

Working with Arrays and Collections in C#

Storing Data in an Array



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Overview



Arrays

- Simplest collection
- Part of the C# language
- Used internally in most other collections

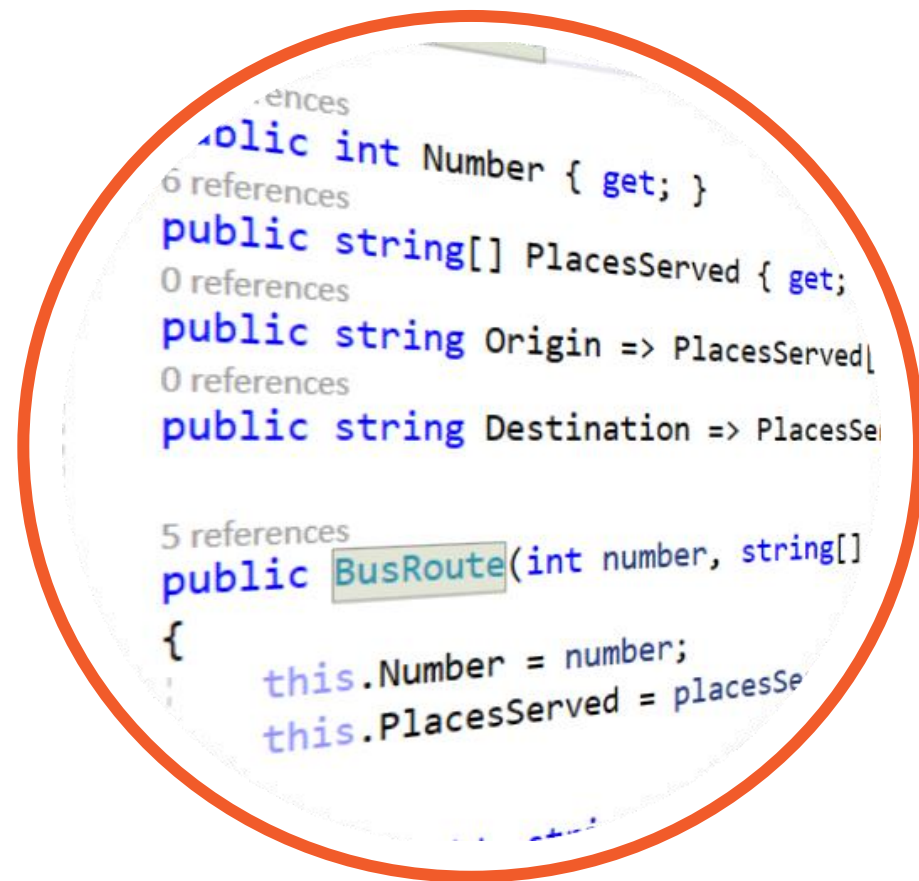
Store data in an array

Look up data

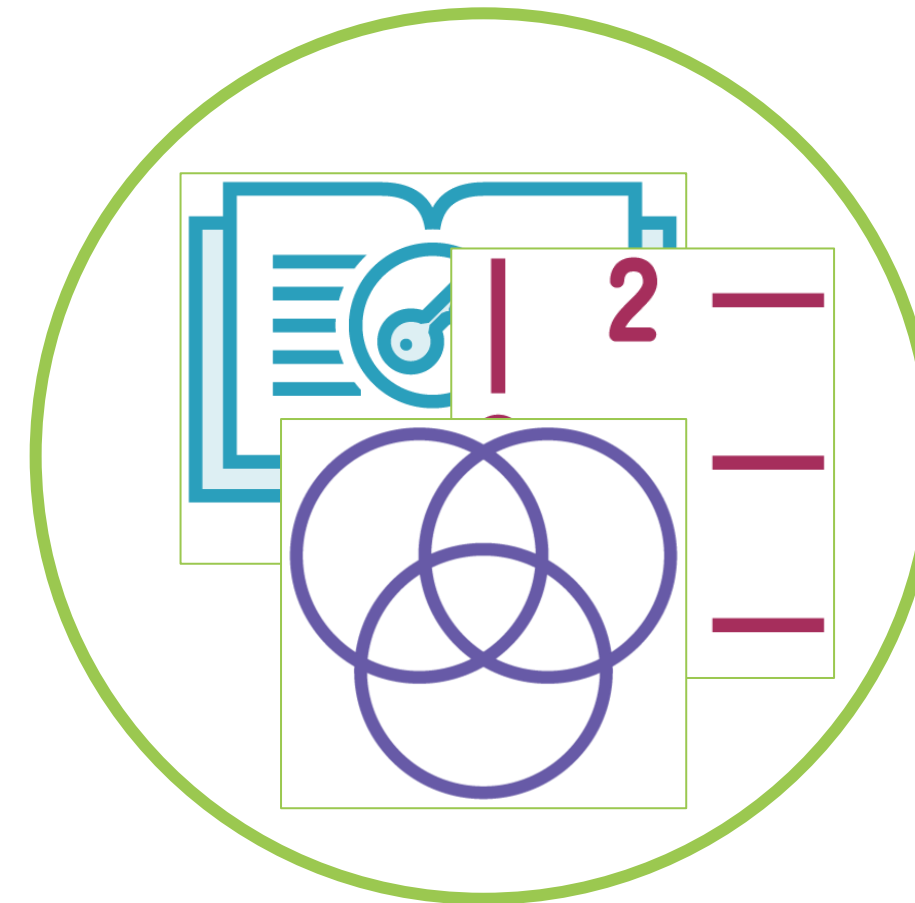
Enumerate data



Prerequisites for this Course



**You should know
C# Language basics**



**No knowledge
of collections assumed**

What Is LINQ Doing?

Beginning C# Collections

by Simon Robinson

Almost every app requires data to be stored in collections. This course gives you a basic introduction, covering the most widely used collections - arrays, lists, and dictionaries - and gets you up to speed with querying and modifying data in them.

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Course author



Simon Robinson

