DUE: 12-10-2024, 11:59 PM EST

Homework 5: Unix Tail Command

General Notes

Read the assignment requirements carefully, especially what to include in your final submission for each part. Refer to the submission instructions on the bottom of this document.

NOTE: This assignment is to be done SOLO, no partner allowed.

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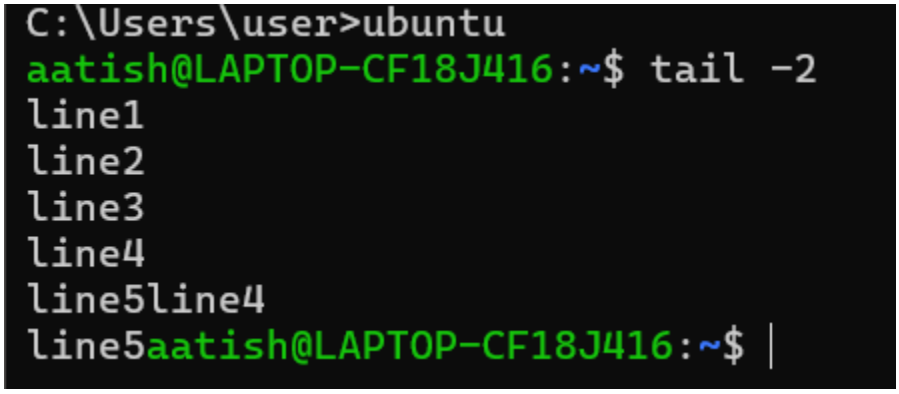
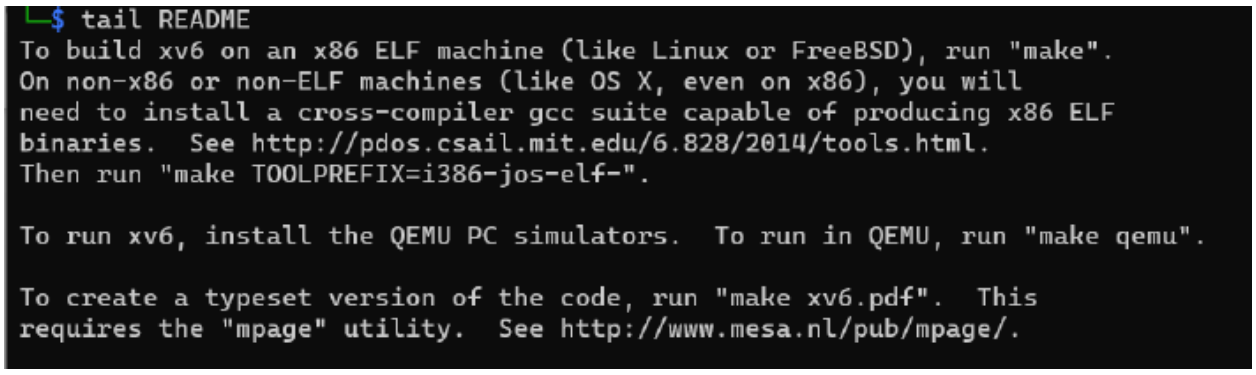
Implementing tail command in xv6

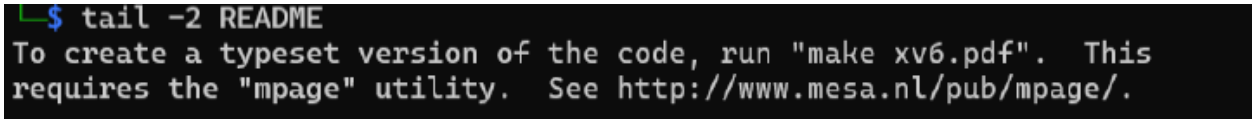
The traditional UNIX tail utility can print out lines from the end of a file. If the number of lines is not given (i.e tail FILE), tail would print out the last 10 lines of its input. We can also specify the number of lines to be printed by calling tail -NUM FILE, for example tail -2 README to print the last 2 lines of the file README.

Write a tail program for xv6. If a filename is provided on the command line, then tail should open it, read and print the last NUM lines (no extra blank lines), and then close it. If no filename is provided, tail should read from standard input.

Here are some of the examples of usage of tail command:







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```
└─$ grep the README |tail
If you are compiling natively, will need to add a plugin to your vscode. To install the necessary dependencies for debug
ging in vscode, press `ctrl p` then enter `ext install webfreak.debug`.
Version 6 (v6).  xv6 loosely follows the structure and style of v6,
xv6 borrows code from the following sources:
    JOS (asm.h, elf.h, mmu.h, bootasm.S, ide.c, console.c, and others)
    Plan 9 (entryother.S, mp.h, mp.c, lapic.c)
In addition, we are grateful for the bug reports and patches contributed by
The code in the files that constitute xv6 is
To run xv6, install the QEMU PC simulators.  To run in QEMU, run "make qemu".
To create a typeset version of the code, run "make xv6.pdf".  This
requires the "mpage" utility.  See http://www.mesa.nl/pub/mpage/.
```

Submission:

- Please upload ONLY "**tail_<netid>.c**" to Brightspace. Example: **"tail_ab123.c"**
- Note: this assignment is to be submitted solo (no partners)

REMINDER: This assignment is to be done in xv6, DON'T use standard C libraries which aren't available on xv6.