**CREATE AND DEPLOY AZURE SQL DB**

**CREATE TABLES**

**- CUSTOMER**

CREATE TABLE Customers (

 CustomerID INT PRIMARY KEY,

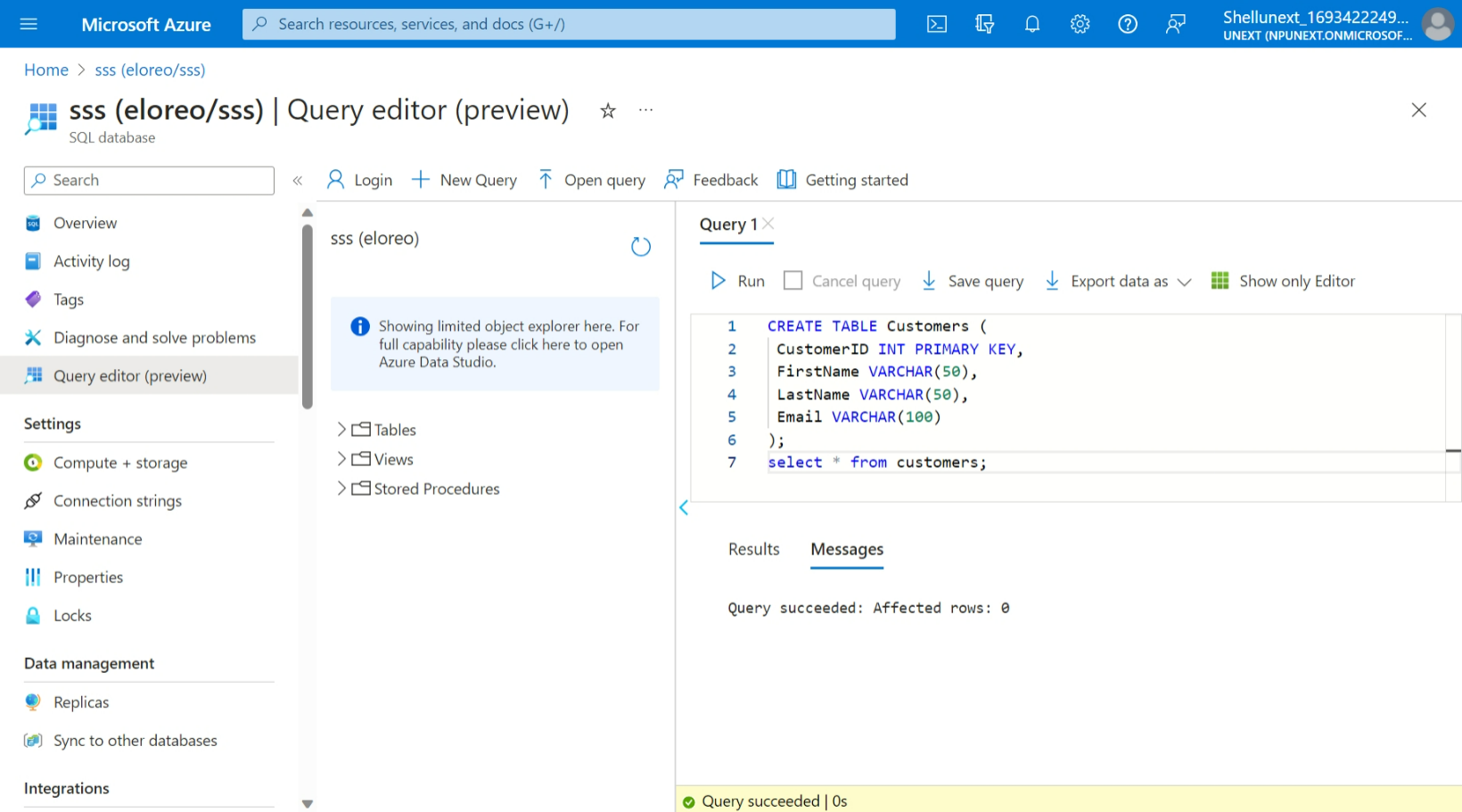
 FirstName VARCHAR(50),

 LastName VARCHAR(50),

 Email VARCHAR(100)

);

select \* from customers;

