
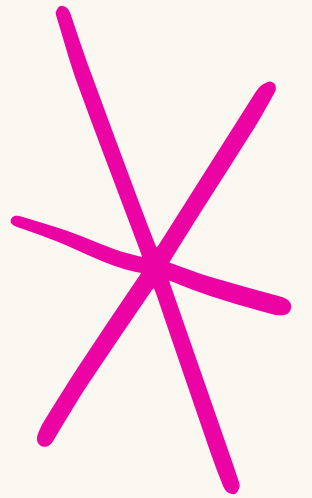


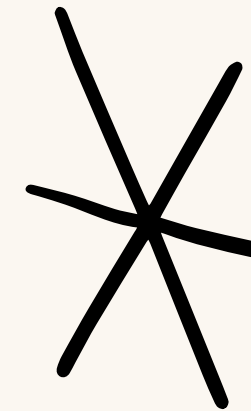
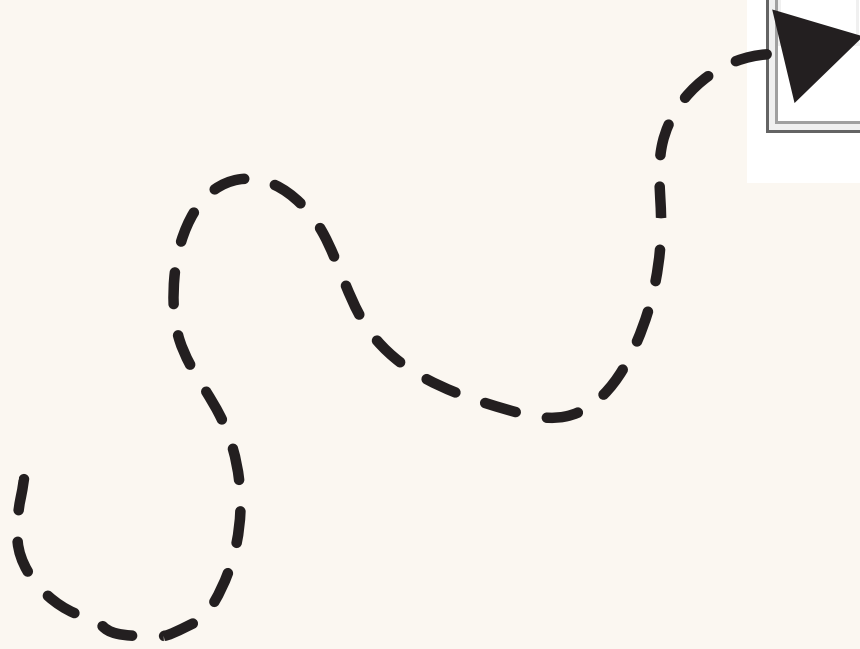
