Finding Data in an Array

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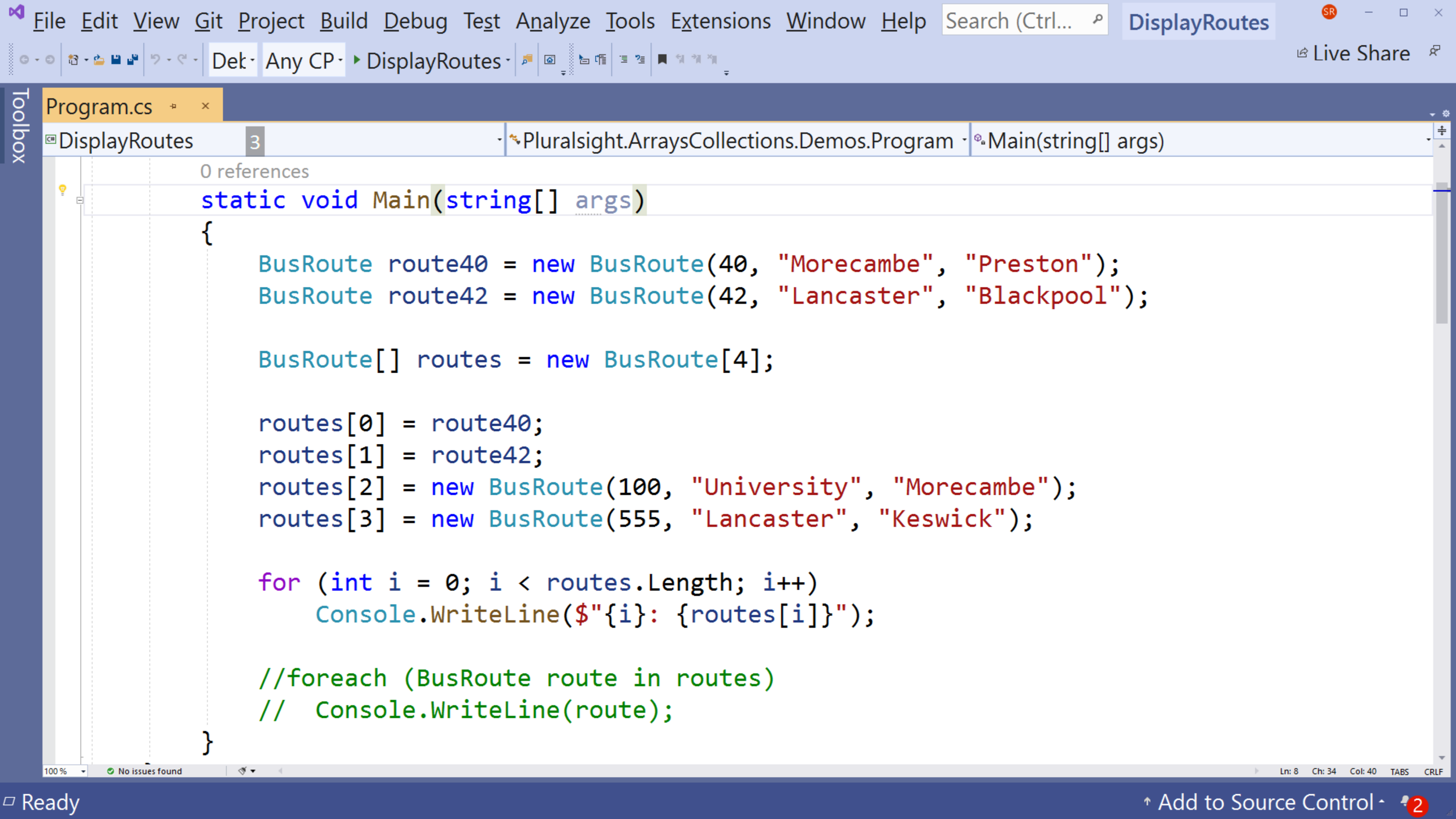
Overview

Arrays

- Look-up requires the index
- What happens when you don’t know the index?
- Arrays as reference types

Which bus goes to Blackpool?


File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search (Ctrl...
DisplayRoutes
Live Share
Toolbox
Program.cs
DisplayRoutes
Pluralsight.ArraysCollections.Demos.Program
Main(string[] args)
0 references
static void Main(string[] args)
{
BusRoute route40 = new BusRoute(40, "Morecambe", "Preston");
BusRoute route42 = new BusRoute(42, "Lancaster", "Blackpool");
BusRoute[] routes = new BusRoute[4];
routes[0] = route40;
routes[1] = route42;
routes[2] = new BusRoute(100, "University", "Morecambe");
routes[3] = new BusRoute(555, "Lancaster", "Keswick");
for (int i = 0; i < routes.Length; i++)
Console.WriteLine($"{i}: {routes[i]}");
//foreach (BusRoute route in routes)
// Console.WriteLine(route);
}
100 %
No issues found
Ln: 8
Ch: 34
Col: 40
TABS
CRLF
Ready
Add to Source Control

