

COMP 8567
Summer 2023
Lab 2

Write a C program **lab2.c** to do the following:

(Note: All the following operations have to be performed **within the single lab2.c program**)

- Using the `open()` system call , create a new file **new.txt** in the PWD with permission 0766
 - You need to use the `umask()` system call before you use the `open()` system call.
 - You need to ensure new.txt is not present in your PWD before you run this program
- Write “Welcome to COMP 8567” into the file new.txt
 - close the file using `close()`
- Continue the same program and open new.txt in the `O_APPEND` mode and write the following into the file using two separate write system calls in line # 2 and line # 3 of the file.
 - “Advanced Systems Programming”
 - “University of Windsor”
- Open new.txt in the `O_RDWR` mode
 - Write “####&&&&” into new.txt at the following positions
 - 10 bytes from the beginning of the file
 - 12 bytes after the previous operation is performed
 - 40 bytes after the end of the file
 - Replace all the NULL characters in the file with the ‘N’ character
 - close new.txt
- open new.txt in the read only mode and perform the following operations:
 - Print the contents of the file 10 bytes at a time (line by line)
 - Print the size of the file onto the standard output
- Close new.txt

//End of the program lab2.c

Submission:

- Upload two files: lab2.c and new.txt (final contents)