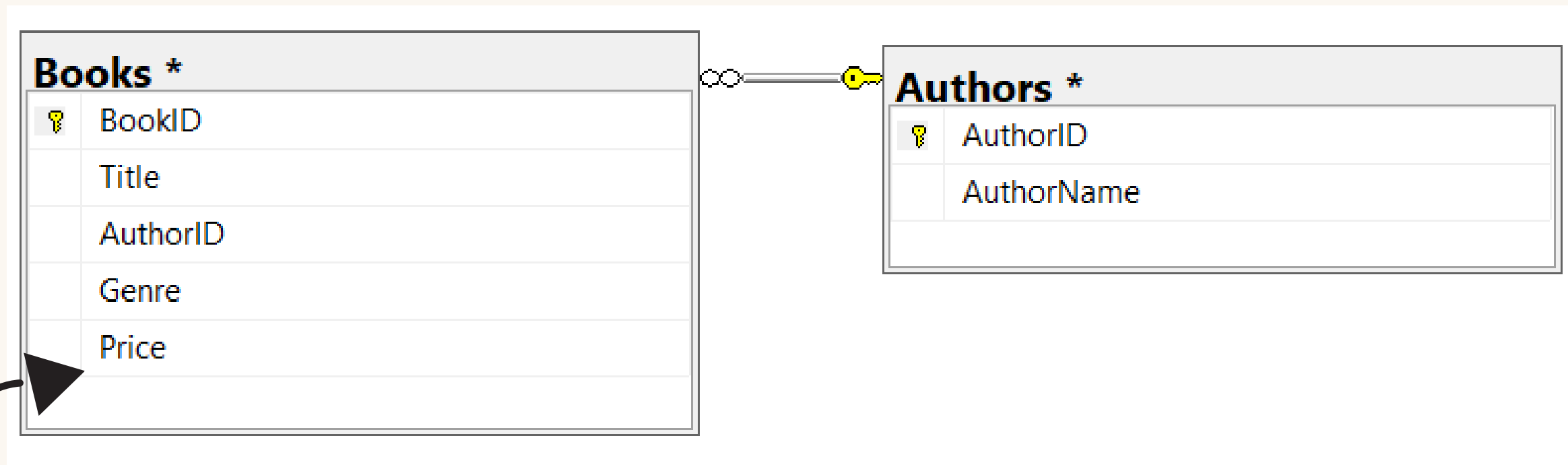
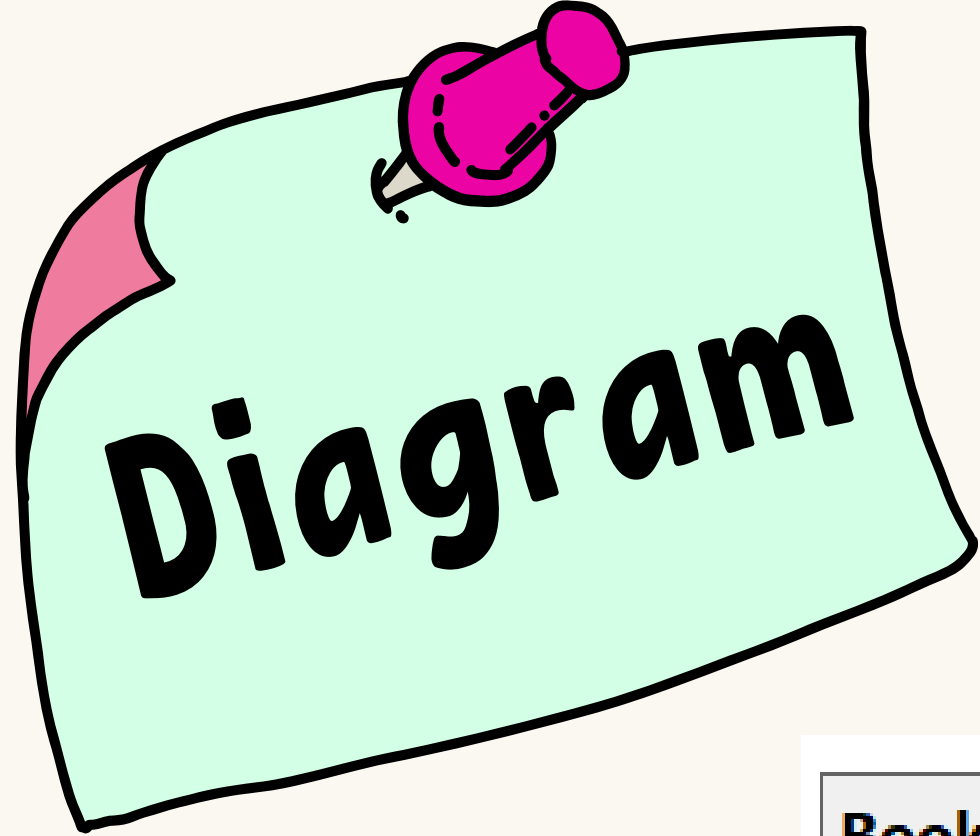
By Kareem Shaaban