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* **ORDERS:**

CREATE TABLE Orders (

OrderID INT PRIMARY KEY,

CustomerID INT,

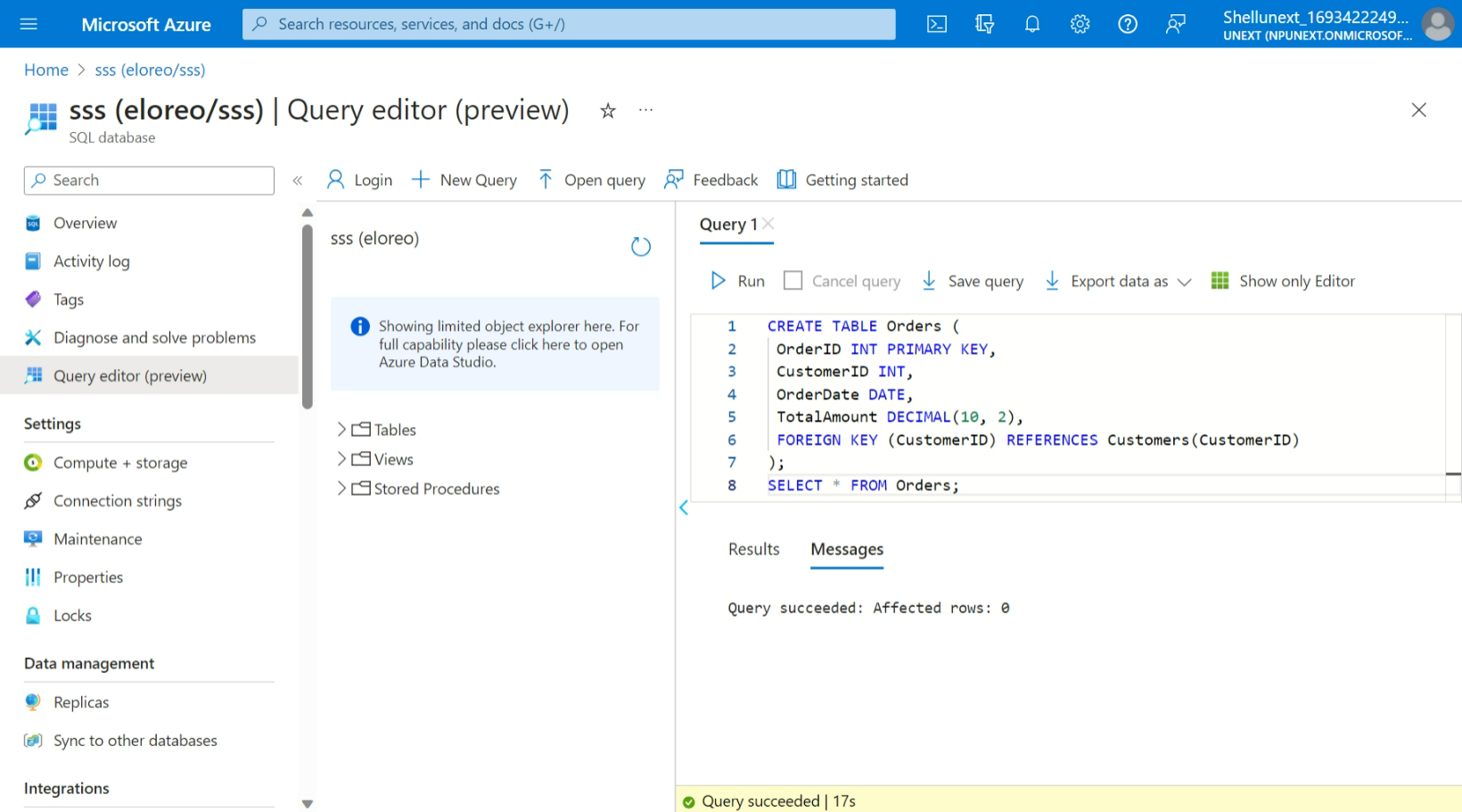
OrderDate DATE,

TotalAmount DECIMAL(10, 2),

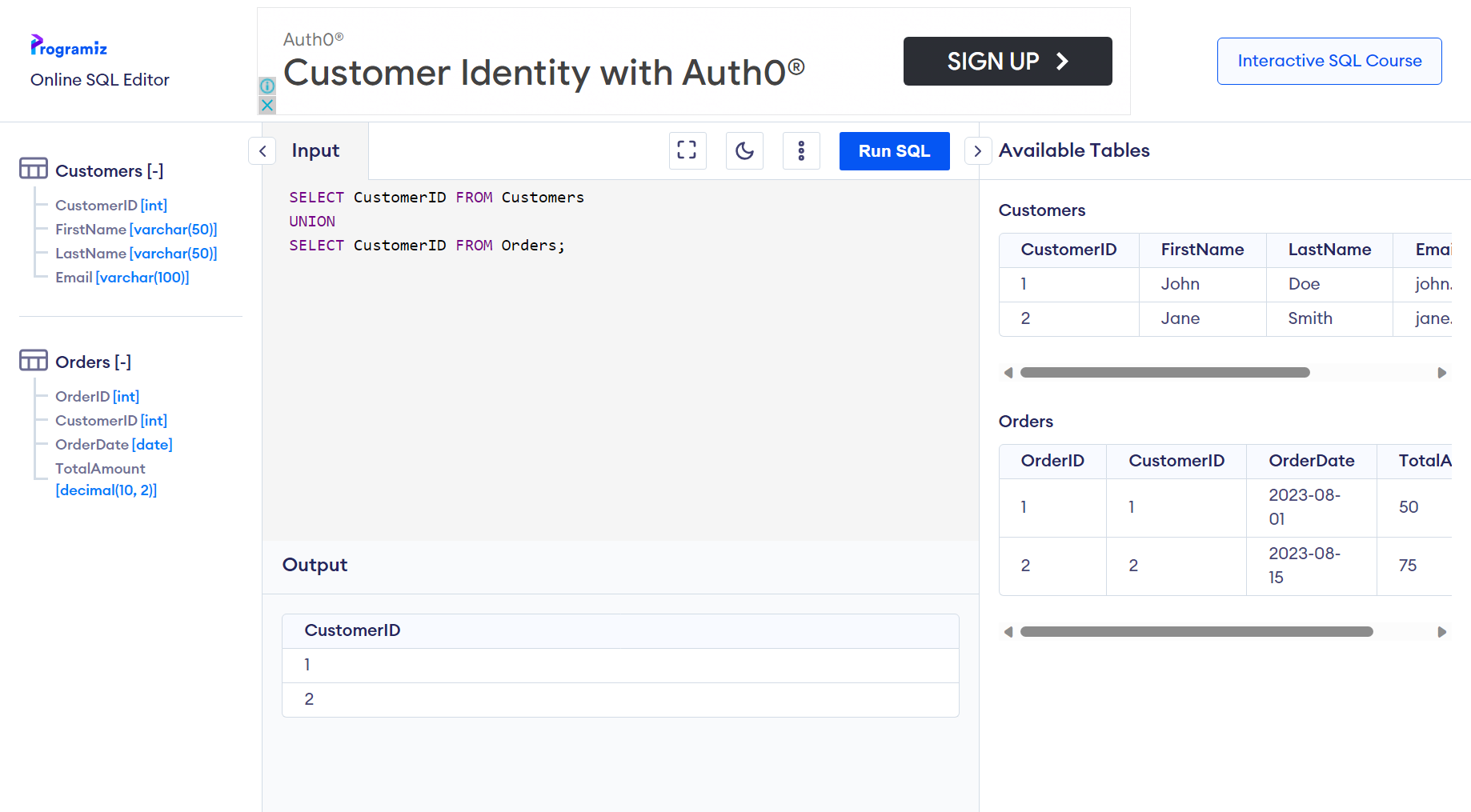
FOREIGN KEY (CustomerID) REFERENCES Customers(CustomerID)

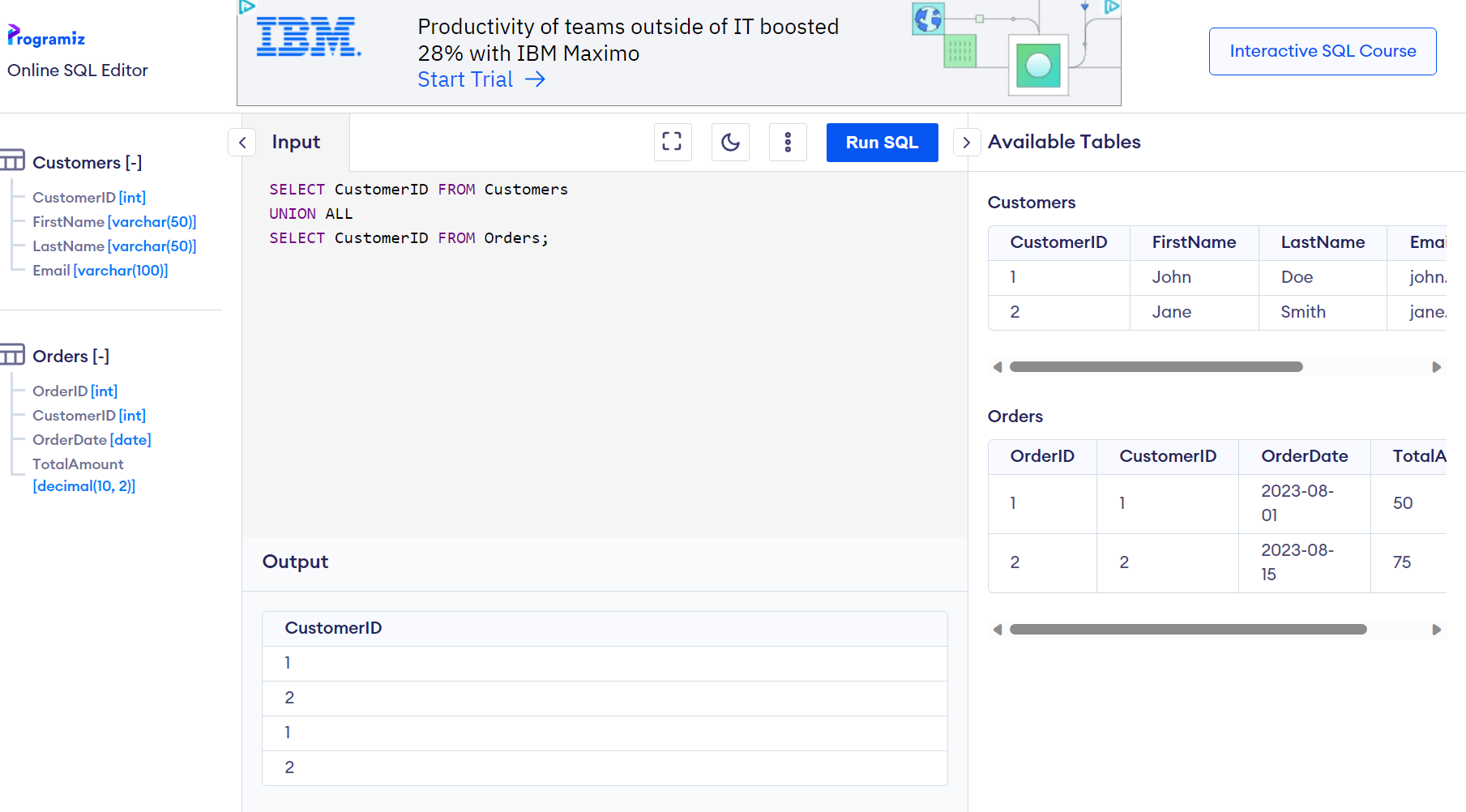
);