Simon Robinson first cut his developer teeth in the early 1980s writing a scheduling system in BBC Basic(!) for his local college. Since then, his programming career has spanned industries ranging...

Course info

Level

Beginner

Rating

★★★★☆ (269)

My rating

★★★★★


Duration

3h 26m

Released

29 Mar 2019

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- Description
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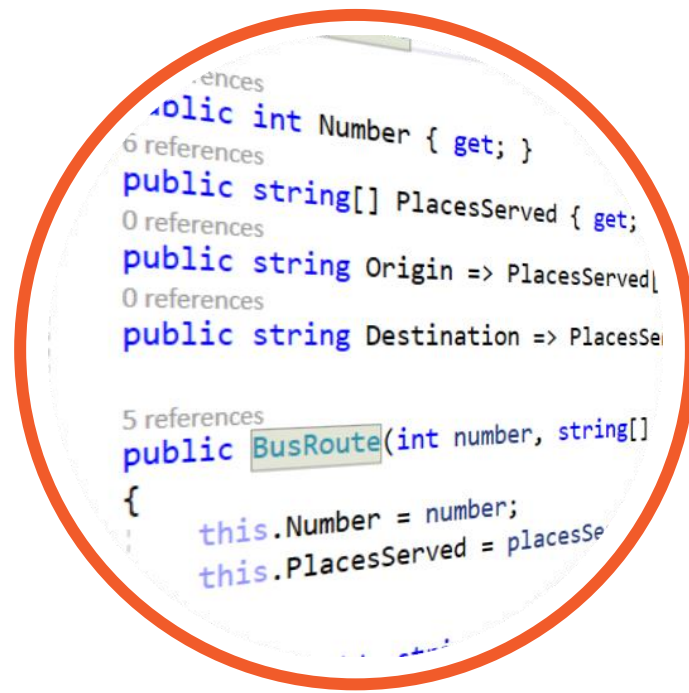
This course is part of:  C# Development Fundamentals Path

Expand All

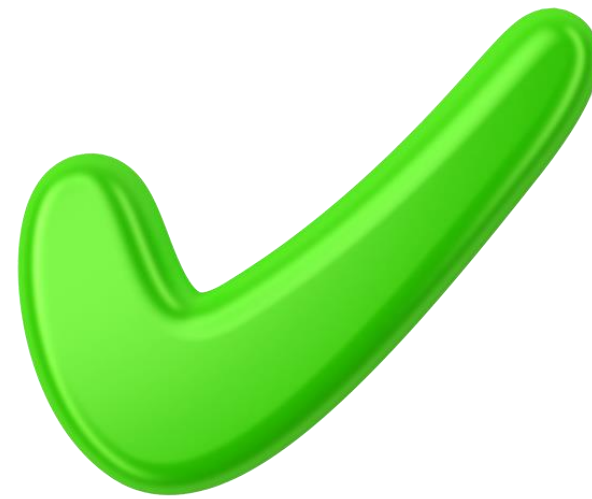
<div>▶</div> Course Overview	<div>✓</div>	<div></div>	1m 57s	<div>▼</div>
<div>▶</div> Introducing Collections and Arrays	<div>✓</div>	<div></div>	26m 34s	<div>▼</div>
<div>▶</div> Introduction to Data Structures and Algorithms	<div>✓</div>	<div></div>	27m 46s	<div>▼</div>

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Which .NET Version?