SQL

THIRD WEEK ASSIGNMENT WITH TDI





1 List the titles of books along with their authors.

Query

```
select  
    Title,  
    AuthorName  
from Authors as a inner join Books as b  
on a.AuthorID = b.AuthorID;
```

Output

Results			Messages		
	Title	AuthorName			
1	The Great Gatsby	F. Scott Fitzgerald			
2	To Kill a Mockingbird	Harper Lee			
3	1984	George Orwell			
4	Pride and Prejudice	Jane Austen			

MS SQL server view

2 Show the titles and prices of all fantasy books.

Query

```
select
    Title,
    round(Price,2) as Price
from Books
where Genre = 'fantasy'
```

Output

Results			Messages		
	Title	Price			
1	Harry Potter and the Sorcerer's Stone	19.99			
2	The Hobbit	14.5			
3	A Game of Thrones	17.99			

MS SQL server view

3 Find the titles and genres of books priced less than **\$15.**

Query

```
select  
    Title,  
    Genre  
from Books  
where Price > 15
```

Output

Results Messages		
	Title	Genre
1	The Great Gatsby	Fiction
2	Harry Potter and the Sorcerer's Stone	Fantasy
3	A Game of Thrones	Fantasy

MS SQL server view

4 List all books and their authors. If a book doesn't have an author, display "Unknown".

Query

```
select
    Title,
    case
        when AuthorName is null then 'Unknown'
        else AuthorName end as AutherName
from Authors as a full outer join Books as b
on a.AuthorID = b.AuthorID;
```

Output

Results Messages		
	Title	AutherName
1	The Great Gatsby	F. Scott Fitzgerald
2	To Kill a Mockingbird	Harper Lee
3	1984	George Orwell
4	Pride and Prejudice	Jane Austen
5	The Catcher in the Rye	Unknown
6	Harry Potter and the Sorcerer's Stone	Unknown
7	The Hobbit	Unknown
8	A Game of Thrones	Unknown

MS SQL server view

5 Show the titles and prices of all books. If a book doesn't have a price, display "Price not available".

Query

```
select
  Title,
  case
    when AuthorName is null then 'Unknown'
    else AuthorName end as AuthorName ,
  case
    when Price is null then 'Price not available'
    else round(Price,2) end as Price
from Authors as a full outer join Books as b
on a.AuthorID = b.AuthorID;
```

Output

Results Messages			
	Title	AuthorName	Price
1	The Great Gatsby	F. Scott Fitzgerald	15.99
2	To Kill a Mockingbird	Harper Lee	12.5
3	1984	George Orwell	10.99
4	Pride and Prejudice	Jane Austen	9.99
5	The Catcher in the Rye	Unknown	11.25
6	Harry Potter and the Sorcerer's Stone	Unknown	19.99
7	The Hobbit	Unknown	14.5
8	A Game of Thrones	Unknown	17.9

