ASSIGNMENT 8

Write a program called **YourName-Assignment8** (replace **YourName** with your actual name). that uses functions to read and process the data from a formatted file. The program should contain the following exact functions (exact name, parameters names, parameters type, parameter order, returned values, functionality) in this exact order:

- 1. A ReadConcepts function that reads a list of concepts/strings from the LIST.txt text file (one concept per line), stores them into an array of 100 strings called Concepts, and count how many concepts are in the list and store in the reference parameter Number. The function should have two parameters (the array of concepts and a reference to the number of concepts in the array and should not return a value: void ReadConcepts (string Concepts [100], int &Number)
- 2. A PrintConcepts function that prints all the concepts from the array, one concept per line. The function should receive the array of concepts and the number of concepts as parameters and should not return any values:

```
void PrintConcepts (string Concepts[100], int Number)
```

3. A <code>SortConcepts</code> function that sort the array using the method from the textbook or practice exercises, without using any predefined functions or other sorting methods. The function should receive the array of concepts and the number of concepts as parameters and should not return any values:

```
void SortConcepts (string Concepts[100], int Number)
```

- 4. The main function should do all of the following in this order:
 - call the ReadConcepts function to read the concepts from the file and store them into an array ArrayConcepts and determine the NumberConcepts of concepts,
 - call the PrintConcepts for ArrayConcepts and NumberConcepts
 - call the SortConcepts to sort the ArrayConcepts and
 - call PrintConcepts to print the sorted ArrayConcepts.

You should solve the problem in C++ using only concepts studied in class so far and without using any global variables.

You need to create and submit:

- Visual Studio 2019 **C++ code** (call the project <u>YourName-Assignment8</u>). Submit the <u>YourName-Assignment8.cpp</u> file from your Visual C++ project.
- A screenshots document (<u>YourName</u>-<u>Assignment8-Screenshot.docx</u>) containing screenshots of your entire code in editor (take multiple screenshots if it larger than one window) and screenshots of the entire program output/console window (take multiple screenshots if it larger than one window). If the code/console/output does not fit on one screen take multiple screenshots.