

Project 2: Unix Utilities

Jesse Mäkelä

jesse.j.makela@student.lut.fi

Features

Feature	What does	Usage example (bash)
my-cat	A simplified version of the `cat` utility that reads and displays file contents.	<code>./my-cat test1.txt</code>
my-grep	A simplified version of the `grep` utility that searches for text patterns in files.	<code>./my-grep foo test2.txt</code>
my-zip	A file compression utility using run-length encoding.	<code>./my-zip test3.txt > compressed.z</code>
my-unzip	A file decompression utility for files compressed with my-zip.	<code>./my-unzip compressed.z</code> <code>./my-unzip compressed.z > original.txt</code>

Build

This project has Makefile

To build:

```
make
```

To clean:

```
make clean
```

Usage example:

```
● essey@JessePC:~/kaysys/projekti2$ make
gcc -Wall -Werror -o my-cat my-cat.c
gcc -Wall -Werror -o my-grep my-grep.c
gcc -Wall -Werror -o my-zip my-zip.c
gcc -Wall -Werror -o my-unzip my-unzip.c
● essey@JessePC:~/kaysys/projekti2$ ./my-cat test1.txt
Hello World
This is a test file
It has multiple lines
● essey@JessePC:~/kaysys/projekti2$ ./my-grep foo test2.txt
foo bar
This line has foo in it
foolish test
● essey@JessePC:~/kaysys/projekti2$ ./my-zip test3.txt > compressed.z
● essey@JessePC:~/kaysys/projekti2$ ./my-unzip compressed.z
aaaaaaaaaabbba
● essey@JessePC:~/kaysys/projekti2$ ./my-unzip compressed.z > original.txt
● essey@JessePC:~/kaysys/projekti2$ make clean
rm -f my-cat my-grep my-zip my-unzip *.z *.o
❖ essey@JessePC:~/kaysys/projekti2$
```

test1.txt	test2.txt
projekti2 > test1.txt	projekti2 > test2.txt
1 Hello World	1 foo bar
2 This is a test file	2 This line has foo in it
3 It has multiple lines	3 Another line without the word
4	4 foolish test
	5

test3.txt	original.txt
projekti2 > test3.txt	projekti2 > original.txt
1 aaaaaaaaaabbba	1 aaaaaaaaaabbba
2	2