#include <stdio.h>

#include <stdlib.h> /\* For exit() function\*/

int main()

{

char c[1000];

FILE \*fptr;

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

printf("Error! opening file");

exit(1); /\* Program exits if file pointer returns NULL. \*/

}

fscanf(fptr,"%[^\n]",c);

printf("Data from file:\n%s",c);

fclose(fptr);

return 0;

}

#include <stdio.h>

#include <stdlib.h> /\* For exit() function \*/

int main()

{

char c[1000];

FILE \*fptr;

fptr=fopen("program.txt","w");

if(fptr==NULL){

printf("Error!");

exit(1);

}

printf("Enter a sentence:\n");

gets(c);

fprintf(fptr,"%s",c);

fclose(fptr);

return 0;

}

**Write a C Program to print half pyramid as using \* as shown in figure below.**

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

#include <stdio.h>

int main()

{

int i,j,rows;

printf("Enter the number of rows: ");

scanf("%d",&rows);

for(i=1;i<=rows;++i)

{

for(j=1;j<=i;++j)

{

printf("\* ");

}

printf("\n");

}

return 0;

}

**Write a C Program to print half pyramid as using numbers as shown in figure below.**

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

#include <stdio.h>

int main()

{

int i,j,rows;

printf("Enter the number of rows: ");

scanf("%d",&rows);

for(i=1;i<=rows;++i)

{

for(j=1;j<=i;++j)

{

printf("%d ",j);

}

printf("\n");

}

return 0;

}

**Write a C Program to print triangle of characters as below**

A

B B

C C C

D D D D

E E E E E

#include<stdio.h>

int main()

{

int i,j;

char input,temp='A';

printf("Enter uppercase character you want in triangle at last row: ");

scanf("%c",&input);

for(i=1;i<=(input-'A'+1);++i)

{

for(j=1;j<=i;++j)

printf("%c",temp);

++temp;

printf("\n");

}

return 0;

}

C Program To Display inverted half pyramid using \* and numbers

**Write a C Program to print inverted half pyramid using \* as shown below.**

\* \* \* \* \*

\* \* \* \*

\* \* \*

\* \*

\*

#include <stdio.h>

int main()

{

int i,j,rows;

printf("Enter the number of rows: ");

scanf("%d",&rows);

for(i=rows;i>=1;--i)

{

for(j=1;j<=i;++j)

{

printf("\* ");

}

printf("\n");

}

return 0;

}

1 2 3 4 5

1 2 3 4

1 2 3

1 2

1

**Write a C Program to print inverted half pyramid as using numbers as shown below.**

#include <stdio.h>

int main()

{

int i,j,rows;

printf("Enter the number of rows: ");

scanf("%d",&rows);

for(i=rows;i>=1;--i)

{

for(j=1;j<=i;++j)

{

printf("%d ",j);

}

printf("\n");

}

return 0;

}

C Program To display the pyramid of \* and digits

**Write a C program to print pyramid using \*.**

\*

\* \* \*

\* \* \* \* \*

\* \* \* \* \* \* \*

\* \* \* \* \* \* \* \* \*

#include <stdio.h>

int main()

{

int i,space,rows,k=0;

printf("Enter the number of rows: ");

scanf("%d",&rows);

for(i=1;i<=rows;++i)

{

for(space=1;space<=rows-i;++space)

{

printf(" ");

}

while(k!=2\*i-1)

{

printf("\* ");

++k;

}

k=0;

printf("\n");

}

return 0;

}

**Write a C program to print the pyramid of digits in pattern as below.**

1

2 3 2

3 4 5 4 3

4 5 6 7 6 5 4

5 6 7 8 9 8 7 6 5

#include <stdio.h>

int main()

{

int i,space,rows,k=0,count=0,count1=0;

printf("Enter the number of rows: ");

scanf("%d",&rows);

for(i=1;i<=rows;++i)

{

for(space=1;space<=rows-i;++space)

{

printf(" ");

++count;

}

while(k!=2\*i-1)

{

if (count<=rows-1)

{

printf("%d ",(i+k));

++count;

}

else

{

++count1;

printf("%d ", (i+k-2\*count1));

}

++k;

}

count1=count=k=0;

printf("\n");

}

return 0;

}

Write a C program to display reverse pyramid.

\* \* \* \* \* \* \* \* \*

\* \* \* \* \* \* \*

\* \* \* \* \*

\* \* \*

\*

#include<stdio.h>

int main()

{

int rows,i,j,space;

printf("Enter number of rows: ");

scanf("%d",&rows);

for(i=rows;i>=1;--i)

{

for(space=0;space<rows-i;++space)

printf(" ");

for(j=i;j<=2\*i-1;++j)

printf("\* ");

for(j=0;j<i-1;++j)

printf("\* ");

printf("\n");

}

return 0;

}

C Program to Draw Pascal's triangle

1

1 1

1 2 1

1 3 3 1

1 4 6 4 1

1 5 10 10 5 1

#include<stdio.h>

int main()

{

int rows,coef=1,space,i,j;

printf("Enter number of rows: ");

scanf("%d",&rows);

for(i=0;i<rows;i++)

{

for(space=1;space<=rows-i;space++)

printf(" ");

for(j=0;j<=i;j++)

{

if (j==0||i==0)

coef=1;

else

coef=coef\*(i-j+1)/j;

printf("%4d",coef);

}

printf("\n");

}

}

,

C Program to display Floyd's Triangle.

