

CS 3733 Operating Systems — Spring 2001

Assignment 1

Name _____

Consecutively number the pages and fill in the index below.

Put a check mark in the appropriate place if you think the part is correct.

| Description | source page | lint page | test output page | check if correct |
|-------------|-------------|-----------|------------------|------------------|
| makefile | _____ | | | |
| utility.c | _____ | _____ | | _____ |
| sorting.c | _____ | _____ | | _____ |
| testpart1.c | _____ | _____ | _____ | _____ |
| testpart2.c | _____ | _____ | _____ | _____ |
| testpart3.c | _____ | _____ | _____ | _____ |
| testpart4.c | _____ | _____ | _____ | _____ |
| testpart5.c | _____ | _____ | _____ | _____ |

Answer the questions that are on the back of this sheet.

If you think everything you did is correct, check here: _____

Otherwise, give a brief description of what is working and what is not:

Give a sort answer here for each of these questions:

- 1) How much space was allocated in `readline` for the smallest line?
- 2) Do you check for memory allocation errors in `readline`?
- 3) Do you free all space allocated by `readline` when `malloc` returns an error?
- 4) Do you check for I/O errors in `readline`?
- 5) Do you free all space allocated by `readline` when an I/O error occurs?
- 6) In `readline`, the first time a line is found that is too long, how much additional space is allocated?
- 7) What is the longest line used in testing `readline`? How many times was reallocation done to read in this line?
- 8) Does `readfile` free the space allocated by previous calls to `readline` when an error occurs?
- 9) Does `readfile` free the space allocated by the call to `readline` that returns an empty string?
- 10) What machines were used to run your timing tests?
- 11) How did you make sure that other processes running on your machine did not interfere with your timing tests?