Code is in .NET 5/C# 9



**Principles and most code are fine in
.NET Core / .NET Framework**



**I'll call out
minor .NET Framework issues**

Introducing the Main Demo

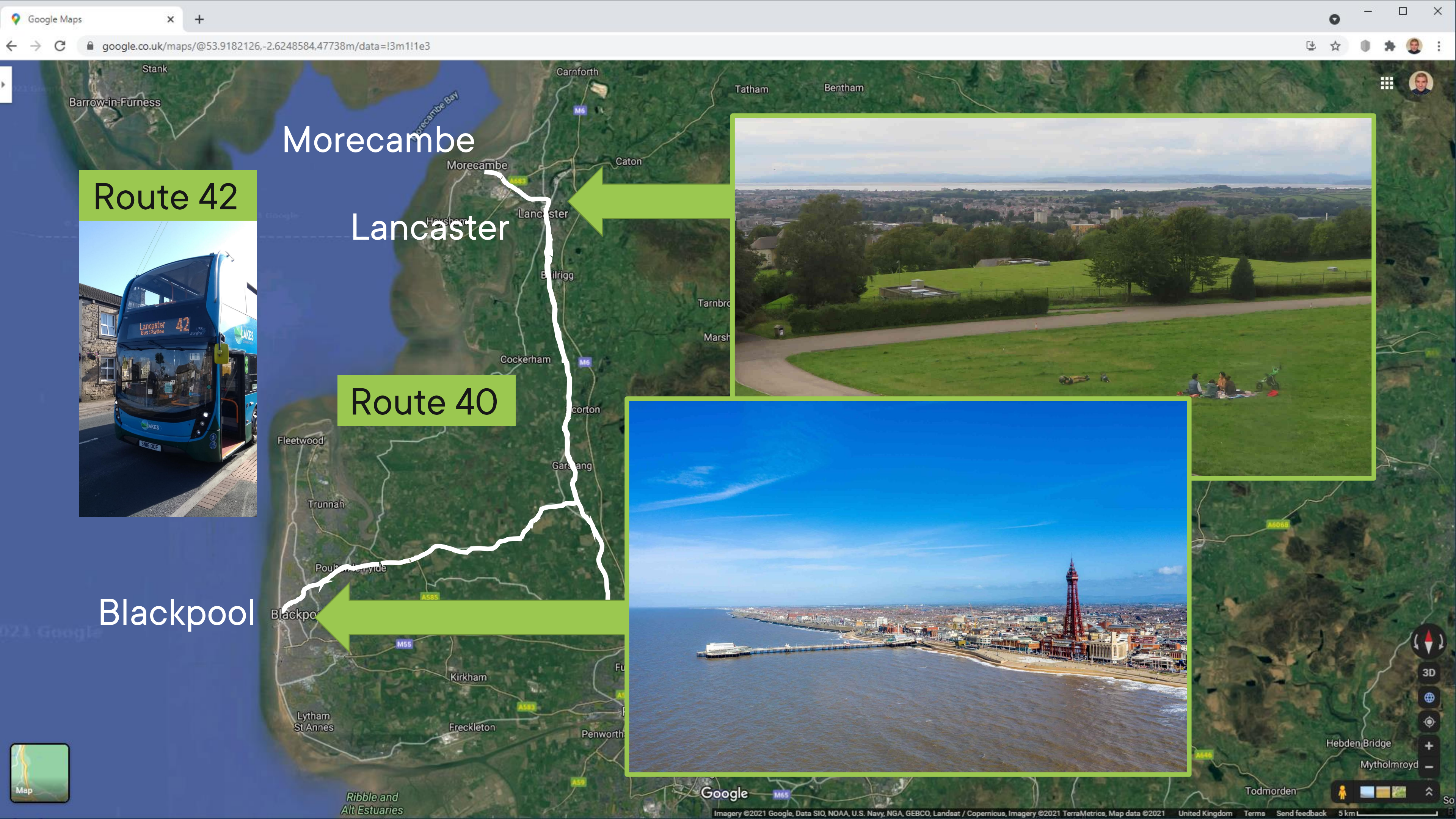


Your Task...

