*

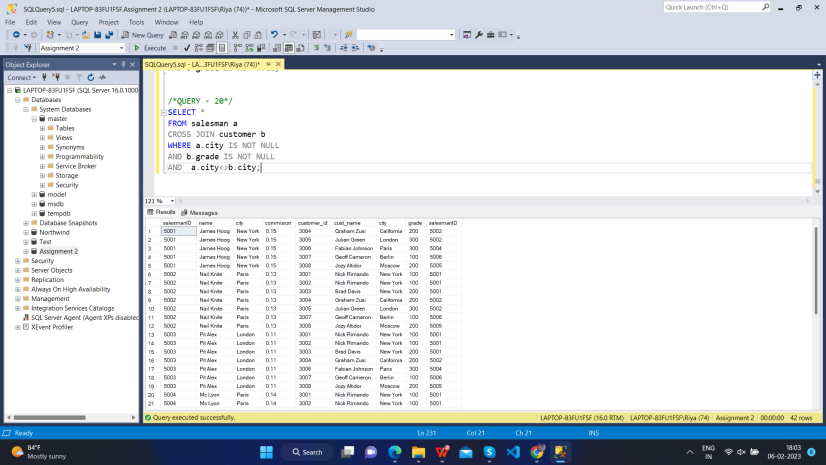
FROM salesman a

CROSS JOIN customer b

WHERE a.city IS NOT NULL

AND b.grade IS NOT NULL

AND a.city<>b.city;

****