

Lab 4

Assignment 1:

Write a complete C++ program illustrating the use of the random number generator. *For each of the 3 ranges listed below, call the random number generator 2 times.* You should have 6 calls to the random number generator in your program. Your output should be descriptive (i.e. tell what range of values the random number was generated within and the value generated) and written to a file, the name of which is supplied by the user.

Use rand () to generate random values in the following ranges:

1. Generate character in the range of 'C' – 'R'
2. Generate integer within range [3, 5]
3. Generate integer within range (-10, 15)

Assignment 2:

This assignment requires reading two input files “*words.txt*” and “*phrases.txt*”. *words.txt* will contain exactly 5 words appearing on multiple lines, *phrases.txt* will contain 3 lines of text. You also need an output file with the name supplied by the user. Write a complete C++ program that first reads each individual word in *words.txt*, and writes each word to the output file, one word per line. It should then read each complete line in *phrases.txt* using getline, and write each line, as read, to the same output file.

Sample words.txt: (notice it has 5 words)

Programming

is frustrating

and

fun.

Sample phrases.txt: (notice it has 3 lines)

Programming is frustrating and fun.

Debugging is the most painful thing I've ever experienced!

CS135 rocks! Can't wait until the final project.

Associated sample output file:

Output from words.txt file:

Programming

is

frustrating

and

fun.

Output from phrases.txt file:

Programming is frustrating and fun.

Debugging is the most painful thing I've ever experienced!

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(We have to set a specific number of words and lines right now because we don't have the ability to read an unknown number – we'll be able to do that when we learn about while loops – it'll give us much more flexibility – try while loops if you want to.)