

Files:

a. Write a C program to display the contents of a file to standard output device.

```
#include<stdio.h>
#include<string.h>
void main()
{
char ch;
char str[20];
FILE *fp;

printf("Enter the source file name");
gets(str);
```

```
fp=fopen(str,"r");

if(fp==NULL)
{
    printf("Error in opening file");
}

while((ch=getc(fp))!=EOF)
{
    putchar(ch);
}
fclose(fp);
}
```

RESULT:

INPUT:

hello.txt (created file with text "this is kmit")

OUPUT:

Enter the source file name
hello.txt
this is kmit

b. Write a C program which copies one file to another, replacing all lowercase characters with their uppercase equivalents.

```
#include <stdio.h>
#include<stdlib.h>
void main()
{
    FILE *fp,*ft;
    char ch;

    fp=fopen("w.c","r");
    ft=fopen("ww.c","w");

    if(fp==NULL)
    {
        puts("Cannot open file");
        exit(0);
    }
```

```
if(ft==NULL)
{
    puts("Cannot open file");
}

while((ch=fgetc(fp))!=EOF)
{
    if(ch>=97&&ch<=122)
        ch=ch-32;
    fputc(ch,ft);
}
fclose(fp);
fclose(ft);
}
```

RESULT:

INPUT:

```
//w.c created file with following c program code
#include<stdio.h>
void main()
{
    int a=10,b=20;
    printf("addition of a,b=%d",a+b);
}
```

OUTPUT:

```
{  
int a=10,b=20;  
printf("addition of a,b=%d",a+b);  
}
```

OUTPUT:

//ww.c generated by compiler with following code by

convert lowercase letters to uppercase letters

```
#INCLUDE<STDIO.H>
```

```
VOID MAIN()
```

```
{
```

```
INT A=10,B=20;
```

```
PRINTF("ADDITION OF A,B=%D",A+B); }
```

**c. Write a C program to count the number of times
a character occurs in a text file. The
file name and the character are supplied as
command line arguments.**

```
#include <stdio.h>  
#include <stdlib.h>  
#include <string.h>  
  
int main(int argc, char *argv[])  
{  
    FILE *finp = NULL;  
    FILE *output = NULL;  
  
    int letter; // character to be found  
    int ex=0; // character occurrence counter  
  
    if( argc!=4 )  
    {  
        printf( "pass correct way of command line  
arguments like inputfile outfile character want  
  
                to search\n");  
        exit(0);  
    }  
  
    finp=fopen(argv[1], "r");
```

```

        to search\n");
    exit(0);
}

finp=fopen(argv[1], "r");

if( finp==NULL)
{
    perror( "fopen for the input file failed" );
    exit(0);
}

output=fopen(argv[2], "w");

if(output==NULL )
{
    perror( "fopen for the output file failed" );
    fclose( finp );
    exit(0);
}

while( (letter = fgetc(finp) )!=EOF)
{
    if( argv[3][0]==letter) /*From ASCII TABLE*/
    {
        ex++;
    }
}

fprintf(output,"The search character is '%c' and it
occurred %d times\n", argv[3][0], ex);
fclose(finp);
fclose(output);

return 0;
}

```

```
        }
    }

    fprintf(output,"The search character is '%c' and it
occurred %d times\n", argv[3][0], ex);
    fclose(finp);
    fclose(output);

    return 0;
}
```

RESULT:

OUTPUT:

```
$./a.out hi.txt hi2.txt s
(hi.txt file contained text: hello studentsssss.
As a result: hi2.txt got: The search character is 's'
and it occurred 6 times )
```

e. Write a C program to merge two files into a third file (i.e., the contents of the first file followed by those of the second are put in the third file).

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

void main()
{
    // Open two files to be merged
    FILE *fp1 = fopen("w.c", "r");
    FILE *fp2 = fopen("ww.c", "r");

    // Open file to store the result
    FILE *fp3 = fopen("r.c", "w");

    char c;

    if (fp1 == NULL || fp2 == NULL || fp3 == NULL)
    {
        puts("Could not open files");
        exit(0);
    }

    // Copy contents of first file to file3.txt
    while ((c = fgetc(fp1)) != EOF)
        fputc(c, fp3);

    // Copy contents of second file to file3.txt
    while ((c = fgetc(fp2)) != EOF)
        fputc(c, fp3);

    printf("Merged w.c and ww.c into r.c");
    fclose(fp1);
    fclose(fp2);
    fclose(fp3);
}
```

RESULT:

```
}
```

RESULT:

INPUT:

w.c has following code

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

```
void main()
```

```
{
```

```
int a=10,b=20;
```

```
printf("addition of a,b=%d",a+b);
```

```
}
```

ww.c has following code

```
#INCLUDE<STDIO.H>
```

```
VOID MAIN()
```

```
{
```

```
INT A=10,B=20;
```

```
PRINTF("ADDITION OF A,B=%D",A+B);
```

```
}
```

OUTPUT:

Merged w.c and ww.c into r.c.

r.c has following code

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

```
void main()
```

```
{
```

```
int a=10,b=20;
```

```
printf("addition of a,b=%d",a+b);
```

```
}
```

```
#INCLUDE<STDIO.H>
```

```
VOID MAIN()
```

```
{
```

```
INT A=10,B=20;
```

```
PRINTF("ADDITION OF A,B=%D",A+B);
```

```
}
```