Wayne State University

CSC 4421 – Winter 2025 Computer Operating Systems Labs Lab 02 -Basic I/O

Instructor: Tyler LaFrance Points Possible: 100

Tasks

Task 1*(50 points)

Implement a program to display a file's contents. It should be similar to the UNIX cat command when given a single file. Name your command show. It should have the following syntax:

\$./show fileName

The above program displays the contents of the file named fileName.

Each system call must have error checking, and print an error message if it occurs. You must use open(), read(), and close() system calls. 10 points each.

Task 2*(50 points)

Modify the above program to implement a program called trim. It should write to the destination file from the m^{th} line to the n^{th} line of the original file. It should have the following syntax:

\$./trim m n fileName destinationFile

The above program writes the contents of the file named fileName, from line m to line n, to destinationfile.

Each system call must have error checking, and print an error message if it occurs. You must use open(), read(), write(), and close() system calls. 10 points each