Wayne State University

CSC 4420 - SS 2024 Computer Operating Systems Lab

Lab 02 - Basic I/O

Points: 100

Tasks

Task 1*(**50 points**)

Implement a program to display a file's contents. When given a single file, it should be similar to the UNIX cat command. 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()**,** write() **and** close() **system calls. 10 points each.**

Task 2*(**50 points**)

Modify the above program to implement a program called body similar to UNIX commands head or tail. It should print from the mth line to the nth line of the given file. It should have the following syntax:

$ ./body m n fileName

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

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.**