1

2 3

4 5 6

7 8 9 10

#include<stdio.h>

int main()

{

int rows,i,j,k=0;

printf("Enter number of rows: ");

scanf("%d",&rows);

for(i=1;i<=rows;i++)

{

for(j=1;j<=i;++j)

printf("%d ",k+j);

++k;

printf("\n");

}

}

|  |
| --- |
| #include<stdio.h>    struct Student {     int roll;     char name[12];     int percent;  } s1 = { 10, "SMJC", 80 };    int main() {     FILE \*fp;     struct Student s2;       //Write details of s1 to file     fp = fopen("ip.txt", "w");     fwrite(&s1, sizeof(s1), 1, fp);     fclose(fp);       fp = fopen("ip.txt", "r");     fread(&s2, sizeof(s2), 1, fp);     fclose(fp);       printf("\nRoll : %d", s2.roll);     printf("\nName : %s", s2.name);     printf("\nPercent : %d", s2.percent);       return (0);  } |

Output :



|  |  |
| --- | --- |
| 1  2  3 | Roll    : 10  Name    : SMJC  Percent : 80 |

**#include**<stdio.h>

**int** **main**(){

**char** str[70];

FILE \*p;

**if**((p=fopen("string.txt","r"))==NULL){

printf("\nUnable t open file string.txt");

exit(1);

}

**while**(fgets(str,70,p)!=NULL)

puts(str);

fclose(p);

**return** 0;

}

DISPLAY SOURCE CODE AS OUTPUT IN C PROGRAM

#include<stdio.h>

int main(){

    FILE \*p;

    char ch;

    p=fopen("raja.c","r");

    while((ch=getc(p))!=-1)

         putchar(ch);

    fclose(p);

    return 0;

}

COPY DATA FROM ONE FILE TO ANOTHER FILE USING C PROGRAM

 

**#include**<stdio.h>

**int** **main**(){

  FILE \*p,\*q;

**char** file1[20],file2[20];

**char** ch;

  printf("\nEnter the source file name to be copied:");

  gets(file1);

  p=fopen(file1,"r");

**if**(p==NULL){

      printf("cannot open %s",file1);

      exit(0);

  }

  printf("\nEnter the destination file name:");

  gets(file2);

  q=fopen(file2,"w");

**if**(q==NULL){

      printf("cannot open %s",file2);

      exit(0);

  }

**while**((ch=getc(p))!=EOF)

      putc(ch,q);

  printf("\nCOMPLETED");

  fclose(p);

  fclose(q);

**return** 0;

}

Write a c program to know given file is regular file, character special or it is directory?

#include "time.h"

#include "sys\stat.h"

#include "stdio.h"

void main(){

    struct stat status;

    FILE \*fp;

    stat("c:\\tc\\bin",&status);

    clrscr();

    if (status.st\_mode & S\_IFDIR)

         printf("It is directory.\n");

    if (status.st\_mode & S\_IFCHR)

         printf("It is chracter file.");

    if (status.st\_mode & S\_IFREG)

         printf("It is reggular file.");

    getch();

}

Output: It is directory.

Explanation:

Function int stat (char \*, struct stat \*) store the information of open file in form of structure struct stat Structure structstat has been defined in sys\stat.h as

struct stat {

    short  st\_dev,   st\_ino;

    short  st\_mode,  st\_nlink;

    int    st\_uid,   st\_gid;

    short  st\_rdev;

    long   st\_size,  st\_atime;

    long   st\_mtime, st\_ctime;

};

Write a c program to find out the size and drive where file has stored of any given file?

#include "time.h"

#include "sys\stat.h"

#include "stdio.h"

int main(){

    struct stat status;

    FILE \*fp;

    fp=fopen("test.txt","r");

    fstat(fileno(fp),&status);

    printf("Size of file : %d",status.st\_size);

    printf("Drive name   : %c",65+status.st\_dev);

    return 0;

}

Explanation:

Function int fstat (char \*, struct stat \*) store the information of open file in form of structure struct stat

Structure struct stat has been defined in sys\stat.h as

struct stat {

    short  st\_dev,   st\_ino;

    short  st\_mode,  st\_nlink;

    int    st\_uid,   st\_gid;

    short  st\_rdev;

    long   st\_size,  st\_atime;

    long   st\_mtime, st\_ctime;

};

Here

(a)st\_dev: It describe file has stored in which drive of your computer  ,it returns a number.

(b)st\_mode:  It describes various modes of file like file is read only, write only, folder, character file etc.

(c)st\_size: It tells the size of file in byte.

(d)st\_ctime:It tells last data of modification of the file in date format.

Note: 65 is ASCII value of A .So after adding status.st\_dev with 65 it will return appropriate drvie name as in your computer.

**To understand this example, you should have knowledge of following**[C programming](http://www.programiz.com/c-programming)**topics:**

[C Programming Files I/O](http://www.programiz.com/c-programming/c-file-input-output)

This program stores a sentence entered by user in a file.

#include <stdio.h>

#include <stdlib.h> /\* For exit() function \*/

int main()

{

char c[1000];

FILE \*fptr;

fptr=fopen("program.txt","w");

if(fptr==NULL){

printf("Error!");

exit(1);

}

printf("Enter a sentence:\n");

gets(c);

fprintf(fptr,"%s",c);

fclose(fptr);

return 0;

}

**Output**

Enter sentence:

I am awesome and so are files.