

Sidharth

2K18/MC/114

Experiment 1

Aim: To Write a C program to read a file and copy the contents into a new file using system calls.

Code:

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

int main(int argc, char *argv[]){
    int file1, file2;
    char buff[1024];
    long int n;
    if(((file1 = open(argv[1], O_RDONLY)) == -1) ||
        ((file2=open(argv[2],O_CREAT|O_WRONLY|O_TRUNC, 0700)) == -1)){
        printf("file problem");
        exit(1);
    }
    while((n=read(file1, buff, 1024)) > 0){
        if(write(file2, buff, n) != n){
            printf("writing problem ");
            exit(3);
        }
    }
    close(file1);
    close(file2);
}
```

Output:

```
sidharth001@LAPTOP-2SFRN76F: /mnt/c/Users/Sidharth/os
doc exp1.c source.txt
sidharth001@LAPTOP-2SFRN76F:/mnt/c/Users/Sidharth/os$ cat source.txt
Integer id enim dictum, eleifend augue vitae, efficitur purus. In varius nisl quis nib
h tincidunt, sit amet egestas nibh sollicitudin. Vivamus libero augue, venenatis non n
isl nec, dapibus pellentesque justo. Fusce et pulvinar enim. Suspendisse aliquet, quam
et pulvinar vestibulum, velit urna euismod neque, mattis egestas ante risus vitae mas
sa.sidharth001@LAPTOP-2SFRN76F:/mnt/c/Users/Sidharth/os$ gcc exp1.c && ./a.out source.
txt dest.txt
sidharth001@LAPTOP-2SFRN76F:/mnt/c/Users/Sidharth/os$ ls
a.out dest.txt doc exp1.c source.txt
sidharth001@LAPTOP-2SFRN76F:/mnt/c/Users/Sidharth/os$ cat dest.txt
Integer id enim dictum, eleifend augue vitae, efficitur purus. In varius nisl quis nib
h tincidunt, sit amet egestas nibh sollicitudin. Vivamus libero augue, venenatis non n
isl nec, dapibus pellentesque justo. Fusce et pulvinar enim. Suspendisse aliquet, quam
et pulvinar vestibulum, velit urna euismod neque, mattis egestas ante risus vitae mas
sidharth001@LAPTOP-2SFRN76F:/mnt/c/Users/Sidharth/os$
```