MS SQL server view

6 Display all authors and the count of their books. If an author hasn't written any books, display "No books written".

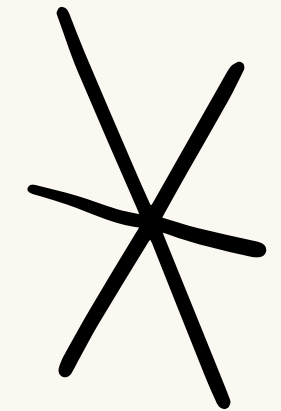
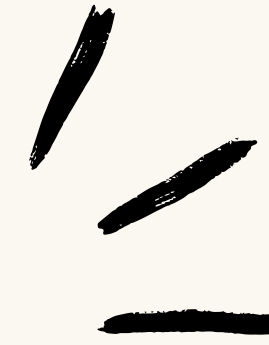
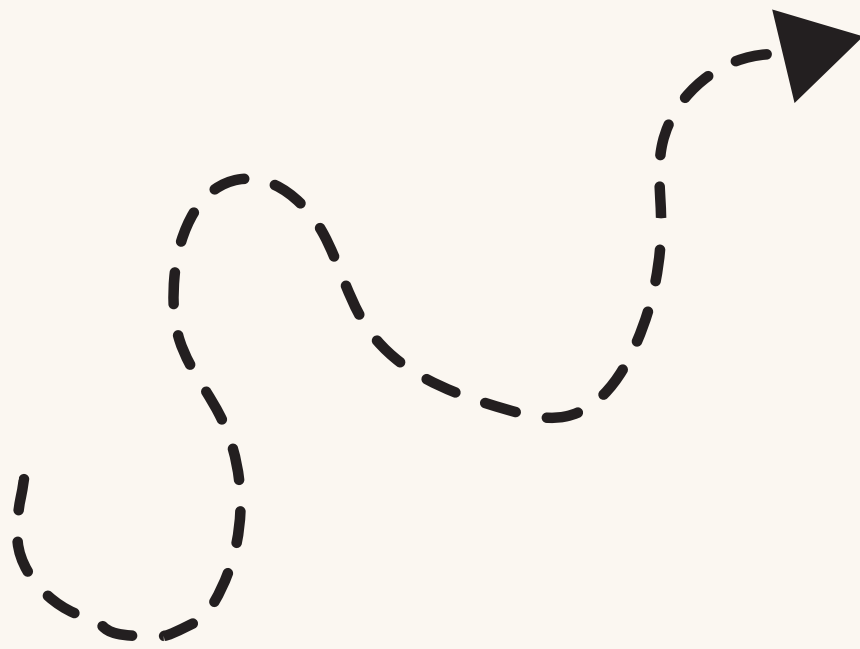
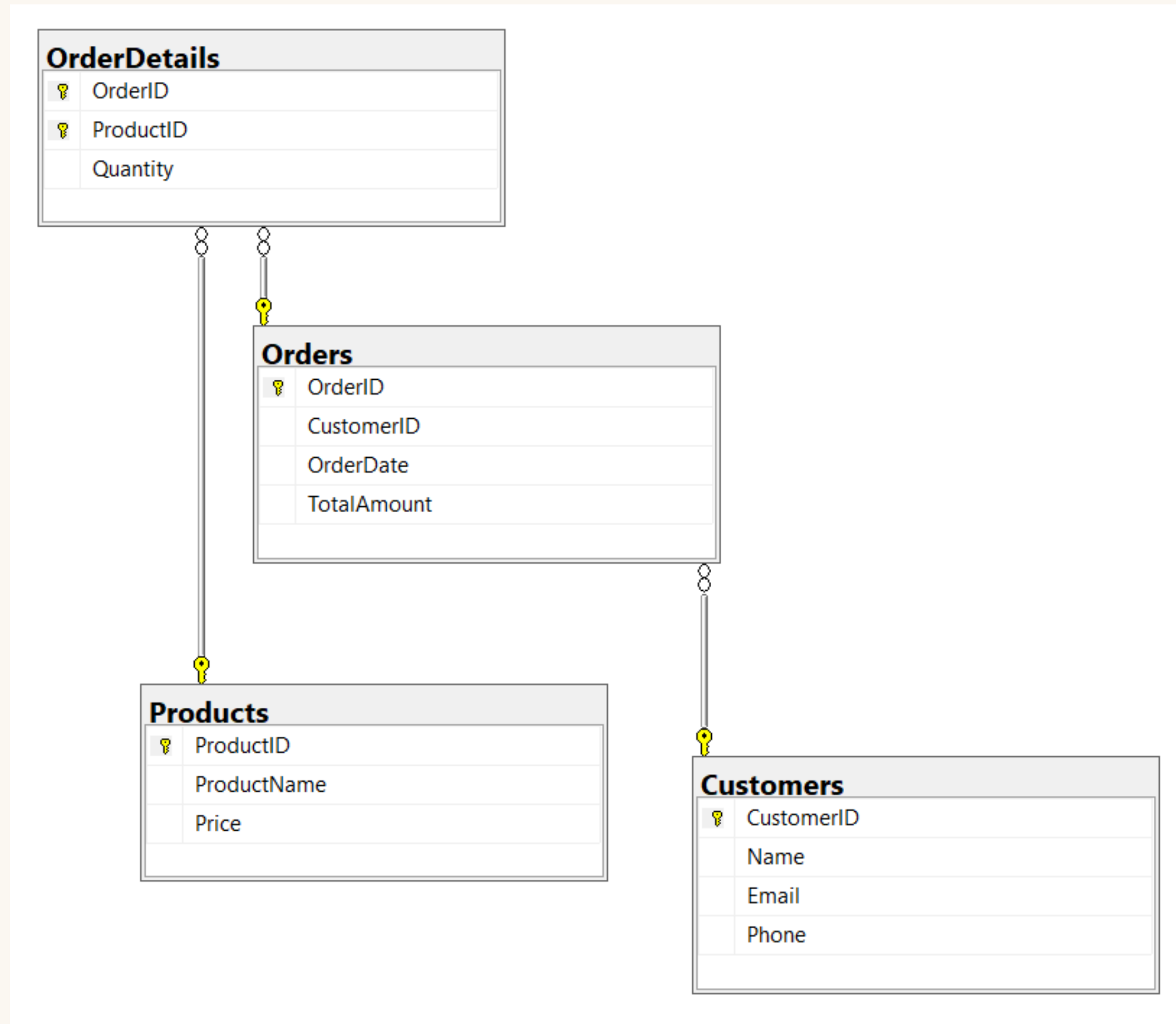
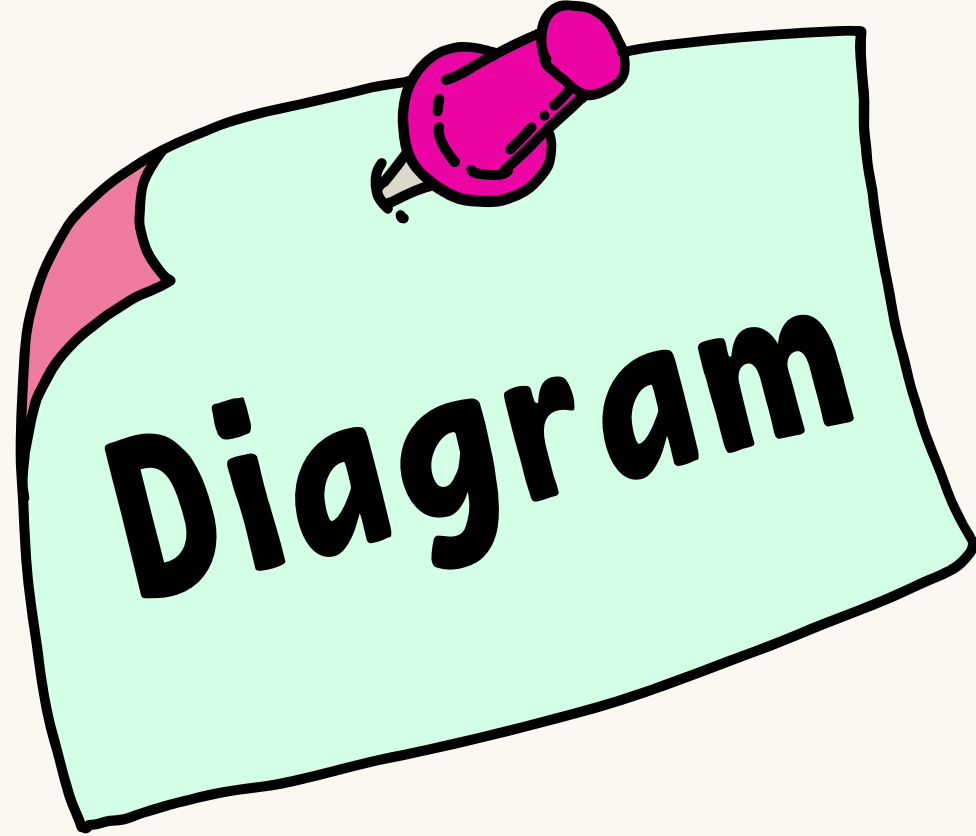
Query

```
select
  case
    when AuthorName is null then 'Unknown'
    else AuthorName end as AuthorName ,
  case
    when count(BookID) = 0 then 'No books written'
    else count(BookID) end as TotalBooks
from Authors as a full outer join Books as b
on a.AuthorID = b.AuthorID
Group by AuthorName;
```

