IDENTIFICATION: Regular Expression #2 / PELE

Overall Purpose

The overall purpose for the group of 'Regular Expressions' assignments is to be able to use Regular Expressions for validation, finding, extracting and replacing text.

The whole group of assignments consist of two steps:

- 1. A basic understanding of Regular Expressions and the use for validation.
- 2. Using Regular expressions for finding, extracting and replacing text. (this assignment)

Background Material:

- Overall view Wikipeia: https://en.wikipedia.org/wiki/Regular_expression
- Nice presentation (though not C#) https://cs.lmu.edu/~ray/notes/regex/
- Microsoft C# quick reference: https://docs.microsoft.com/en- us/dotnet/standard/base-types/regular-expression-language-quick-reference
- C# How to use: https://www.c-sharpcorner.com/article/c-sharp-regex-examples/
- Microsoft reference Regex-class: https://docs.microsoft.com/en-<u>us/dotnet/api/system.text.regularexpressions.regex?view=netcore-3.1</u>

This Assignment: Regular Expression #2

Purpose

The purpose of this assignment is to obtain skills in finding, extracting and replacing text using regular expressions.

Mission

Making experiments with finding, extracting and replacing text.

Assignment 1: Making experiments with finding, extracting and replacing text

Create a .Net Core Console application.

For the following text (a short description of H.C.Andersen 'The Emperors new clothes'):

"Two swindlers arrive at the capital city of an emperor who spends lavishly on clothing at the expense of state matters. Posing as weavers, they offer to supply him with magnificent clothes that are invisible to those who are stupid or incompetent. The emperor hires them, and they set up looms and go to work. A succession of officials, and then the emperor himself, visit them to check their progress. Each sees that the looms are empty but pretends otherwise to avoid being thought a fool. Finally, the weavers report that the emperor's suit is finished. They mime dressing him and he sets off in a procession before the whole city. The townsfolk uncomfortably go along with the pretense, not wanting to appear inept or stupid, until a child blurts out that the emperor is wearing nothing at all. The people then realize that everyone has been fooled. Although startled, the emperor continues the procession, walking more proudly than ever."

(source: https://en.wikipedia.org/wiki/The Emperor%27s New Clothes)

- a. Find the indexes of where the word emperor occur with or without starting uppercase E.
- b. Make capture groups of sentences, extract these and print them out
- c. Change the 'emperor' to 'teacher' and print out the new text.