Use the LINQ Where Clause



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Module Goals



Using the where clause

Finding item(s) in a List<T> collection

Using && and || in a where clause

Using a custom extension method

Searching



Filtering Data

Query syntax uses the where clause

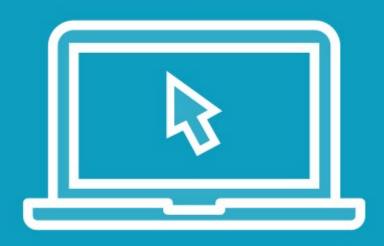
Method syntax uses the Where() method

Filtering Data

```
(from prod in products where
prod.Name.StartsWith("S")
select prod)
```

```
products.Where(
  prod =>
  prod.Name.StartsWith("S"))
```

Demo



Where expression



Using the And Operator

```
(from p in products where
p.Name.StartsWith("L") &&
p.StandardCost > 200
select prod)
```

```
products.Where(p =>
p.Name.StartsWith("L") &&
p.StandardCost > 200)
```



Demo



Where expression with two fields

Custom Extension Method

Can create an extension method to return IEnumerable<T>

Can use this method on the query

```
(from prod in products
select prod).ByColor("Red")
```



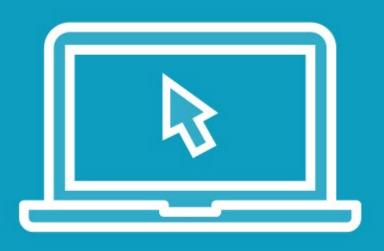
```
public static class ProductHelper
  public static IEnumerable<Product>
    ByColor(
     this IEnumerable<Product> query,
     string color)
    return query
      .Where(p => p.Color == color);
```

◄ Create static class

- Create static method
- Use 'this' keyword to key to type of object
- **◄** Pass in any other parameters

■ Invoke the Where() method to filter data

Demo



Using a custom extension method for filtering

Module Summary



Use where clause filter the collection

Use the C# && operator

Can write your own custom where filter

Up Next: Select a Single Piece of Data from a Collection