An app to give information about bus routes







Morecambe

Route 42



Lancaster

Route 40

Blackpool

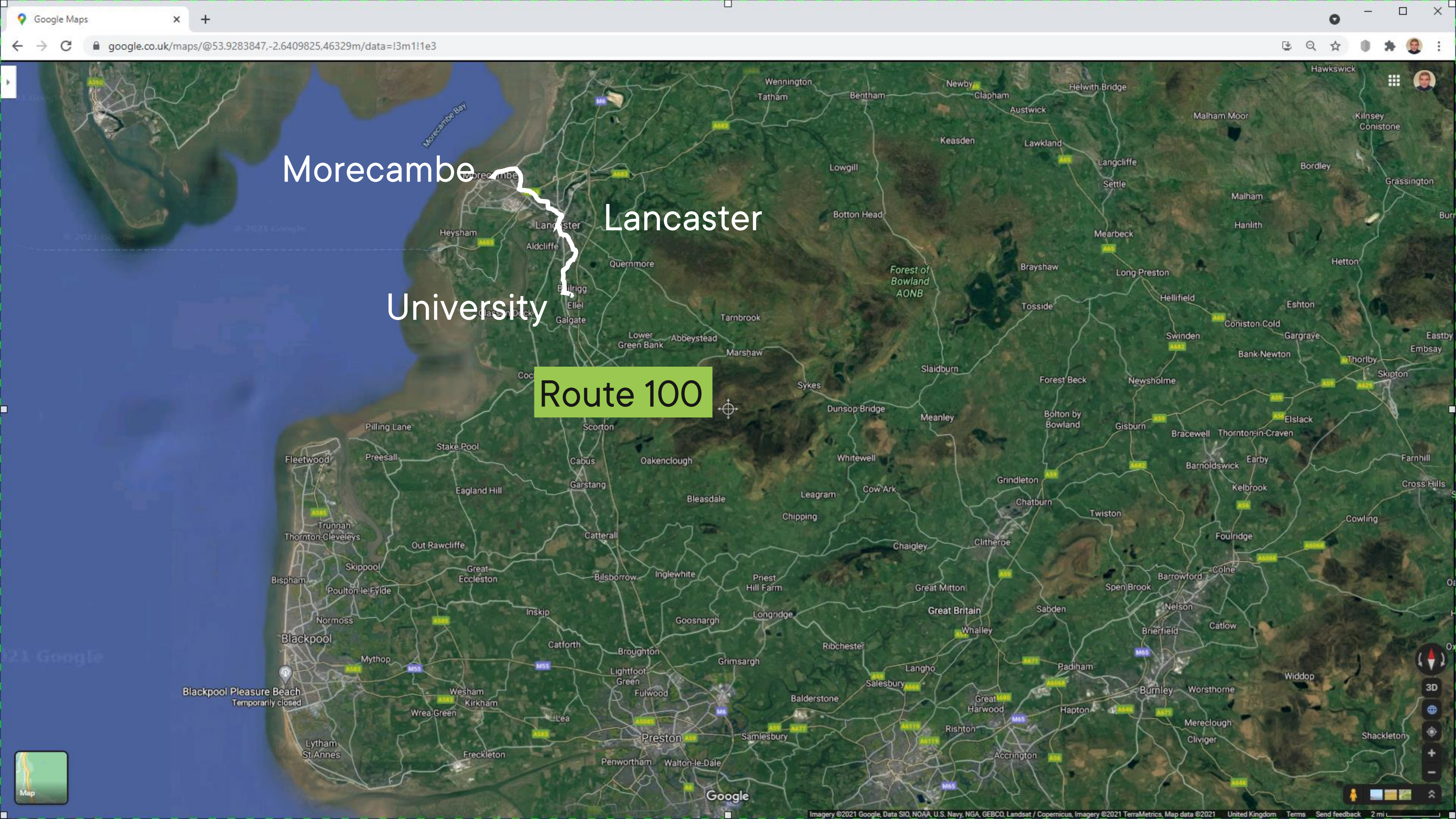


Demo



Represent bus routes in code



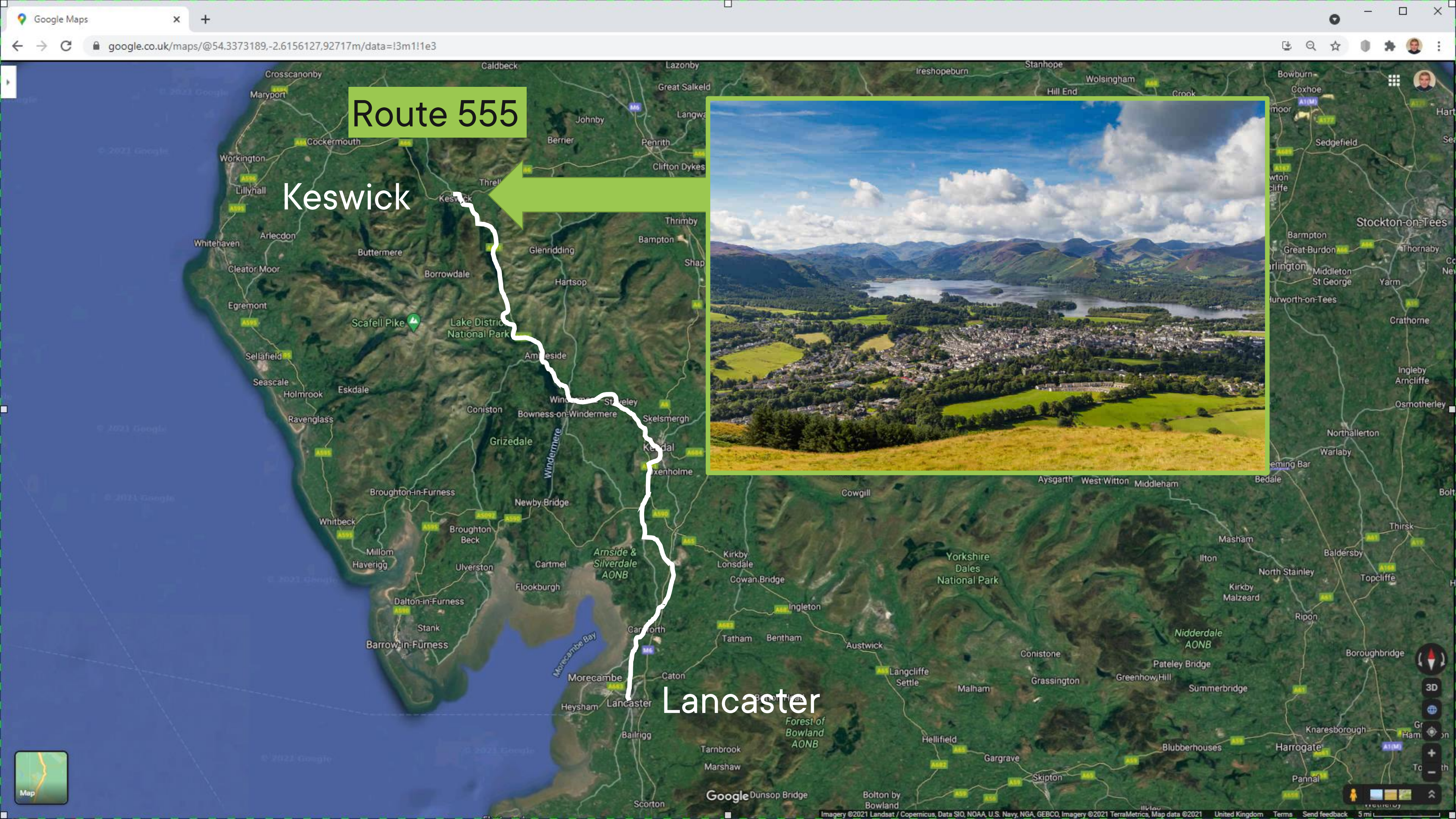


Morecambe

Lancaster

University

Route 100



Route 555

Keswick



Lancaster

Summary



Array to store multiple objects

Use `myType[]` to declare an array of `myType`

Enumerate array with a `for` or `foreach` loop

- Simpler syntax with `foreach`
- Greater control with `for`

Look up or set an element with `array[i]`

- First element has index `0`



Up Next:
Finding items in arrays