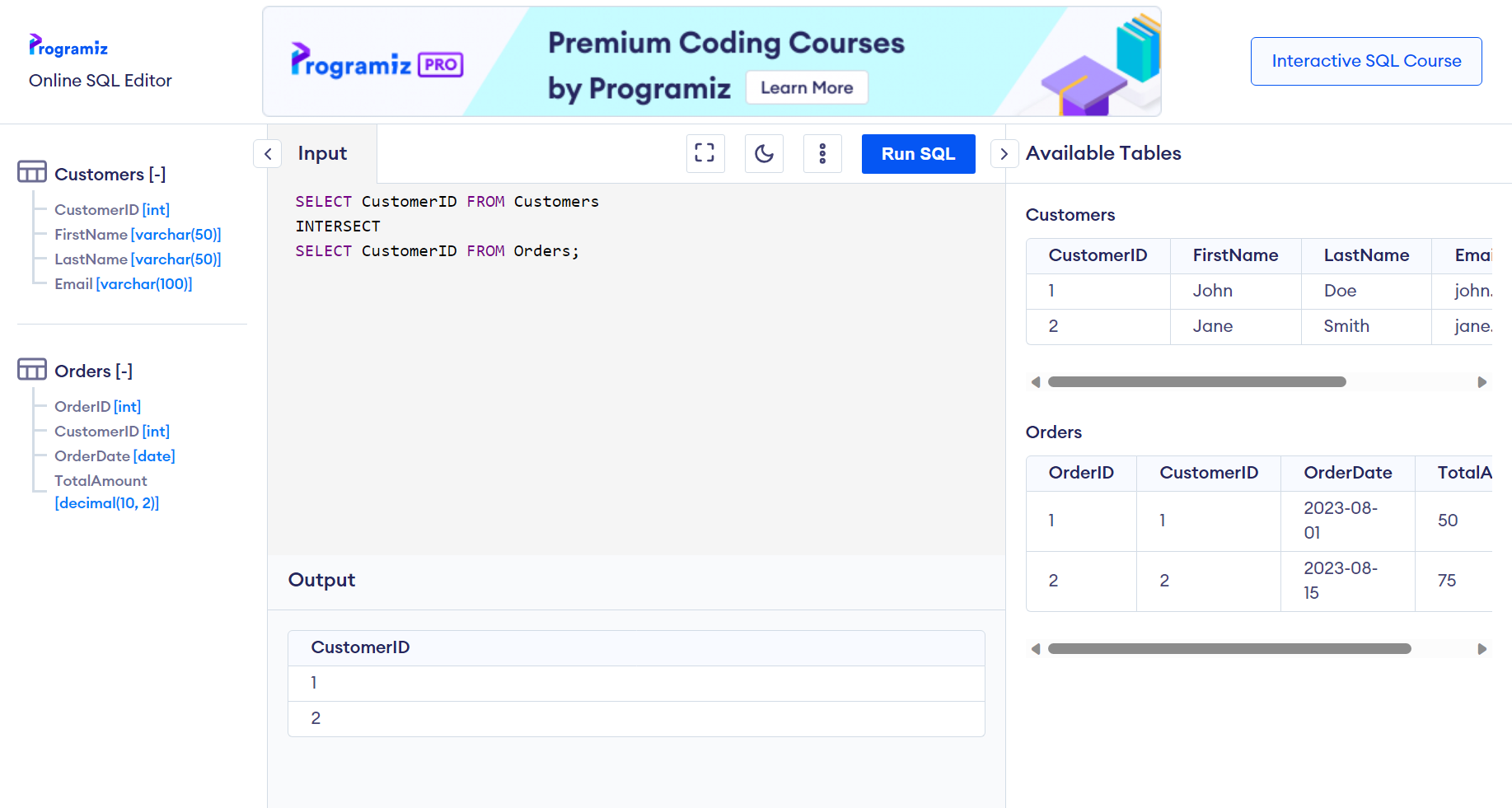
SELECT \* FROM Orders;

