# Use the Join Clause to Combine Two Collections



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#### Module Goals



Perform an equijoin (inner join) between collections

Create one-to-many using group join

Simulate a left outer join



# Inner Join



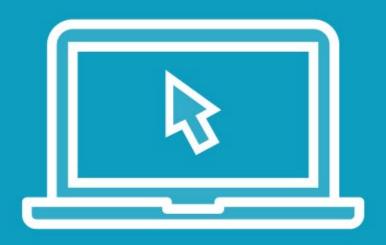
## Equijoin / Inner Join

An equijoin
(an inner join in SQL)

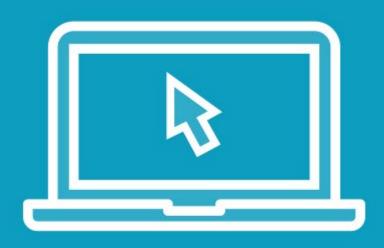
Two or more collections needed

At least one property in each must share equal values





Inner join



Inner join using two fields

# Join Into

#### Join Into

Create new object with Sales collection for each Product

Query syntax uses 'join' and 'into' keywords

Method syntax uses GroupJoin()



#### Join Into

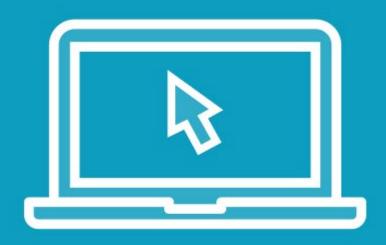
```
SalesOrderId=71774

{ ProductID=680 }

{ ProductID=712 }

SalesOrderId=71780

{ ProductID=707 }
```



Query syntax uses 'into'



Method syntax uses GroupJoin()

# Left Outer Join

## Left Outer Join (Query Syntax)

Inner join using 'into' and a second 'from' statement

A null object may be returned for "right" collection

Use
DefaultIfEmpty()
method for "right"
collection





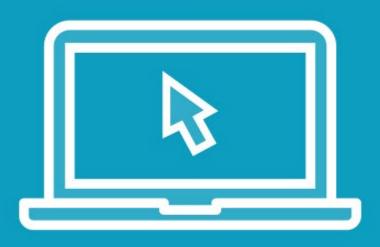
Left outer join

## Left Outer Join (Method Syntax)

SelectMany()
method to select
the 'right'
collection

Where() method to filter what is selected in 'right' collection

Use
DefaultIfEmpty()
method for "right"
collection



Left outer join for method syntax

#### Module Summary



The join clause combines two or more collections

Syntax can be different from query to method syntax

GroupJoin() method creates a one-tomany object

Use SelectMany() and DefaultIfEmpty() to simulate outer join



## Up Next:

Use the Group Clause to Produce Grouped Collections

