

Assignment 1 Addendum

There are points about this elaboration of a0 that are always worth discussing.

I) What you have lost from the standard library.

You no longer have

feof() – so you must read() using your file descriptor and watch the count
Get this correct early

fgets() – you need to extract the “lines” from read()s of a 4096 buffer.
Remember that lines can break across buffers.

Get this done in a separate module as though fgets() exists. Tokenizing
can proceed because you still have the string library.

write() is not fprintf(). Just write bytes from an address. ('binary') read() is
similar but make sure you have the address value in that second parameter
correct. You may use fprintf() for output to user.

II) The Files

A) Concept

a0 created run time data structures you are trying make more permanent. The
structs are being written into a 'random access' file, with the off_t values paired
with the char * song_name. These pairs are written to a second file, a
'directory'. Notice that the off_t values are like the pointer values used in a0 for
lookup.

When those two files are written, you can close things up and open the show
with a second program that needs only to read in the directory and then use it
for access to desired structs. Your binary search is on that directory. Notice that
you can write and read that whole directory (stored as an array) with single
operations.

B) Variable Length Structures

You must (re)design your struct or add info to your directory to know how to
fill the various length fields for display. DOCUMENT THIS PLEASE.

All of the above is some of what we have discussed but I think bears reminder.

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