

MODULE 1: INTRODUCTION TO PROGRAMMING IN C#

CORE EXERCISES

Tutorial 4

A - Console Programs

- A.1 Write a program that will search a list of names for items with a given name and report how many, if any, have been found.
- A.2 Write a program to implement the 'binary search' technique mentioned in the notes. The program should feature a stored list of at least 30 numbers in ascending order and invite the user to search for a given number.
- A.3 One problem with the Bubble Sort is that the basic underlying algorithm extends to values that have already been sorted. Can you make a simple adjustment to make this code more efficient?

B – Windows Programs

- B.1 Write a program featuring a text box in which the user can enter a reasonably large amount of text. The program will allow the user to then search that text for occurrences of a given letter and report how many times it occurs.
- B.2 Extend the program in 1.2 to give a visual progress report to the user indicating the current search interval. The program should pause at each stage to allow the user to view the results and press a button to continue