Coding Exercise

This exercise should take you approximately 2 hours.

- Please produce working, tested code to solve the problem described below
- This is a simple problem, however, we would like you to approach it as though it were part of a more complex project and use appropriate techniques such as object-orientation if relevant. Therefore, please give consideration to factors such as code reusability and extensibility.
- Please do not ask for help or advice from any third party
- Provably test your solution in an appropriate manner. Please provide test collateral as part of your solution
- Provide build instructions along with all necessary source code packaged in a .zip file called CODING_EXERCISE_<YOURINITIALS>.ZIP where <YOURINITIALS>are your initials
- Please do not include executables in your solution
- For preference use an OO based language (C# or Java)
- Please do not use language (or support library) Regex, System String, std::string or Boost library functions such as Split(), IndexOf() and SubString(). The aim is to demonstrate how you would implement these type of functions if you had to write them yourself

Exercise

Write an application that fulfils the following requirements:

1. Accepts two strings as input: One is called "Text", the other is called "Subtext"
2. Matches the subtext against the text, outputting the character positions of the beginning of each match for the subtext within the text
3. Allows multiple matches
4. Allows case-insensitive matching

Acceptance criteria

Text: `How much wood would a Woodchuck chuck, if a Woodchuck could chuck wood?`

Expected results:

Subtext	Positions
How	1
wood	10,23,45,67
Wood	10,23,45,67
oo	11,24,46,68
oO	11,24,46,68
wooden	
?	71
x	