COEN 79L – Getting Started

Lab 1:

• Program 1: count the input characters.

In this program you will ask the user to enter some text. The user may input any combination of alphanumeric and non-alphanumeric characters.

Your program should count each category and tell the user how many of each they entered. Example:

Please type something:

"Hello World" has 10 alphanumeric characters and 0 non-alphanumeric characters.

• Program 2: string of numbers and its reverse

In this program you will ask your user to enter a string 10 numbers with no space in between. You will print the numbers and it reverse according to the following example

Please type a string of 10 digits (0 to 9) with no space

0123456789 9876543210 0123456789 9876543210 0123456789 9876543210 0123456789 9876543210 0123456789 9876543210

• Program 3:

In this program, your program reads a text file and output erases all non-alphabetical characters and for all words larger than 10 characters, converts them to uppercase and prints on the screen (use: cout)

For example, if the file input contains:

- 1_counter.exe compiled successfully.
- 1_counter.exe got correct output.

Exit code: 0

- 2 pattern.exe compiled successfully.
- 2 pattern.exe got correct output.

Exit code: 0

- 3 convert.exe compiled successfully.
- 3 convert.exe got correct output.

Exit code: 1

Execution of your program

>./a.out input will generate the following output on the screen

COUNTEREXE

SUCCESSFULLY

COUNTEREXE

PATTERNEXE

SUCCESSFULLY

PATTERNEXE

CONVERTEXE

SUCCESSFULLY

CONVERTEXE

• Program 4

Write a function that ask the user to think about a number between 1 and 20. Use successive guesses to find that number.

An output of the system can be the following:

- Think of a number between 1 and 20. Press enter when you are ready.
- ➤ Is the number 1? Y or N // if the user wrote anything but Y or N (y or n, yes or no is also acceptable), tell the user to only enter Y or N.
- ➤ Is the number 5? Y or N //if the user entered N
- ➤ I Found the number in <number> steps //if the user entered Y