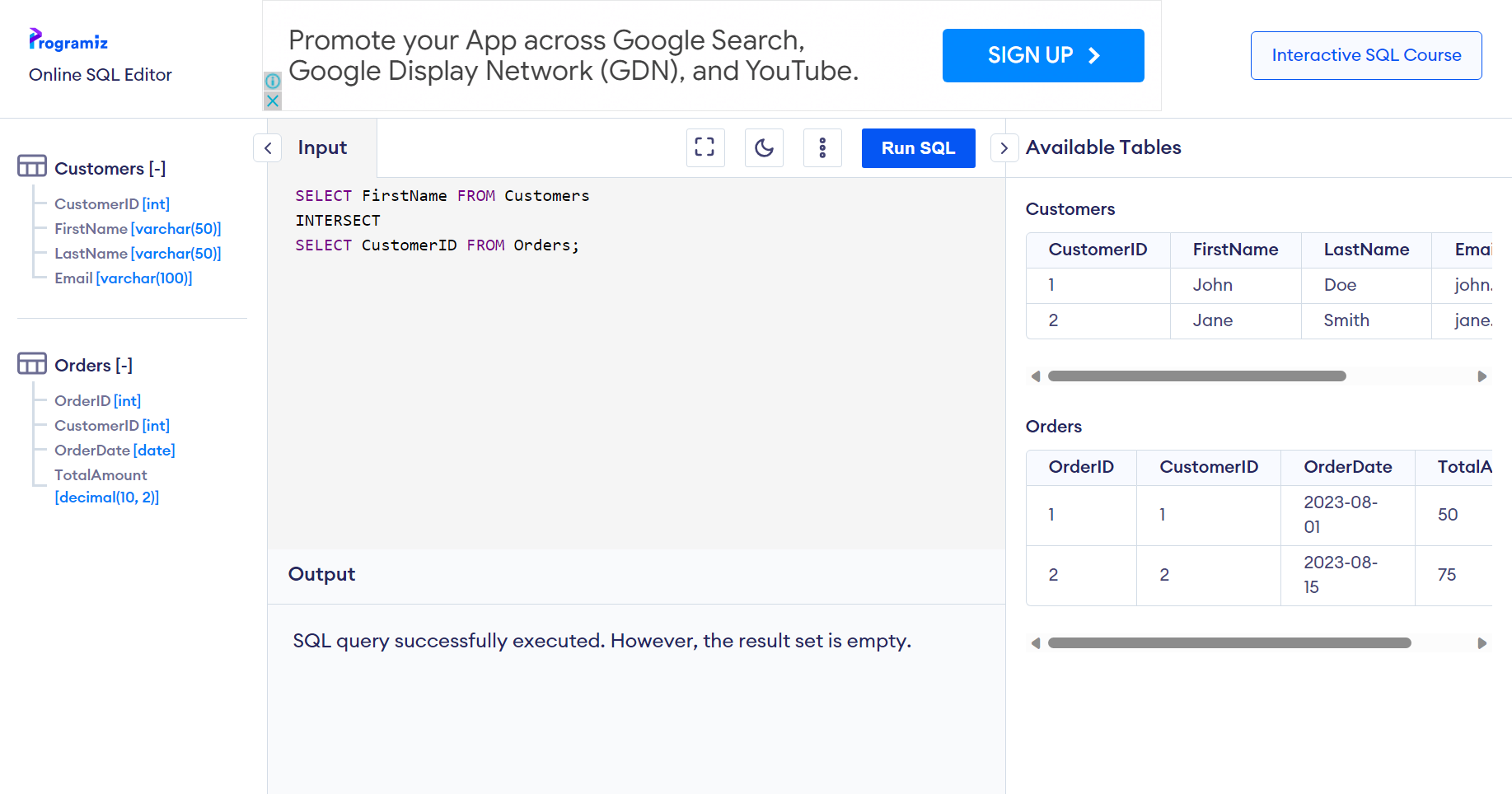
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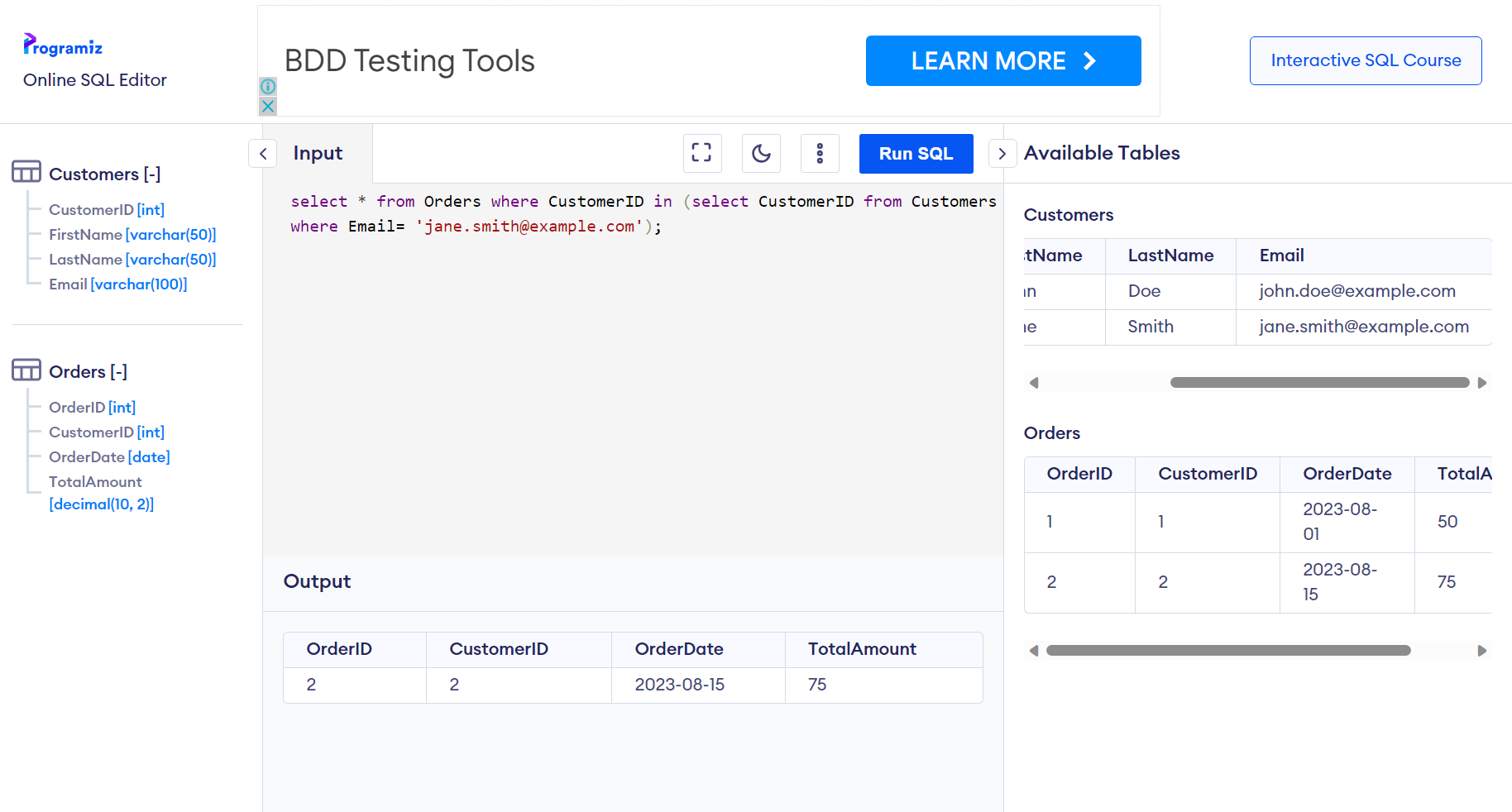
**UNION:**

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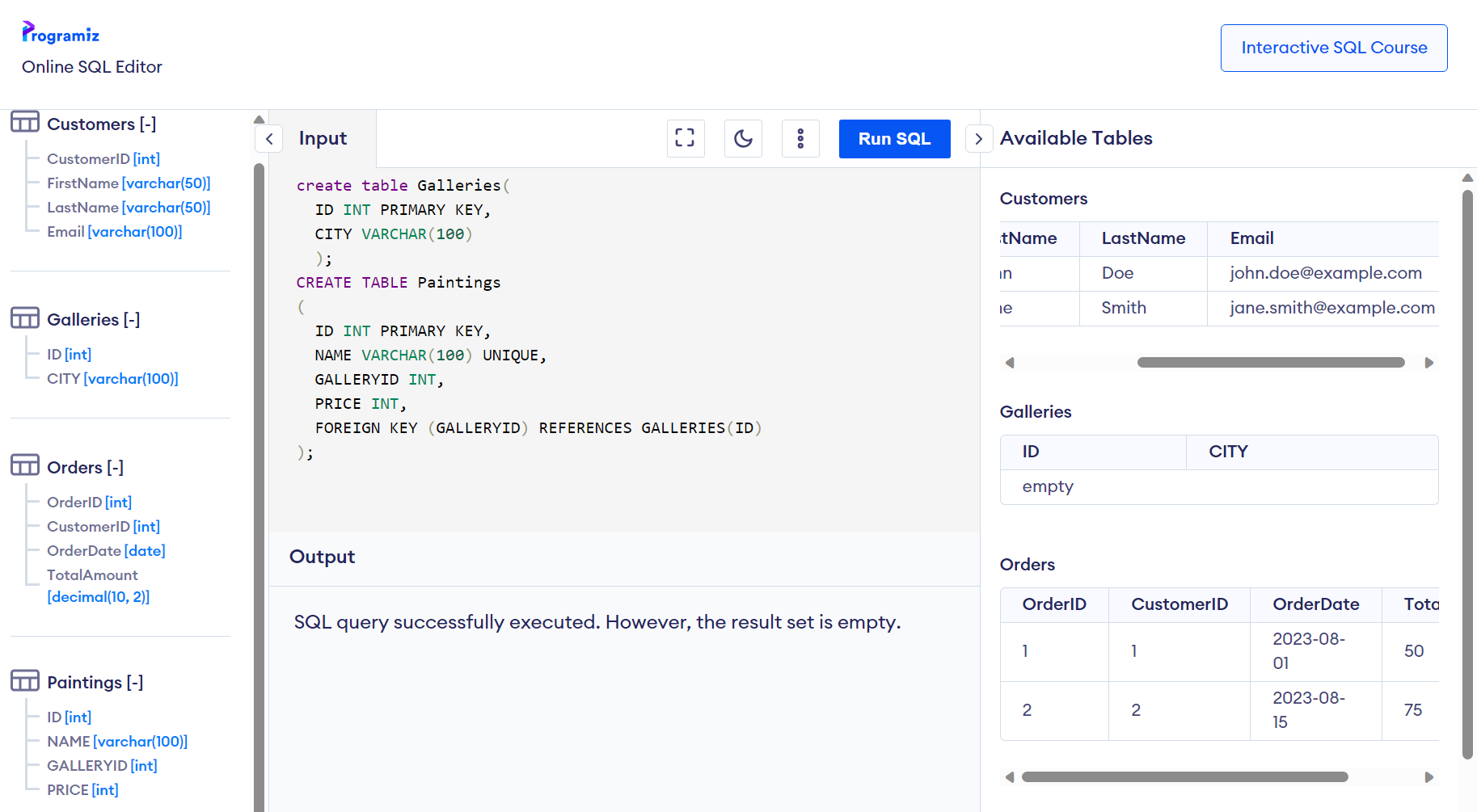
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**ADDITIONAL ASSIGNMENT:**

