MyGrep

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Chapter 1

File Index

1.1 File List

Here is a list of all files with brief descriptions:

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Chapter 2

File Documentation

2.1 mygrep.c File Reference

This file implements a custom grep utility for searching keywords in files/stdin.

Functions

- void readFile_andSearch (FILE *file, char *keyword, const char *outfile, int i_arg) reads file and searches keyword
- int writeLine_toFile (const char *path, char *line)
 appends file with line
- · void usage (void)

Prints the usage information for the mygrep utility.

• int main (int argc, char *argv[])

2.1.1 Detailed Description

This file implements a custom grep utility for searching keywords in files/stdin.

This utility makes a line-by-line search for a specified by user keyword either case-sensitive or insesitive in multiple/signle files or from stdin stream

@synopsis mygrep [-i] [-o outfile] keyword [file...]

Parameters

-i	Perform a case-insensitive search.
-0	Specify an output file to save search results
keyword	The keyword to search for in each line of the files/stdin
file	One or more files to search. If omitted, reads from stdin stream

File Documentation

Author

Volodymyr Skoryi

Date

2024-11-08

2.1.2 Function Documentation

2.1.2.1 main()

```
int main (
          int argc,
          char * argv[] )
```

2.1.2.2 readFile_andSearch()

reads file and searches keyword

This module takes a file, searches (case sensitivity may be specified) for a keyword in each line and in case an outfile was specified is going to append it with the line containing the keyword

Parameters

file	the FILE datatype pointer that is going to be read.
keyword	keyword that is going to be searched in each line of the "*file".
outfile	file path to an output file that is going to contain search result. if not specified (or set to NULL) will outoput to stdout.
i_arg	practically should be a boolean value that if set to 1 will make a case insensitive search (no matter if upper case or lower case).

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Returns

void

2.1.2.3 usage()

```
void usage (
     void )
```

Prints the usage information for the mygrep utility.

This function outputs a synopsis of the command-line arguments and options for the utility to stderr stream, then exits the program with a failure code EXIT_FAILURE.

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2.1.2.4 writeLine_toFile()

appends file with line

this module takes as input a path to the output file, after which it appends it with a string.

Parameters

ра		is the path to the output file (where line is appended)
lin	е	is the line itself that is going to be appended to the file

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Returns

int either 1 or 0. 1 for successful execution, 0 for an error

2.2 mygrep.h File Reference

Functions

- void readFile_andSearch (FILE *file, char *keyword, const char *outfile, int i_arg) reads file and searches keyword
- int writeLine_toFile (const char *path, char *line)
 appends file with line

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2.2.1 Function Documentation

2.2.1.1 readFile_andSearch()

```
void readFile_andSearch (
    FILE * file,
    char * keyword,
    const char * outfile,
    int i_arg )
```

reads file and searches keyword

This module takes a file, searches (case sensitivity may be specified) for a keyword in each line and in case an outfile was specified is going to append it with the line containing the keyword

Parameters

file	the FILE datatype pointer that is going to be read.		
keyword	keyword that is going to be searched in each line of the "*file".		
outfile	file path to an output file that is going to contain search result. if not specified (or set to NULL) will outoput to stdout.		
i_arg	practically should be a boolean value that if set to 1 will make a case insensitive search (no matter if upper case or lower case).		

Author

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Date

2024-11-08

Returns

void

2.2.1.2 writeLine_toFile()

appends file with line

this module takes as input a path to the output file, after which it appends it with a string.

Parameters

path	is the path to the output file (where line is appended)
line	is the line itself that is going to be appended to the file

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2024-11-08

Returns

int either 1 or 0. 1 for successful execution, 0 for an error

2.3 mygrep.h

Go to the documentation of this file.

```
O0001 #ifndef MYGREP_H
00002 #define MYGREP_H
00003
00004 void readFile_andSearch(FILE *file, char* keyword, const char* outfile, int i_arg);
00005 int writeLine_toFile(const char *path, char* line);
00006
00007 #endif
```

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