BIL 102 – Computer Programming HW 06

Last Submission Date: April 9, 2014 - 09:00

Assume that you have a file with integers in each line. Write a function that reads current line into an array and returns the array.

Write a function that finds the longest subsequence between two occurrences of a given number in a given array. The function will return the start and end indexes of the subsequence.

Write a function that reads arrays (in seperate lines in the file) from a given file and finds the longest subsequence between two recurrences of a given number in all of the arrays. The function will return the start and end indexes of the longest of the longest subsequences.

Your program will read numbers from "numbers.txt" and for each of the numbers the program will find the longest subsequence in "arrays.txt". Then the program will write start and end indexes of the longest of the longest subsequences of each number to "longests.txt".

NOTES:

- *Do not change the file names given above.
- *Each line of "arrays.txt" will be considered as an array.
- *Assume that an array's size can be max 100.

EXAMPLE:

arrays.txt 156710285943 2 3 5 6 7 8 2 3 21 5 33 5

numbers.txt

5

2

longests.txt

2 11

06

General:

- 1. Obey honor code principles.
- 2. **Read your homework** <u>carefully</u> and follow the directives about the I/O format (data file names, file formats, etc.) and submission format <u>strictly</u>. Violating any of these directives will be penalized.
- 3. Obey coding convention.
- 4. Do not forget to put the required **tags** in the main function.
- 5. Your submission should include the following file **and NOTHING MORE** (no data files, object files, etc):

```
HW05_<StudentName>_<StudentSirname>_<student number>_part1.c
HW05_<StudentName>_<StudentSirname>_<student number>_part2.c
```

Do **NOT** compress the files you submit.

- 6. Do not use non-English characters in any part of your homework (in body, **file name**, etc.).
- 7. Deliver the printout of your work **until the last submission date**.