A general problem:

Find the item that has a specified value

The product with a particular ID

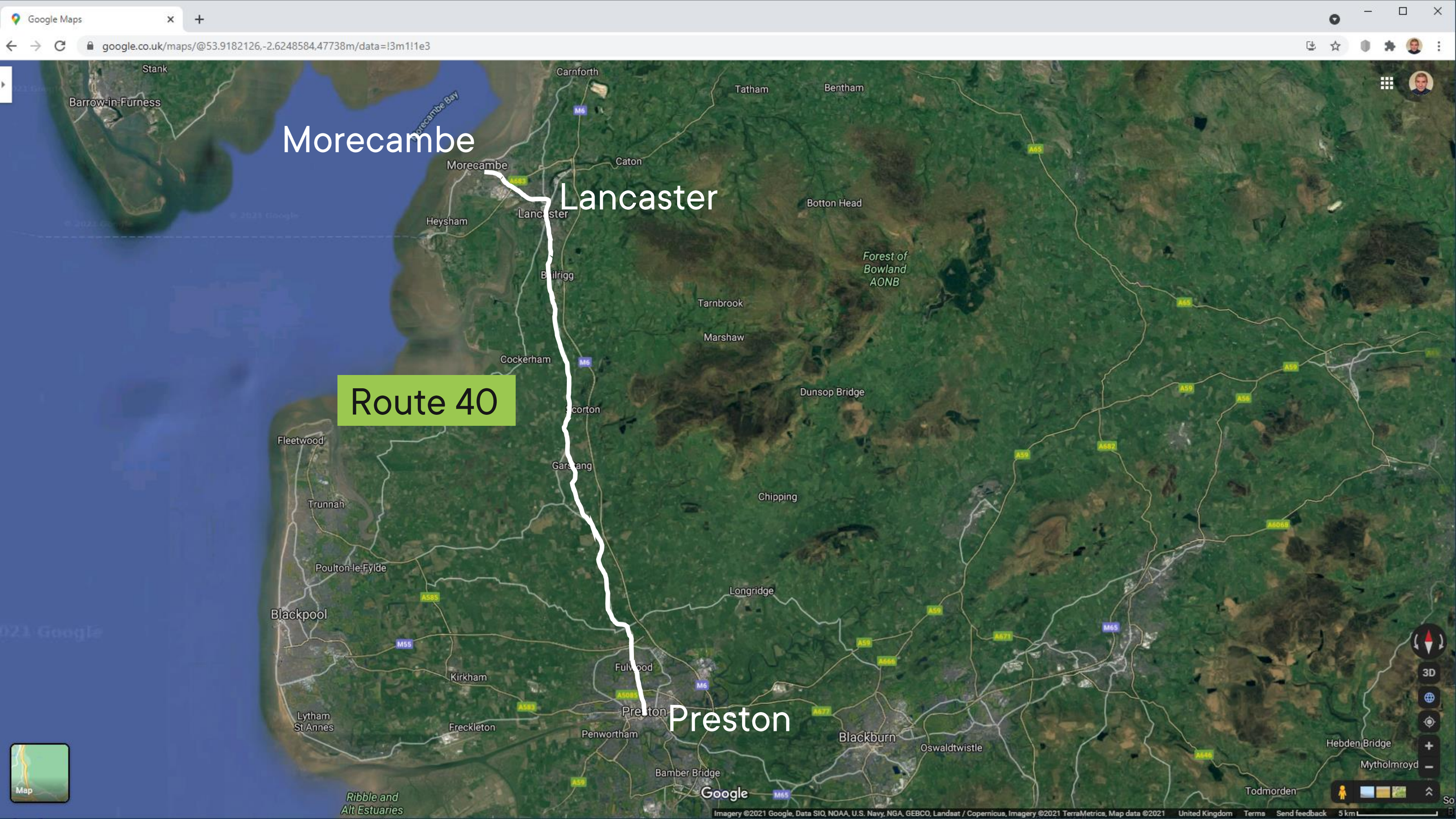
A particular customer

The bus going to a particular place

Demo

Find a particular item

- Using a `foreach` loop
- Using array methods


Google Maps
google.co.uk/maps/@53.9182126,-2.6248584,47738m/data=!3m1!1e3
Morecambe
Lancaster
Preston
Route 40
Stank
Barrow-in-Furness
Carnforth
Tatham
Bentham
Morecambe Bay
Caton
Botton Head
Heysham
Forest of Bowland AONB
Tarnbrook
Marshaw
Cockerham
Dunsop Bridge
Fleetwood
Chipping
Trunnah
Poulton-le-Fylde
Longridge
Blackpool
Kirkham
Lytham St Annes
Freckleton
Penwortham
Blackburn
Oswaldtwistle
Hebden Bridge
Mytholmroyd
Bamber Bridge
Todmorden
Ribble and Alt Estuaries
Google
Map
3D