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**create table Galleries(**

**ID INT PRIMARY KEY,**

**CITY VARCHAR(100)**

**);**

**CREATE TABLE Paintings**

**(**

**ID INT PRIMARY KEY,**

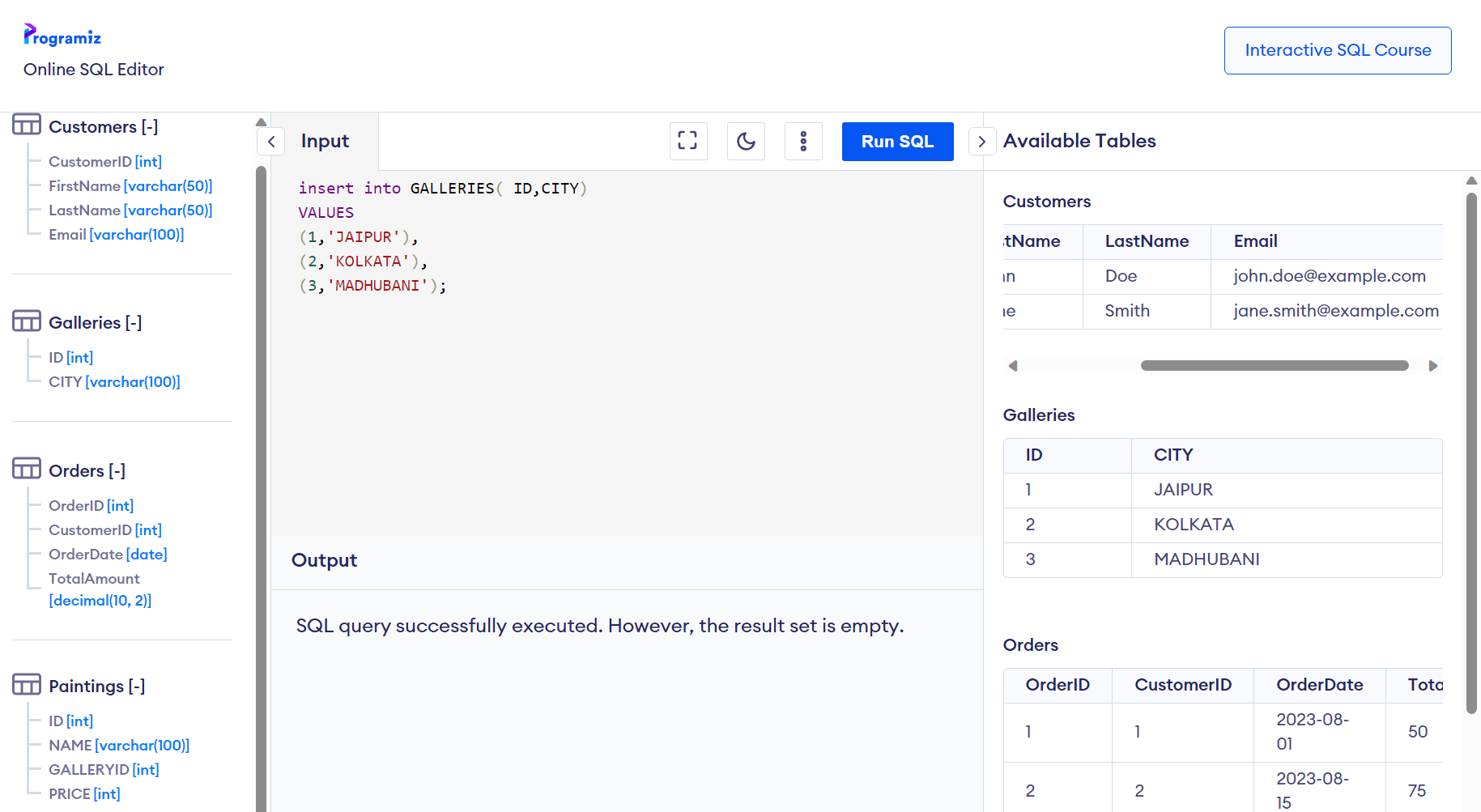
**NAME VARCHAR(100) UNIQUE,**

**GALLERYID INT,**

**PRICE INT,**

**FOREIGN KEY (GALLERYID) REFERENCES GALLERIES(ID)**

**);**

****

**insert into PAINTINGS( ID,NAME,GALLERYID,PRICE)**

**VALUES**

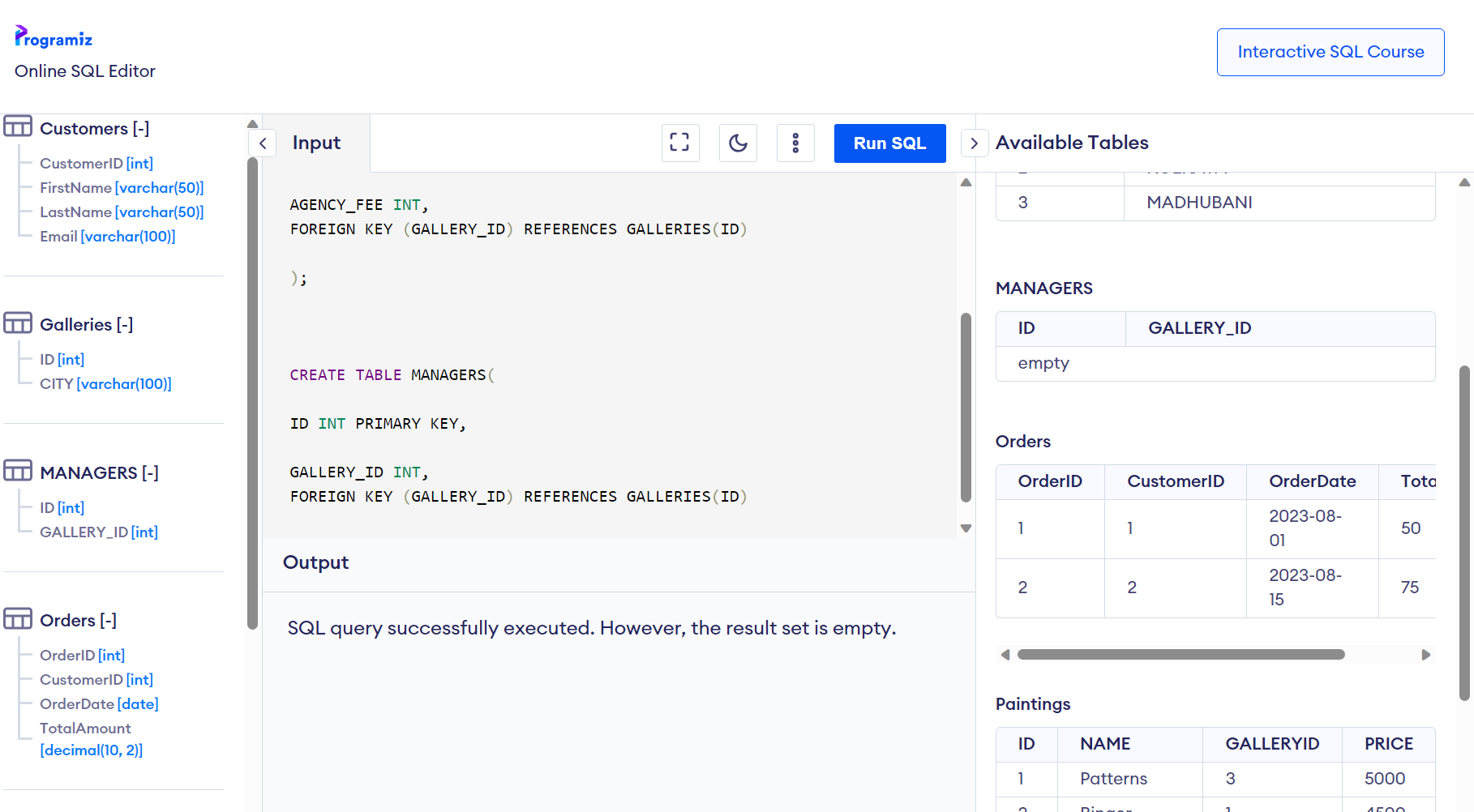
**(1,'Patterns',3,5000),**

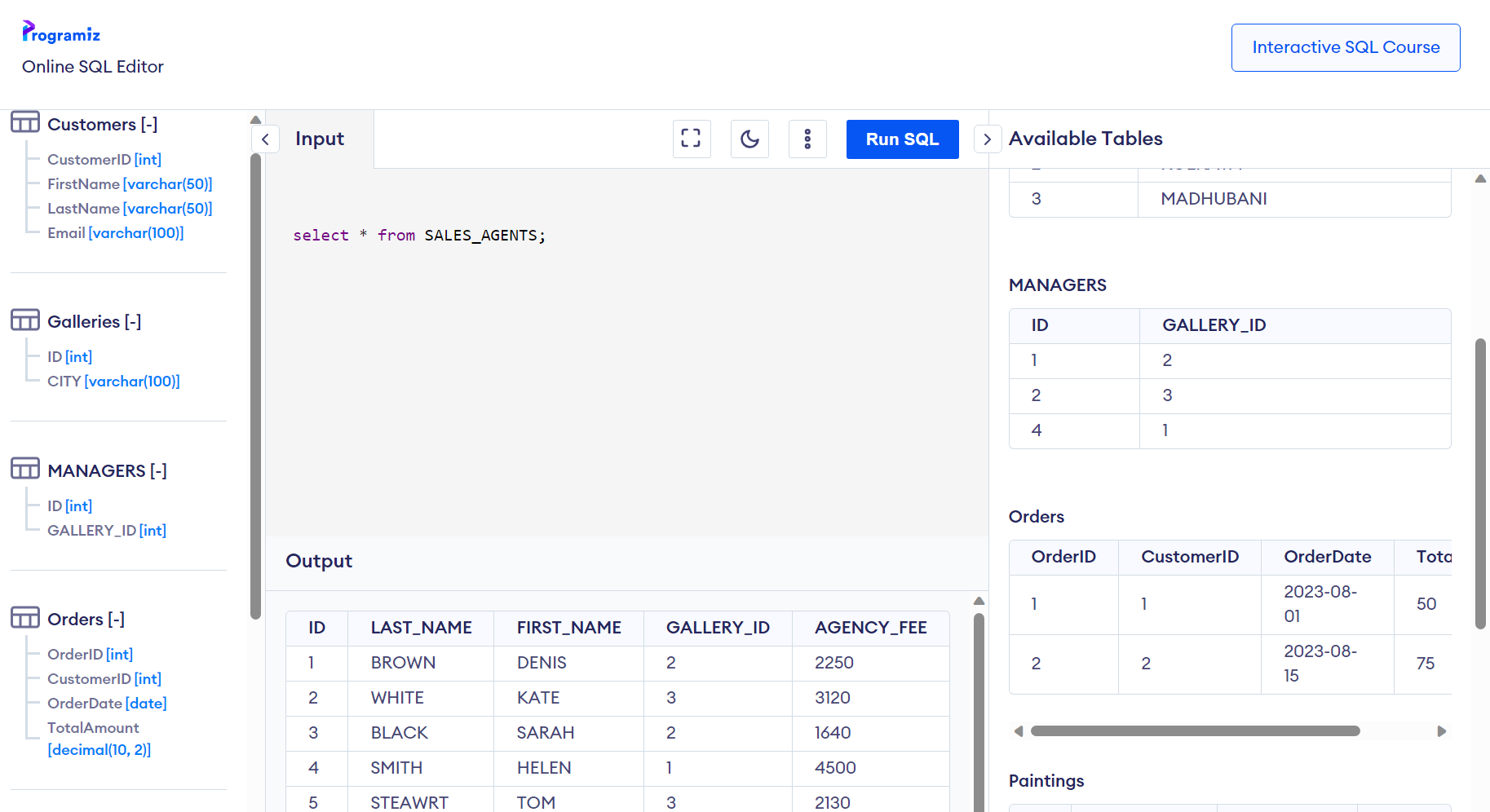
**(2,'Ringer',1,4500),**

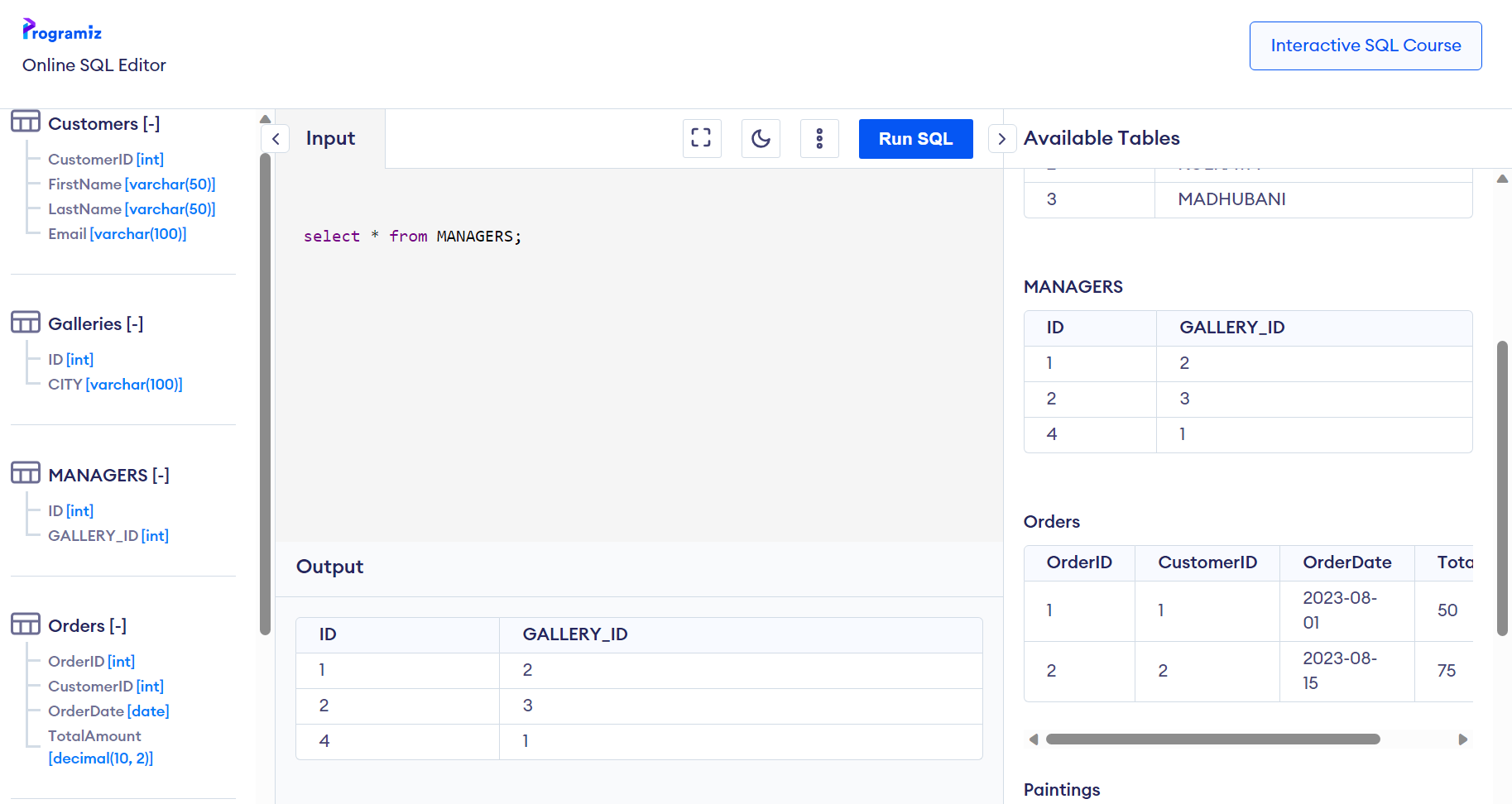
**(3,'Gift',1,3200),**

**(4,'Violin Lessons',2,6700),**

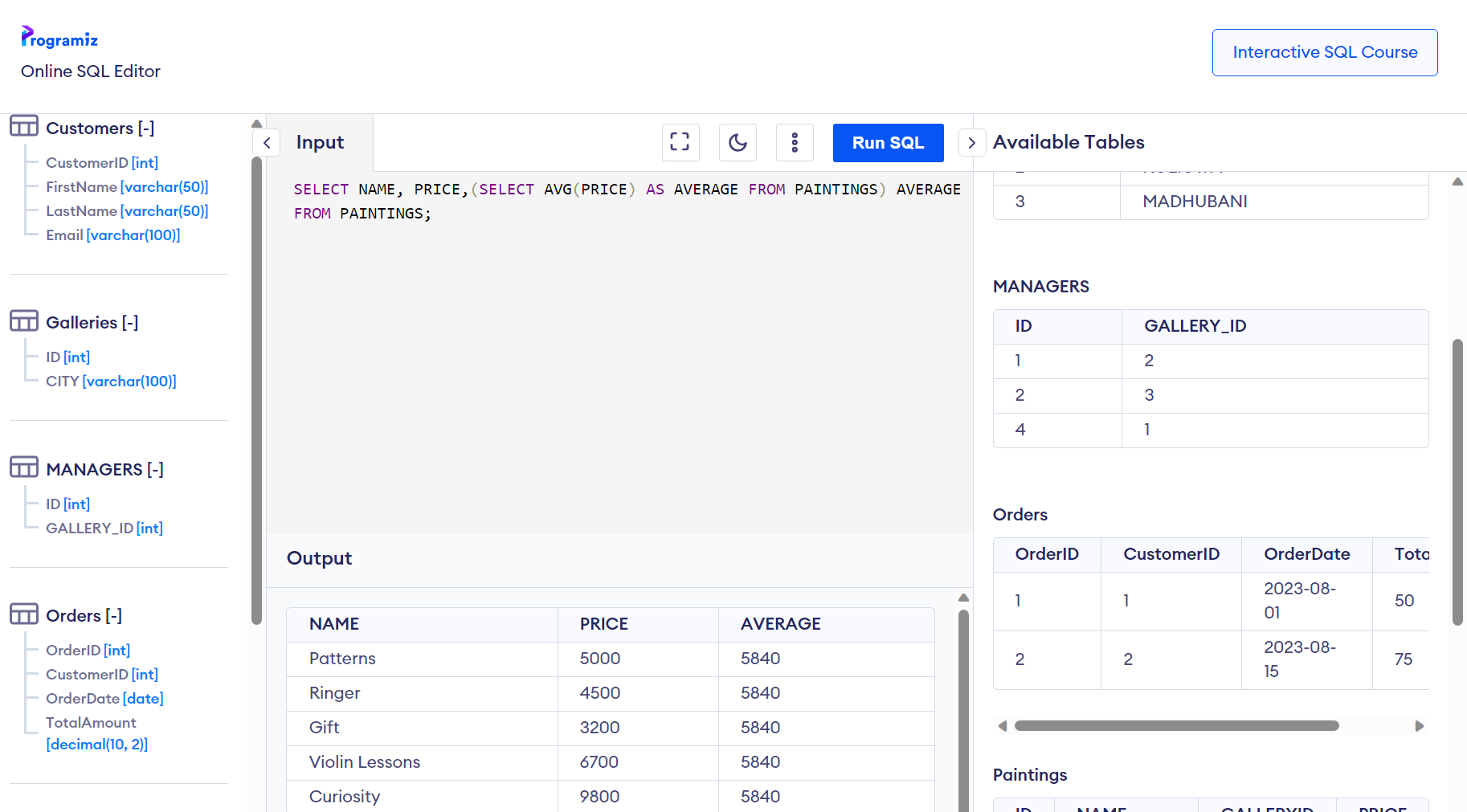
**(5,'Curiosity',2,9800);**

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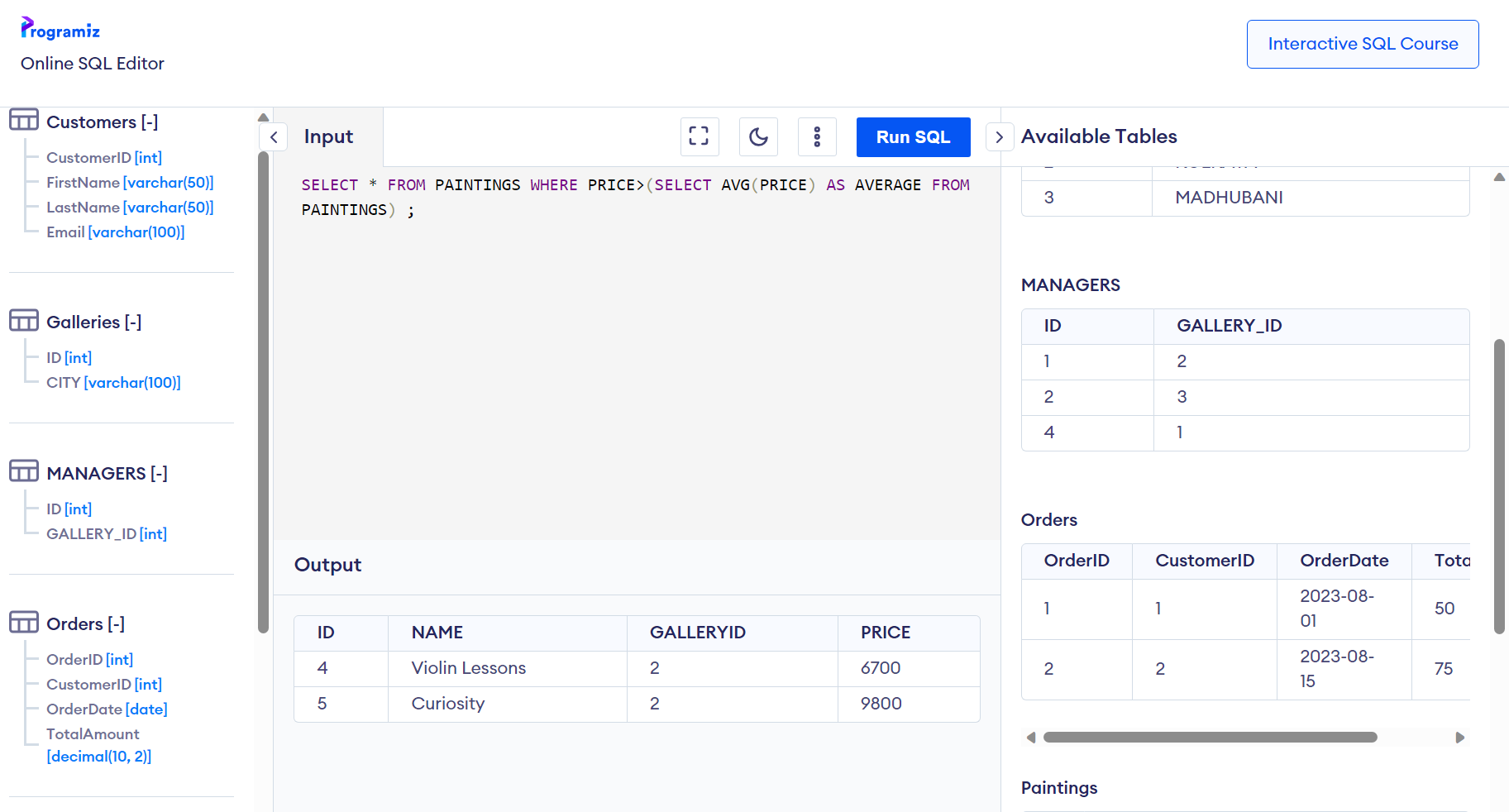
