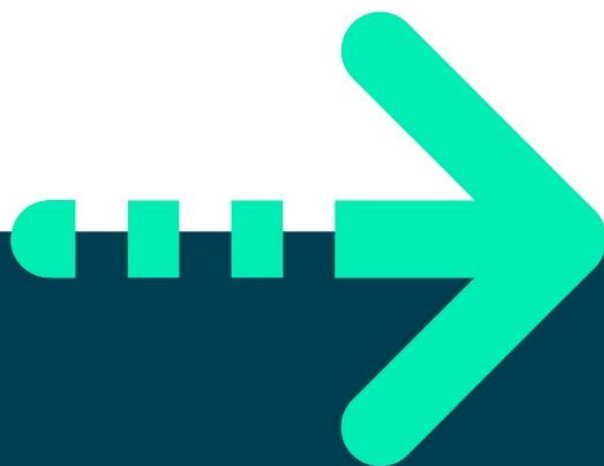# EXERCISE 12, WORKING WITH FILES

FUNDAMENTAL

Exercise 12, Working with Files

Objective

The objective of this practical session is for you to become familiar with a number of classes found in the **IO** namespace and practice reading and writing to files.

Part 1 – File I/O Practice

1. Create a new C# Console Application called Lab12

2. Add three pre-supplied text files to your project.
   course.txt, trainer.txt and courseTrainer.txt

   Tip: to add these right mouse click on the project name and then select Add > 'Existing item' and select the text files.

3. Create a method in the Program class with following signature

   ```csharp
   private static string[] ReadCSV(string inFile)
   ```

4. Write code in the **ReadCSV** method to read one line of the **inFile** parameter and split the resulting string using "," as delimiter. Return the resulting string[].

   Tip: use the String's **Split(',')** method and return the resulting string[ ].

5. Back in Main(), call the ReadCSV() method and pass it the "../../course.txt" as file name and capture the result in a variable called **courses**.

   Do the same for "../../trainer.txt" and capture the result in variable called **trainers**.

   The reason for the strange file path is because the compiled code is stored in /bin/debug/Lab12.exe, therefore you'll need to look up twice (../..), to get to the root of the project where you copied the files.

6. Create a file called trainersAndCourses.txt and append the courses and trainers arrays to this file.

7. Run your code and make sure it works.

Part 2 – Relate courses and trainers
(optional and only if you've time)

1. Add a pre-supplied text file called **trainerCourse.txt** to the project.

   This file contains rows of two **","** separated integers.

   The two integers point to trainer numbers (the first value) and course titles (second number).
   Trainer and course numbers being the order in which trainers and courses are stored in the files.

   For example, **1,2** indicates
   "*Mike Baradaran*" (**1st** row of trainer.txt)**,** teaching
   "*Systems Development Basics*" (**2nd** row of course.txt)**.**

   Convert all the numbers to trainer names and course titles in order to produce a report displaying the trainer's name and the course title.

** End **