

LAB 1

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Q1.

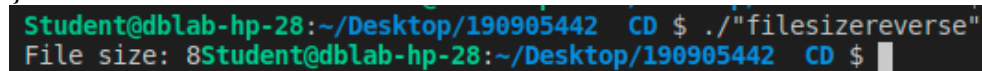
```
#include<stdio.h>
#include<stdlib.h>
```

```
int main()
{
    char file_name[20];
    printf("Enter your file name: ");
    scanf("%s", file_name);
    FILE *f1;
    f1=fopen(file_name,"r");
    if(f1==NULL){
        printf("File doesnt exist");
    }
    else {
        char c=fgetc(f1);
        int line=0;
        int ch=0;
        while(c!=EOF){
            if(c=='\n'){
                ++line;
            }
            else {
                ++ch;
            }
            c=fgetc(f1);
        }
        printf("Lines %d Characters %d",line,ch);
        fclose(f1);
        return 0;
    }
    return 0;
}
```

```
Student@dblab-hp-28:~/Desktop/190905442  CD $ cd "/home/Student/Desktop/190905442  CD "
Student@dblab-hp-28:~/Desktop/190905442  CD $ ./"countlinesandcharacters"
Enter your file name: src
Lines 1 Characters 8Student@dblab-hp-28:~/Desktop/190905442  CD $ █
```

Q2.

```
#include<stdio.h>
#include<stdlib.h>
int main(){
    FILE *f1,*f2;
    char ch, buffer[1024];
    int i=0;
    f1=fopen("src","r");
    f2=fopen("output.txt","w+");
    if(!f1 || !f2){
        printf("File doesnt exist");
    }
    while(ch!=EOF){
        ch=fgetc(f1);
        if(ch!='\n'){
            buffer[i++]=ch;
        }
    }
    printf("File size: %d",i-1);
    for(int j=i-2;j>=0;j--){
        ch=buffer[j];
        fputc(ch,f2);
    }
}
```

A terminal window with a black background and green text. The prompt is 'Student@dblab-hp-28:~/Desktop/190905442 CD \$'. The command './"filesizereverse"' has been executed. The output is 'File size: 8'. The prompt is now 'Student@dblab-hp-28:~/Desktop/190905442 CD \$' followed by a cursor.

```
Student@dblab-hp-28:~/Desktop/190905442 CD $ ./"filesizereverse"
File size: 8Student@dblab-hp-28:~/Desktop/190905442 CD $ █
```

Input : hi there

Output : ereht ih

Q3.

```
#include<stdio.h>
#include<stdlib.h>
int main()
{
    FILE *f1, *f2, *f3;
    char c1 , c2;
    f1 = fopen("first", "r");
    f2 = fopen("second", "r");
    f3 = fopen("output1.txt", "w");

    if (!f1 || !f2 || !f3)
    {
        printf("Cant Open File\n");
        exit(1);
    }
    while(1)
    {
        if(c1 != EOF)
        {
            c1 = fgetc(f1);
            while(c1 != '\n')
            {
                if(c1 == EOF)
                    break;
                fputc(c1, f3);
                c1 = fgetc(f1);
            }
            fputc('\n', f3);
            if(c1 != EOF)
                fputc('\n', f3);
        }
        if(c2 != EOF)
        {
            c2 = fgetc(f2);
            while (c2 != '\n')
            {
                if(c2 == EOF)
                    break;
                fputc(c2, f3);
                c2 = fgetc(f2);
            }
            fputc('\n', f3);
            if(c2 != EOF)
                fputc('\n', f3);
        }
        if(c1 == EOF && c2 == EOF)
            break;
    }
    return 0;
}
```

```
Student@dblab-hp-28:~/Desktop/190905442 CD $ ./"addtwofiles"  
Student@dblab-hp-28:~/Desktop/190905442 CD $ █
```

Input :

First file :

HELLO

HI

THERE

Second file :

world

fine

okay

Output :

HELLO

world

HI

fine

THERE

okay