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**SELECT NAME, PRICE,(SELECT AVG(PRICE) AS AVERAGE FROM PAINTINGS) AVERAGE FROM PAINTINGS;**

****

**SELECT \* FROM PAINTINGS WHERE PRICE>(SELECT AVG(PRICE) AS AVERAGE FROM PAINTINGS) ;**

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MULTIPLE COLUMN SUBQUERIES:

SELECT ID,NAME,PRICE FROM PAINTINGS TABLE WHERE NAME AND PRICE ARE THE MINIUM PRICE:

SELECT ID,NAME,PRICE FROM PAINTINGS WHERE (NAME,PRICE) IN ( SELECT NAME,MIN(PRICE) FROM PAINTINGS);

(THE ABOVE QUERY WORKS IN OTHER SERVERS)

(FOR AZURE SQL QUERY TO BE WRITTEN IS: )

SELECT ID,NAME,PRICE FROM PAINTINGS WHERE CONCAT(NAME,PRICE) IN ( SELECT CONCAT(NAME,MIN(PRICE)) FROM PAINTINGS GROUP BY NAME)

CO-RELATED SUBQUERIES:

SUBQUERIES THAT RETURN MULTIPLE COLUMNS AS OUTPUT DEPENDING UPON THE INFO OBTAINED FROM THE PARENT QUERY

QUERY WHERE WE HAVE A COUNT OF PAINTING AND CITY NAMES:

