

Design Document

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1 Goal

The goal of this program is to read any numbers of files and print it out to standard output. The order of files being printed is the order it was entered on the command line. If the character '-' was specified, then we will print from standard input.

2 Assumptions

I'm assuming that the format that we are printing out the document is the way they appear when they are opened in terminal. I'm also assuming that this program should work on any openable files in terminal.

3 Design

The approach I am taking is to read the inputs of the command line one by one. For each input, I will check if the specified file exists. If the file exists, read the content of the file and store it into a buffer of size 32 Kib and print out the buffer to standard output. If the specified file does not exist, then we will throw an error using warn(). If a '-' is specified then we will take input from standard input.

I will make a separate function that takes in a file name and write the content to standard output.

4 Pseudocode

Procedure Dog

```
write_file function (filename)
    while not end of file
        Declare buffer of size 32
        Read file to buffer
        Write buffer to standard output
        Clear buffer
```

Main Function

```
If no arguments
    Standard input -> write_file
```

Loop through arguments

Open file ->fd

If "-" Is specified

Standard input -> write_file

If file does not exist or is a directory or does not have permission

Print warning to standard error

Else

fd -> write_file