

Beginner:

- String manipulation:
  - Write an extension method for **string** that returns a reversed version of the string.
  - Write an extension method for **string** that counts the number of occurrences of a given character (you should pass the character).
  - Write an extension method for **string** that checks if it starts or ends with a specific substring (you should pass this substring to the method).
- Numeric operations:
  - Write an extension method for **int** or **double** that checks if the number is even or odd.
  - Write an extension method for **int** or **double** that calculates the absolute value.
  - Write an extension method for **int** or **double** that rounds to the nearest multiple of a given number.
- Data structures:
  - Write an extension method for **int[]** or **double[]** that removes all duplicate elements (one occurrence of duplicate element).
  - Write an extension method for **int[]** or **double[]** that checks if it contains a specific element (you should pass the element).
  - Write an extension method for **int[]** or **double[]** that returns the element with the maximum value.

Intermediate:

- Date and time:
  - Write an extension method for **DateTime** that returns the day of the week as a string (Day/Month/Year Hour:Minute:Seconds:milisecs).
  - Write an extension method for **DateTime** that checks if it falls within a certain date range.
  - Write an extension method for **DateTime** that calculates the age based on a date of birth.
- Collections and enumerables:
  - Write an extension method for **int[]** or **double[]** that merges two sequences into a single sequence.

- Write an extension method for `int[]` or `double[]` that generates a string representation of the sequence with custom separators (you should pass the separator).