# Exercises: C# Advanced Topics

This document defines in-class exercises from the ["C# Basics" Course @ Software University](http://softuni.bg/courses/csharp-basics/).

### Arrays

## Integers

Create an array with 10 integers. Fill the **array** with **random integers** in the range **[0…100]**. Each **subsequent element** of the array should **add the previous element** to its **value**.

For example, if the randomly generated items are **0 1 2 3 4 5 6 7 8 9**, the elements in the array should be **0 1 3 6 10 15 21 28 36 45**.

## Text Modification

You are given a **string**. Go through **all letters** and if the letter's **ASCII code** divides by **3** **without** **remainder**, raise the letter to **upper case**.

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| **Input** | **Output** |
| **you though this deer was real…nope, just chuck testa.** | **yOU thOUgh thIs deeR was ReaL...nOpe, jUst ChUCk testa.** |

## \* Bubble Sort

Write the bubble sort algorithm for **sorting** an **array of integers**.

**See**: <http://en.wikipedia.org/wiki/Bubble_sort#/media/File:Bubble-sort-example-300px.gif>