MODULE 6 FILE PROGRAM SET -1

Write a line to sample.txt and display

```
                //Enter contents in a file and Display the contents
#include<stdio.h>
main()
{
        char c;
        FILE *f;
        f=fopen("Sample.txt","w");
        printf("Enter contents to file. Type * to stop\n");
                                        //Type a line and press enter key
        c=getchar();                    //Read first letter and store in c
        while(c!='\n')                  //if c is not \n(enter key)
        {
        putc(c,f);                      //store the value of c in f (that points to file sample.txt)
        c=getchar();                    //Read next letter and store in c
        }
        fclose(f);

        f=fopen("Sample.txt","r");
        if(f1==0)                       //or if(!f1) (Here if f1 is 0 f1 is 1 then this is true)
        {       printf("File does not exist");
        }
        else
        {
                printf("\ncontents in file \n");
                c=getc(f);              //Read first letter from file sample.txt and store in c
                while(c!=EOF)           //      if c is not end of file character
                {
                putchar(c);             //print the value of c in screen
                c=getc(f);              //Read next letter from file sample.txt and store in c
                }
        fclose(f);
        }
}
```

Write contents to sample.txt and display

```
//Enter contents through keyboard and store in a file until * is seen.  and Display the contents
#include<stdio.h>
main()
{
        char c;
        FILE *f;
        f=fopen("Sample.txt","w");
        printf("Enter contents through keyboard to store in file. Type * to stop\n");
        c=getchar();
        while(c!='*')
        {
        putc(c,f);
        c=getchar();
        }
        fclose(f);

        f=fopen("Sample.txt","r");
        if(f1==0)           //or if(!f1) Here if f1 is 0 f1 is 1 then this is true
        {       printf("File does not exist");
        }
        else
        {
        printf("\ncontents in file \n");
        c=getc(f);
                while(c!=EOF)
                {
                putchar(c);
                c=getc(f);
                }
        fclose(f);
        }
}
```

//COPY contents from sample.txt to output.txt

```
//create sample.txt and fill it with contents
#include<stdio.h>
main()
{
        char c;
        FILE *f1,*f2;
        f1 = fopen("sample.txt","r");
        f2 = fopen("Output.txt","w");
        if(f1==0)           //or if(!f1) Here if f1 is 0 f1 is 1 then this is true
        {       printf("File does not exist");
        }
        else
        {
        c=getc(f1);
                while(c!=EOF)
                {
                    putc(c,f2);
                    c=getc(f1);
                }
        }
        fclose(f1);
        fclose(f2);
}
```

//MERGE contents from sample.txt and abc.txt to output.txt

```
#include<stdio.h>

main()
{
        char c;
        FILE *f1,*f2,*f3;


        f1 = fopen("sample.txt","r");
        f2 = fopen("abc.txt","r");
        f3 = fopen("Output.txt","w");

        if(f1==0 || f2==0)                      //or if(!f1) Here if f1 is 0 f1 is 1 then this is true
        {       printf("File does not exist");

        }

        else
        {
        c=getc(f1);
                while(c!=EOF)
                {
                    putc(c,f3);
                    c=getc(f1);
                }
        c=getc(f2);
                while(c!=EOF)
                {
                    putc(c,f3);

                    c=getc(f2);
                }
        }

        fclose(f1);
        fclose(f2);
        fclose(f3);


}
```

Read contents from a sample.txt file and
Convert lowercase into uppercase and write into another file upsample.txt

```
#include<stdio.h>


intmain()
{
        char c;
        FILE *f1,*f2,*f3;
        clrscr();

        f1 = fopen("sample.txt","r");
        f2 = fopen("upsample.txt","w");


        if(f1==0 ) //or if(!f1) Here if f1 is 0 f1 is 1 then this is true
        {       printf("File does not exist");

        }

        else
        {
        c=getc(f1);
                while(c!=EOF)
                {
                    putc(toupper(c),f2);

                    c=getc(f1);
                }
        }

        fclose(f1);
        fclose(f2);
        fclose(f3);

}
```

