

# Documentation 2

## MY-CAT

```
(base) jerepuurun@Jere-Mac cat % ./my-cat lorem.txt lorem2.txt
1. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin imperdiet justo sit amet enim vulputate tincidunt. Fusce commodo hendrerit auctor. Nunc
2. lacinia nulla sed metus interdum, at feugiat ligula consectetur. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.
3. Maecenas finibus mollis placerat. Aenean rutrum sit amet lorem eget semper. Pellentesque et felis ac quam dapibus lobortis. Maecenas ac nisi libero. Donec
4. neque enim, rhoncus quis lacus non, porta fringilla risus. Aliquam nisi nibh, molestie a elementum ac, dignissim sit amet odio. Nam ac tellus metus. Aenean rhoncus, risus pulvinar efficitur lacinia, nisi mauri
s vestibulum turpis, sed maximus neque nulla quis nisl. Aliquam tempor at orci sed dapibus. Duis
5. lacinia lacinia lorem quis vulputate.
6. Fusce vitae turpis rutrum, lacinia libero vel, auctor massa. Phasellus euismod ac nulla at pretium. Nam sollicitudin vulputate lacus, vitae commodo libero
1. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin imperdiet justo sit amet enim vulputate tincidunt. Fusce commodo hendrerit auctor. Nunc
2. lacinia nulla sed metus interdum, at feugiat ligula consectetur. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.
3. Maecenas finibus mollis placerat. Aenean rutrum sit amet lorem eget semper. Pellentesque et felis ac quam dapibus lobortis. Maecenas ac nisi libero. Donec
4. neque enim, rhoncus quis lacus non, porta fringilla risus. Aliquam nisi nibh, molestie a elementum ac, dignissim sit amet odio. Nam ac tellus metus. Aenean rhoncus, risus pulvinar efficitur lacinia, nisi mauri
s vestibulum turpis, sed maximus neque nulla quis nisl. Aliquam tempor at orci sed dapibus. Duis
5. lacinia lacinia lorem quis vulputate.
6. Fusce vitae turpis rutrum, lacinia libero vel, auctor massa. Phasellus euismod ac nulla at pretium. Nam sollicitudin vulputate lacus, vitae commodo libero
(base) jerepuurun@Jere-Mac cat %
```

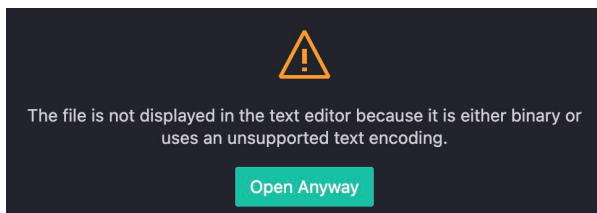
For my-cat program, I first check that atleast 1 file is provided. After that, I loop through all of the provided files, and I decided to use getline() for printing the lines out, since the other task also required using it.

## MY-GREP

```
(base) jerepuurun@Jere-Mac grep % ./my-grep lorem lorem.txt
3. Maecenas finibus mollis placerat. Aenean rutrum sit amet lorem eget semper. Pellentesque et felis ac quam dapibus lobortis. Maecenas ac nisi libero. Donec
5. lacinia lacinia lorem quis vulputate.
(base) jerepuurun@Jere-Mac grep %
```

Here I utilized the same code I had written in the my-cat task. I moved the output part to a separate function, and added the string matching using strstr(). Another addition I had to make was the reading from terminal / pipe if no input file was given, but that was an easy implementation with the stdin.

## MY-ZIP & MY-UNZIP



Not sure how to take a screenshot of the zipping “working”, as nothing gets outputted into the console.

I do the argument amount check first, open the file with “rb” to support not only text files. Then I simply loop through characters, count them, and fwrite them onto a file. I decided to utilize current and previous characters to determine whether the character has changed to a new one.

In the decompression function, I read the binary number from the file, get the character, and in a loop print the character number of times.

For both of these I utilized fread, fwrite for zipping and printf for unzipping.

```
(base) jerepuurun@Jere-Mac unzip % ./my-unzip lorem.z
1. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin imperdiet justo sit amet enim vulputate tincidunt. Fusce commodo hendrerit auctor. Nunc
2. lacinia nulla sed metus interdum, at feugiat ligula consectetur. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.
3. Maecenas finibus mollis placerat. Aenean rutrum sit amet lorem eget semper. Pellentesque et felis ac quam dapibus lobortis. Maecenas ac nisi libero. Donec
4. neque enim, rhoncus quis lacus non, porta fringilla risus. Aliquam nisi nibh, molestie a elementum ac, dignissim sit amet odio. Nam ac tellus metus. Aenean rhoncus, risus pulvinar efficitur lacinia, nisi mauri
s vestibulum turpis, sed maximus neque nulla quis nisl. Aliquam tempor at orci sed dapibus. Duis
5. lacinia lacinia lorem quis vulputate.
6. Fusce vitae turpis rutrum, lacinia libero vel, auctor massa. Phasellus euismod ac nulla at pretium. Nam sollicitudin vulputate lacus, vitae commodo libero
(base) jerepuurun@Jere-Mac unzip %
```