

COSC 350 System Software mini test #2

1. write a program to count the lines of a file using system calls.

```
#include <stdio.h>
#include <stdlib.h>
#include <fcntl.h>
```

2. Explain the difference between Buffered I/O and Unbuffered I/O.

3. Explain the following Implementations of a file system.

Contiguous Allocation -

Linked-List Allocation-

Linked-List allocation with file allocation table FAT -

Index-Node Allocation -

4. Write a c program to take integer arguments and find the even value sum and the odd value sum.
Write a `st_to_int` that takes a string argument and output the string as an integer.

eg. `./a.out 12 13 14 15 16 17`

even value sum: 42

odd value sum: 45

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

5. write a c program which creates a symmetric file so that each line of the file say: abcdefg becomes abcdefg || gfedcba in a new file

```
#include <unistd.h>
#include <fcntl.h>
#include <stdlib.h>
#include <stdio.h>
#include <syst/stat.h>
```