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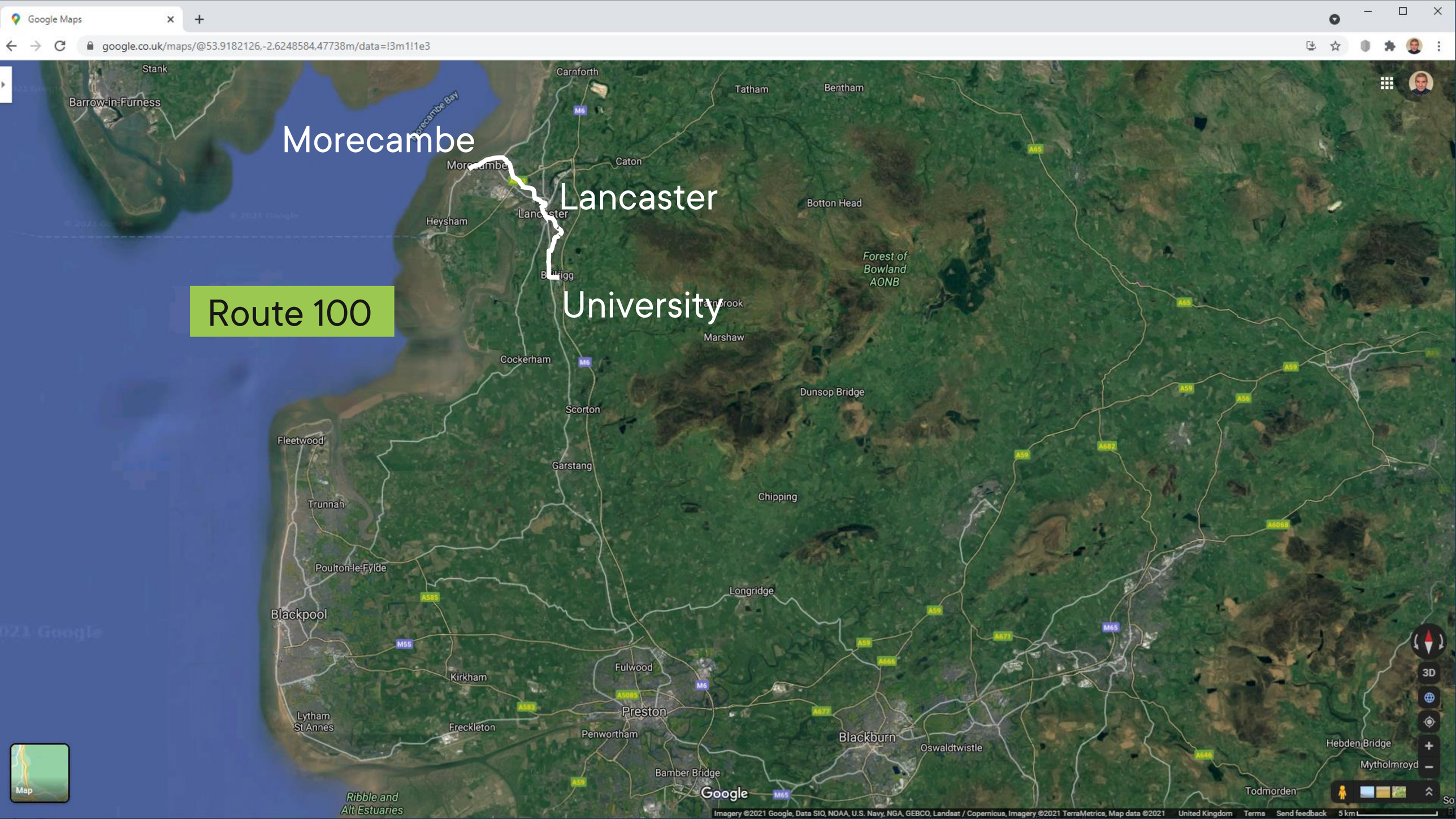
5 km


Google Maps
google.co.uk/maps/@53.9182126,-2.6248584,47738m/data=!3m1!1e3
Morecambe
Lancaster
University
Route 100
Stank
Barrow-in-Furness
Carnforth
Tatham
Bentham
Morecambe Bay
Caton
Heysham
Botton Head
Forest of Bowland AONB
Marshaw
Cockerham
Dunsop Bridge
Scorton
Fleetwood
Garstang
Trunnah
Chipping
Poulton-le-Fylde
Longridge
Blackpool
Fulwood
Kirkham
Preston
Lytham St Annes
Freckleton
Penwortham
Blackburn
Oswaldtwistle
Bamber Bridge
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Summary

Find items in an array without using the index

- Use a `foreach` loop
- Use `Array.Find()` for one item
- Use `Array.FindAll()` for multiple items

`System.Array`

- Provides useful methods and properties

Up Next:
Lists