SELECT CITY,(SELECT COUNT(\*) FROM PAINTINGS P WHERE G.ID = P.GALLERY\_ID) COUNT\_PAINTINGS FROM GALLERIES G;

FIND OUT THE INFO OF THOSE SALES AGENT WHOSE AGENCY FEES IS GERATER THAN OR EQUAL TO THE AGENCY FEES OF THERE GALLERY

SELECT FIRST\_NAME, LAST\_NAME,AGENCY\_FEE FROM SALES\_AGENTS SA1 WHERE SA1.AGENCY\_FEE >= (SELECT AVG(AGENCY\_FEE) FROM SALES\_AGENTS SA2 WHERE SA2.GALLERY\_ID = SA1.GALLERY\_ID);

Views:

CREATE VIEW VW\_PAINTINGPRICE AS

SELECT NAME AS PAINTING,PRICE,(SELECT AVG(PRICE) FROM PAINTINGS WHERE PRICE IN

(SELECT PRICE FROM PAINTINGS WHERE PRICE>=5000)) AS AVG\_PRICE FROM PAINTINGS;

SELECT \* FROM VW\_PAINTINGPRICE;

Upload this file having set of insert statements to your azure sql db after create table:

create table Sales\_Order\_data(

channel varchar(50) NOT NULL,

sales\_order\_line\_key numeric NOT NULL,

