Thinking in Patterns

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Looping Through Collections

Just use a for or foreach loop?

Maybe LINQ can help us?

Learn to spot repeating patterns

Declarative or Imperative Code?

Says what we want to do

Moves implementation details out of the way

Expresses our intent

Declarative Code

Says how it should be done

Specifies implementation details

Can obscure our intent

Imperative Code

Challenge

LINQ Challenge

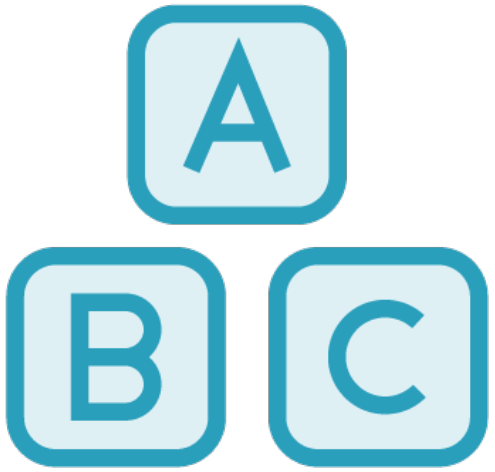
Motorsport Scores

Pro Tip

Get to Know the Available LINQ Extensions

Challenge

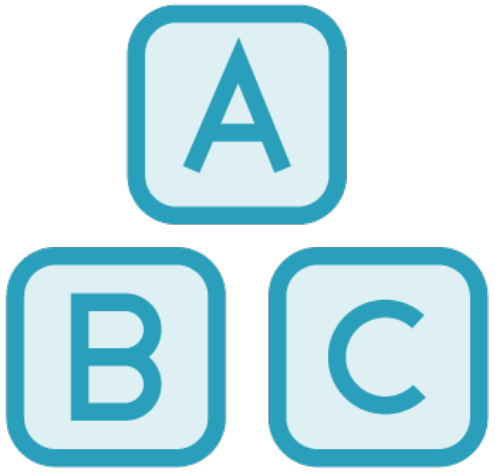
Spot the Pattern #1



Filtering Collections

Challenge

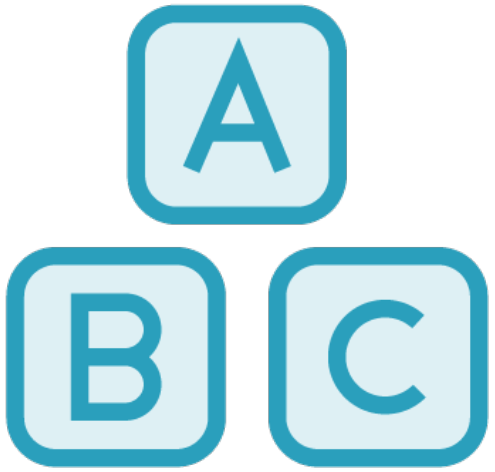
Spot the Pattern #2



Finding One Item

Challenge

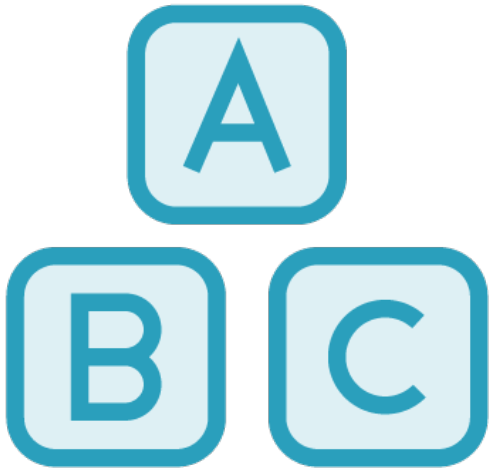
Spot the Pattern #3



True for Everything?

Challenge

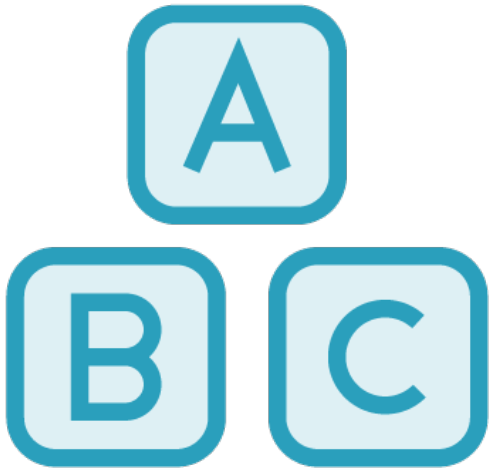
Spot the Pattern #4



Transforming Objects

Challenge

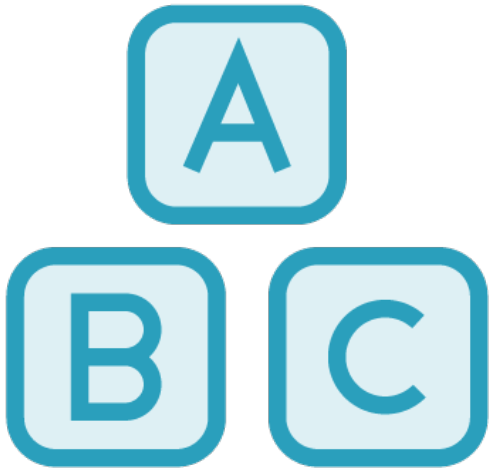
Spot the Pattern #5



How Many like This?

Challenge

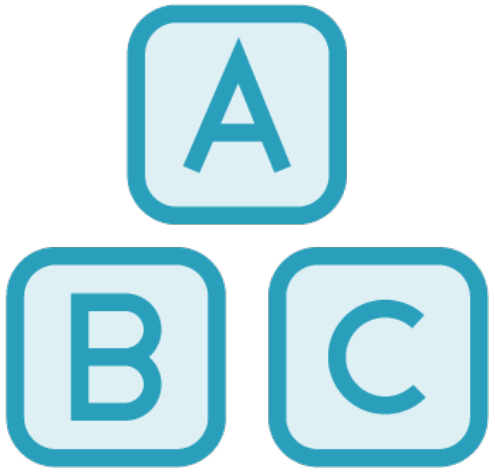
Spot the Pattern #6



Grouping Things

Challenge

Spot the Pattern #7



Nested Loops

Pro Tip

Use Productivity Tools to Spot Patterns

Solution

LINQ Challenge

Motorsport Scores

Summary

Learn to see repeating patterns

LINQ can simplify our code

- Express intent with declarative code

Use productivity tools

- e.g. ReSharper can detect patterns

LINQ extension methods can be chained

- Up next: LINQ Pipelines