Output

Results			Messages	
	AuthorName	TotalBooks		
1	F. Scott Fitzgerald	1		
2	George Orwell	1		
3	Harper Lee	1		
4	Jane Austen	1		
5	Unknown	4		

MS SQL server view



1

**Show all products
along with the
order details.
Include products
that haven't been
ordered.**

Query

```
select * from  
  Products as p full outer join OrderDetails as od  
on p.ProductID = od.ProductID ;
```

Output

Results		Messages				
	ProductID	ProductName	Price	OrderID	ProductID	Quantity
1	1	Laptop	800	101	1	1
2	1	Laptop	800	105	1	1
3	2	Smartphone	600	102	2	1
4	3	Headphones	100	101	3	2
5	3	Headphones	100	105	3	1
6	4	External Hard Drive	120	103	4	1
7	5	Tablet	400	104	5	2

MS SQL server view

2 Display the names of customers and the total amount spent on orders. Include customers who haven't placed any orders, showing "0" as the total amount for them.

Query

```
select c.name as CutomerName ,  
       case when sum(o.TotalAmount) is null then 0  
             else sum(o.TotalAmount) end as TotalAmount  
from Customers as c full outer join Orders as o  
on c.CustomerID = o.CustomerID  
Group by c.name ;
```

Output

Results Messages		
	CutomerName	TotalAmount
1	Alice Smith	112.5
2	Bob Johnson	90.25
3	Emily Brown	30
4	James Wilson	0
5	John Doe	120.75

MS SQL server view

3 Show the product names and quantities ordered. Include products without orders, displaying "0" as the quantity for them.

Query

```
select ProductName,  
       case when sum(Quantity) is null then 0  
             else sum(Quantity) end as Quantity  
from Products as p full outer join OrderDetails as od  
on p.ProductID = od.ProductID  
Group by ProductName ;
```

Output

Results Messages		
	ProductName	Quantity
1	External Hard Drive	1
2	Headphones	3
3	Laptop	2
4	Smartphone	1
5	Tablet	2

MS SQL server view

4

List all orders along with the names of the customers who made them. Include orders without customers and customers without orders.

Query

```
select * from
  Customers as s full outer join Orders as o
on s.CustomerID = o.CustomerID ;
```

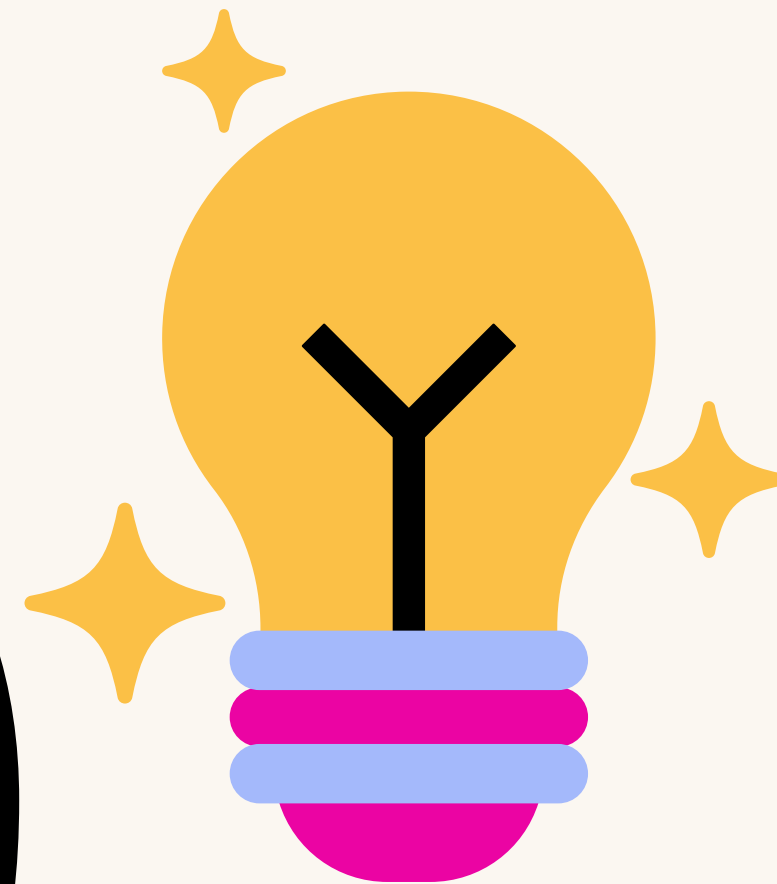
Output

Results		Messages						
	CustomerID	Name	Email	Phone	OrderID	CustomerID	OrderDate	TotalAmount
1	1	John Doe	john@example.com	123-456-7890	101	1	2024-04-01	75
2	1	John Doe	john@example.com	123-456-7890	103	1	2024-04-03	45.75
3	2	Alice Smith	alice@example.com	987-654-3210	102	2	2024-04-02	112.5
4	3	Bob Johnson	bob@example.com	456-789-0123	105	3	2024-04-05	90.25
5	4	Emily Brown	emily@example.com	789-012-3456	104	4	2024-04-04	30
6	5	James Wilson	james@example.com	321-654-0987	NULL	NULL	NULL	NULL

MS SQL server view



DONE :))



Presented By Kareem Shaaban