You are required to write an application that searches for a specific text through a list of files and URLs (Similar to Unix GREP)

grep is a command-line utility for searching plain-text data sets for lines that match a regular expression. Its name comes from the ed command g/re/p, which has the same effect. grep was originally developed for the Unix operating system, but later available for all Unix-like systems and some others such as OS-9.

Requirements:

* **Input**:
  + A list that includes both files names, folders and web URLS. For instance:
    - C:\test.txt
    - <http://www.lipsum.com/>
    - …
  + A word to search for.
  + A flag that indicates whether the search is case sensitive or case insensitive.
  + A flag that indicates whether it’s a regular search (search for lines that include the word) or a reverse search (for lines that do not include the word)
* **Output**:
  + For each file, folder or URL, The application should show all the lines that match (or do not match, depending on the setting) the word.
  + Output format should be <File full path or url>: <line number - text>
* **UI:**
  + Create a console application. In this case you can get the input from command line. For example:

grep –v –i hello file:file.txt,url:<http://www.lipsum.com/>,folder:searchthis/

-v stands for reverse search

-i stands for case insensitive search.

* **Hint:** for getting the website content use the following code:

var wc = WebClient();

var webData = wc.DownloadString("https://www.lipsum.com/");

We will test correctness, design, clarity, and efficiency of the application, as well as the implementation time. Also, make sure you test your code.

Please ask if anything is not clear. The intention is to test your programming skills, not reading skills.

After finishing the assignment, please save all source code as a plaintext file (.txt extension) and email it to us.

Sample File.txt contains

Ping

Pong

ping

bong

kong

king

grep –v –i ping file:file.txt

has no reverse search output

file.txt | line 1= Ping

file.txt | line 3 = ping

has reverse search

output

file.txt | line2 = Pong

file.txt | line4=bong

…