

Double Pointer Exercise

Purpose

The purpose of this exercise is to familiarize the programmer with the usage of pointers and double pointers in C. The programmer will create a basic functioning clone of the `getline()` function.

Objective

Create your own `getline()` function utilizing double pointers. Using the provided skeleton source "getline_practice.c" complete each TODO in order to create a working `getline()` function.

Concepts

- A pointer is a type of variable that is represented by a memory address.
- "Dereferencing a pointer" is simply going to that address in memory and viewing or editing the buffer at that address.
- A double pointer is essentially a pointer to a pointer. It is used when you wish to alter not only the buffer but also where that buffer is located (as a result of `realloc()`).
 - If the buffer contents change but the location doesn't, then the single pointer does not change.
 - If the buffer contents change along with its location, then the single pointer will change as well.
 - Dereferencing the double pointer allows one to view and edit where a buffer is located.
 - Double-dereferencing a double pointer allows one to edit the buffer contents directly.

Attached

getline_practice.c

getline_practice.h