

```
/****** Writing to a file *****/
```

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

```
int main()
```

```
{
```

```
    int num;
```

```
    FILE *fptr;
```

```
    fptr=fopen("sample.txt","w");
```

```
    if(fptr==NULL)
```

```
    {
```

```
        printf("Error!");
```

```
    }
```

```
    printf("Enter a number: ");
```

```
    scanf("%d",&num);
```

```
    fprintf(fptr,"%d",num);
```

```
    fclose(fptr);
```

```
    return 0;
```

```
}
```

```
/****** Reading from file *****/
```

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

```
int main()
```

```
{
```

```
int num;

FILE *fptr;

// open the file

if ((fptr=fopen("sample.txt","r"))==NULL)

{

    printf("Error! opening file");

}

fscanf(fptr,"%d",&num);

printf("Value of n=%d",num);

fclose(fptr);

return 0;

}


/***** Program to copy from one file to another *****/

#include <stdio.h>

#include <stdlib.h>

int main()

{

    FILE *fptr1, *fptr2;

    char filename[100], c;

    printf("Enter the filename to open for reading \n");
```

```
scanf("%s", filename);
```

```
// Open one file for reading
```

```
fptr1 = fopen(filename, "r");
```

```
if (fptr1 == NULL)
```

```
{
```

```
    printf("Cannot open file %s \n", filename);
```

```
    exit(0);
```

```
}
```

```
printf("Enter the filename to open for writing \n");
```

```
scanf("%s", filename);
```

```
// Open another file for writing
```

```
fptr2 = fopen(filename, "w");
```

```
if (fptr2 == NULL)
```

```
{
```

```
    printf("Cannot open file %s \n", filename);
```

```
    exit(0);
```

```
}
```

```
// Read contents from file
```

```
c = fgetc(fptr1);
```

```
while (c != EOF)
```

```

{
    fputc(c, fptr2);
    c = fgetc(fptr1);
}
printf("\nContents copied to %s \n", filename);
fclose(fptr1);
fclose(fptr2);
return 0;
}

/* C Program to count the Number of Lines in a Text File */

#include <stdio.h>

int main()
{
    FILE *fp;
    int count = 0;    // Line counter (result)
    char filename[100];
    char c;           // To store a character read from file
    int not=0, nob=0, noc=0;
    // Get file name from user.
    printf("Enter file name: ");

```

```
scanf("%s", filename);

// Open the file
fp = fopen(filename, "r");

// Check if file exists
if (fp == NULL)
{
    printf("Could not open file %s", filename);
    return 0;
}

// Extract characters from file and store in character c
for (c = getc(fp); c != EOF; c = getc(fp))
if (c == '\n')        // Increment count if this character is newline
count = count + 1;    // count newlines
else if (c == ' ')
nob++;                // count blanks
else if (c == '\t')
not++;                // count tabs
else
noc++;                // count characters
printf("The file %s has %d lines\n", filename, count);
```

```
printf("The file %s has %d characters\n", filename, noc);

printf("The file %s has %d blanks\n", filename, nob);

printf("The file %s has %d tabs\n", filename, not);


// Close the file

fclose(fp);

return 0;

}


/***** Print alternate characters from a file (random access of a file) *****/

#include <stdio.h>

main()

{

int k;

FILE *fstream;

char ch;

fstream = fopen("sample2.txt", "r");

printf("Alternate Characters = \n");


for (ch = getc(fstream); ch != EOF; ch = getc(fstream))

{
```

```
printf("%c", ch);  
//fseek(fstream, 1L,1);  
fseek( fstream, 1, SEEK_CUR);
```

```
}  
putchar('\n');  
fclose(fstream);  
}
```

```
/****** Print alternate characters from a file (random access of a file) *****/
```

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

```
main()
```

```
{
```

```
int k;
```

```
FILE *fstream;
```

```
char ch;
```

```
fstream = fopen("sample.txt", "w");
```

```
for ( k = 65; k <= 90; k++)
```

```
fprintf(fstream, "%c", k);
```

```
fclose(fstream);
```

```
fstream = fopen("sample.txt", "r");
```

```
k = 3;
fseek( fstream, k, SEEK_SET);
fscanf( fstream, "%c", &ch);
printf("Character at position %d = %c \n", k, ch);
k = -5;
fseek( fstream, k, SEEK_END);
fscanf( fstream, "%c", &ch);
printf("Character at position %d = %c \n", k, ch);
fclose(fstream);
}
```

```
/*Program to read name and marks of n number of students from user and store
them in a file*/
```

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

```
main()
```

```
{
```

```
char name[50];
```

```
int marks,i,n;
```

```
printf("Enter number of students: ");
```

```
scanf("%d",&n);
```

```
FILE *fptr;
```



```
fptr=(fopen("sample3.txt","w"));
if(fptr==NULL)
{
    printf("Error!");
}
for(i=0;i<n;++i)
{
    printf("For student%d\nEnter name: ",i+1);
    scanf("%s",name);
    printf("Enter marks: ");
    scanf("%d",&marks);
    fprintf(fptr,"\nName=%s \nMarks=%d \n",name,marks);
}
fclose(fptr);
fptr=fopen("sample3.txt","r");
for(i=0;i<n;++i)
{
    printf("\nFor student %d \t ",i+1);
    fscanf(fptr,"%s",name);
    printf("%s",name);
    fscanf(fptr, "%s",name);
    printf("\t%s",name);
}
```

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

```
fclose(fptr);
```

```
}
```