Sort and store numbers in another file

Write a C program to read a set of numbers from an input file value.dat and store the sorted numbers in an output file sorted.dat

```
#include<stdio.h>
main()
{
        intn,num,a[100],b[100];
        FILE *f1,*f2;
        inti,j,temp;

        f1 = fopen("value.dat","w");

        printf("\nEnter how many numbers\n");
        scanf("%d",&n);

        printf("nEnter numbers to store in value.dat\n");
        for(i=0;i<n;i++)
        {
        scanf("%d",&a[i]);
        putw(a[i],f1);
        }

        fclose(f1);

        f1 = fopen("value.dat","r");
        f2 = fopen("sorted.dat","w");
        if(f1==0 )                          //or if(!f1) Here if f1 is 0 then !f1 is 1 then this is true
        {       printf("File does not exist");

        }
        else
        {
        num=getw(f1);
        i=0;
        printf("\nNumber stored in value.dat are  \n“);
        while(num!=EOF)
                {
                        b[i]=num;
                        printf("%d\t",num);
                        num=getw(f1);
                        i=i+1;
                }
```

```
        printf("\nBUBBLE SORT\n");

        for(i=0;i<=n-2;i++)
        {
                for(j=0; j<=n-2-i; j++)
                {
                        if(b[j]>b[j+1])
                        {
                                temp=b[j];
                                b[j]=b[j+1];
                                b[j+1]=temp;
                         }
                }
        }


printf(“Writing sorted array b in sorted.dat file”);
        for(i=0;i<n;i++)
         {
        putw(b[i],f2);
         }
        }
        fclose(f1);
        fclose(f2);

f2 = fopen("sorted.dat","r");

        if(f2==0 ) //or if(!f1) Here if f1 is 0 f1 is 1 then this is true
        {       printf("File does notexist");
        }
        else
        {
        num=getw(f2);
           i=0;
        printf("Number stored is ");

         while(num!=EOF)
                {
                        printf("\n%d\t",num);
                    num=getw(f2);

                }

            fclose(f2);
        }
```

Count the number of vowels in a file

```
#include<stdio.h>
#include<ctype.h>
intmain()
{
        char c;
        FILE *f1;
        int vow=0;
         f1=fopen("sample.txt","r");
if(f1==0)
{       printf("File does not exist");
}
else
{
c=getc(f1);
while(c!=EOF)
{


if(strcmp(toupper(c),'A')==0||strcmp(toupper(c),'E')==0||strcmp(toupper(c),'I')==0||strcmp(touppe
r(c),'O')==0||strcmp(toupper(c),'U')==0)
                { vow=vow+1;
                }
c=getc(f1);
                }
}
        fclose(f1);

printf("\nNumber of vowels=%d",vow);
}
```

Store information about a student in file

such as name and rollno(use structure)

```
//STORE STUDENT DETAILS IN A FILE studstr.txt  and display
#include<stdio.h>
#include<ctype.h>
struct student
{
introllno;
char name[20];
};
intmain()
{
        struct student s,s1;
        inti,n;
        FILE *f1;

        f1=fopen("studstr.txt","w");
        printf("Enter how many students");
        scanf("%d",&n);


        for(i=0;i<n;i++)
        {
        printf("\nEnter roll number and name");
        scanf("%d %s",&s.rollno,s.name);

        fwrite(&s, sizeof(struct student), 1, f1) ;
        }

        fclose(f1);

f1=fopen("studstr.txt","r");

fread(&s1, sizeof(struct student),1, f1) ;

while(  !feof(f1) )
{

        printf("\nrollno=%d name=%s",s1.rollno,s1.name);
        fread(&s1, sizeof(struct student), 1, f1 ) ;

}
fclose(f1);
}
```