## Mandatory Activity. Concurrent Programming. Lab 11.

This activity must be autonomously done by the student. **It must be done prior to the following laboratory class**. It will be used as part of the following laboratory.

## **Activity**

Using the Task Parallel Library (TPL) to implement a parallel application to count the number of words occurrences in a text file (e.g., "language" = 10 times, "C#" = 3 times...). It can be assumed that no hyphen is used at the end of a line (words are not hyphenated).

Implement both the sequential and parallel version, measuring the runtime performance benefit (if any). Use the clarin.txt file to test the application.

Why is the benefit so low?

What can be done to achieve a higher benefit?

Modify your implementation to obtain the highest level of optimization using TLP and PLinq.

Use the appropriate programming language features learned so far.