

CSE344 HOMEWORK1

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When writing make on terminal, all parts will be compiling.

PART1

Then, to run part1, make runAppendMeMore will be writing the terminal.

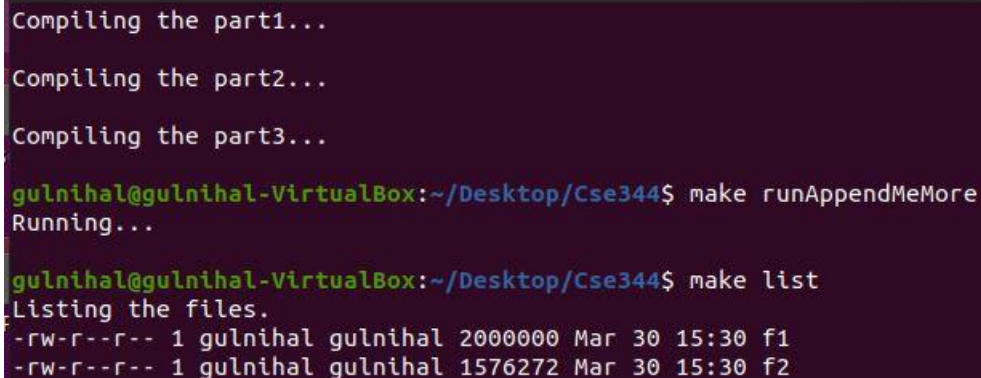
After that, run the make list on terminal to list the sizes of the file f1 and f2.

The size is different because of O_APPEND .

\$ appendMeMore f1 1000000 & appendMeMore f1 1000000 -> This is run two instances of this program at the same time. While writing, bytes are appending.

Repeat the same steps, writing to a different file, but this time specifying the x argument: \$ appendMeMore f2 1000000 x & appendMeMore f2 1000000 x .However, when writing it's not appended so some bytes overwrite.

That's why f2 is less than f1.



```
Compiling the part1...
Compiling the part2...
Compiling the part3...
gulnihal@gulnihal-VirtualBox:~/Desktop/Cse344$ make runAppendMeMore
Running...
gulnihal@gulnihal-VirtualBox:~/Desktop/Cse344$ make list
Listing the files.
-rw-r--r-- 1 gulnihal gulnihal 2000000 Mar 30 15:30 f1
-rw-r--r-- 1 gulnihal gulnihal 1576272 Mar 30 15:30 f2
```

PART2

Dup() function returns the minimum integer value available for the current system.

The Dup2 function returns the first integer value that is not less than the newfd. That is divided into two situations:

- 1: If the newfd has been turned on, then turn it off, replicate the file descriptor.
- 2, if the newfd is equal to the oldfd, Dup2 returns newfd without closing it.

```
gulnihal@gulnihal-VirtualBox:~/Desktop/Cse344$ make runDup
Running...

Before the dup2:
fd1 = 3 fd2 = 4
After the dup2:
fd1 = 3 fd2 = 4
returning value is 4.

Error! : Bad file descriptor
65
8
```

In this output , first of all printing the file descriptor before dup2. Then printing the after dup2 and which value returned is printed, as well.

After that error will be printed because in the program, opening the file but without O_CREAT and this file does not exist in the folder. So when checking dup for this situation. Error is occurred.

After that, the returning values of dup function of fd3 and fd4 are printed respectively.

PART3

First of all, opening the file(fd1) and then, this file descriptor duplicating to the new variable (fd2).

Also opening other file which flag is different from the fd1.

Finally, the file descriptors are compared.

```
l_1901042253$ make runPart3
Running...

fd1-fd2
Same

fd2-fd3
It's not same.
gulnihal@gulnihal-VirtualBox:~/Downloads/akdem_gulnihal_1901042253/akdem_gulniha
l_1901042253$
```