sales\_order varchar(50) NOT NULL,

sales\_order\_line varchar(50) NOT NULL

);

And then upload the text script having all the insert queries and run:

SELECT \* FROM [DBO].[SALES\_ORDER\_DATA] WHERE SALES\_ORDER = ‘43659001’

INDEXES:

(FROM PDF)

CREATE TABLE PRODUCTS(

PID INT,

PNAME VARCHAR(100),

CATEGORY VARCHAR(50),

PRICE DECIMAL(10,2),

STOCKQUANTITY INT

);

INSERT INTO PRODUCTS(PID, PNAME, CATEGORY, PRICE, STOCKQUANTITY)

VALUES

(1,'PRODUCT A','ELECTRONICS',499.99,100),

(2,'PRODUCT B','CLOTHING',39.99,250),

(3,'PRODUCT C','ELECTRONICS',899.99,50)

SELECT \* FROM PRODUCTS;

/\* CLUSTERED INDEX\*/

CREATE CLUSTERED INDEX IX\_PRODUCTID ON PRODUCTS(PRODUCTID);

/\* NON CLUSTERED INDEX\*/

CREATE NONCLUSTERED INDEX IX\_PRODUCTID ON PRODUCTS(CATEGORY);

/\* COLUMNSTORE INDEX\*/

CREATE NONCLUSTERED COLUMNSTORE INDEX CS\_PRICE ON PRODUCTS (PRICE);