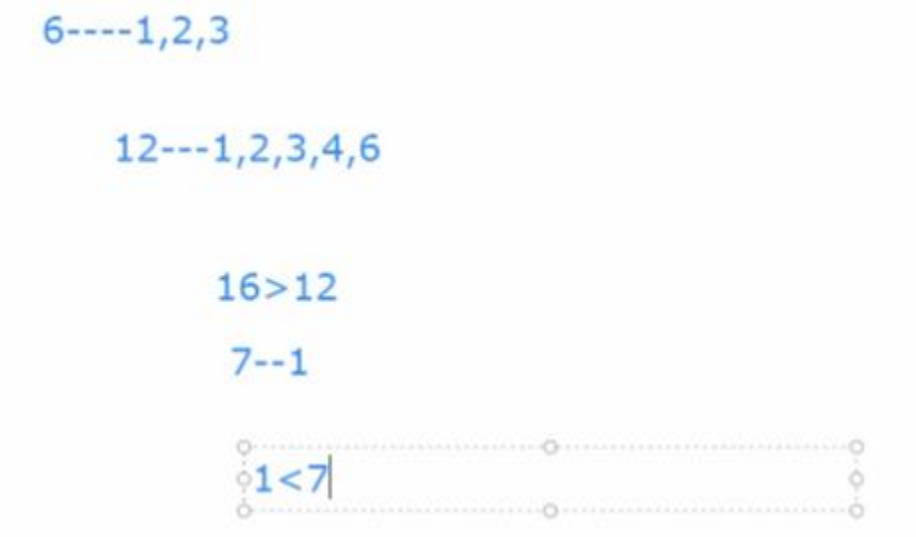
Process:abundant,perfect,deficient)



deficient number:

```
#include<stdio.h>
int main()
{
        int n,r,sum=0,i;
        printf("enter a number");
```

```
	scanf("%d",&n);
	for(i=1;i<n;i++)
	{
		r=n%i;
		if(r==0)
		{
			sum=sum+i;
		}
	}
	if(sum<n)
	printf(" is a deficient number");
	else
	printf("not a deficient");
	return 0;
}
```

Abundant number:

```
#include<stdio.h>
int main()
{
	int n,r,sum=0,i;
	printf("enter a number");
	scanf("%d",&n);
```

```
        for(i=1;i<n;i++)
        {
                r=n%i;
                if(r==0)
                {
                        sum=sum+i;
                }
        }
        if(sum>n)
        printf(" is a abundant number");
        else
        printf("not a abundant");
        return 0;
}
```

Perfect number:

```
#include<stdio.h>
int main()
{
        int n,r,sum=0,i;
        printf("enter a number");
        scanf("%d",&n);
```

```
for(i=1;i<n;i++)
{
        r=n%i;
        if(r==0)
        {
                sum=sum+i;
        }
}
if(sum==n)
printf(" is a perfect number");
else
printf("not a perfect");
return 0;
```

positive number:

```
#include<stdio.h>
int main()
{
        int num;
        printf("enter num value");
        scanf("%d",&num);
```

```
if(num>=0)
{
        printf("number is positive");
}
        else if(num==0)
        {
                printf("number is zero");
        }
else
{
        printf("number is negative");
        return 0;
        }
}
```

Program using #define:

There are two simple ways in C to define constants:

1. Using #define preprocessor.
2. Using const keyword.

#define identifier value

```
#include<stdio.h>

#define ha 0.5
```

```
int main()
{
        int b,h;
        float area;
        printf("enter b,h value");
        scanf("%d%d",&b,&h);
        area=b*h*0.5;
        printf("the area is %f",area);
        return 0;
}
```

Another program:

```
#include <stdio.h>
#define LENGTH 10
#define WIDTH  5
#define NEWLINE '\n'
int main()
 {
   int area;
    area = LENGTH * WIDTH;
 printf("value of area : %d", area);
    printf("%c", NEWLINE);
   return 0;
}
```

Largest among 4 numbers:

```
#include <stdio.h>
int main()
{
  int n1, n2, n3,n4;
  printf("Enter four numbers: ");
  scanf("%d%d%d%d",&n1,&n2,&n3,&n4);
  if (n1>n2&&n1>n3&&n1>n4)
    printf("%d is the largest number.", n1);
  else if (n2>n1&&n2>n3&&n2>n4)
    printf("%d is the largest number.", n2);
  else if(n3>n1&&n3>n2&&n3>n4)
    printf("%d is the largest number.", n3);
    else
    printf("%d is the largest number",n4);
  return 0;
}
```

Or

```
#include<stdio.h>
 main()
 {
int a,b,c,d;
```

```
printf("Enter the Four Numbers :");
scanf("%d %d %d %d",&a,&b,&c,&d);
if(a>b)
{
  if(a>c)
    {
    if(a>d)
    {
printf("%d is big",a);
}
else
{
printf("%d is big",d);
}
}
}
else
 if(b>c)
    {
    if(b>d)
         {
    printf("%d is big",b);
```

```
    }
else
{
  printf("%d is big",d);
}
}
    else
         if(c>d)
         {
 printf("%d is big",c);
}
else
{
printf("%d is big",d);
}
 return 0;
 }
```

Prime number:

```
#include<stdio.h>
int main()
```

```
{
  int n,i,r;
  printf("Enter n value ");
  scanf("%d",&n);
  for(i=2;i<n;i++)
  {
        r=n%i;
}
        if(r==0)
     printf("Not prime");
     else
     printf("Prime");

}
```

Electricity bill:

```
#include<stdio.h>
int main()
{
        int srno,premr,prsmr,nu;
        float bill;
        char cname[20];
```

```
printf("enter srno,premr,prsmr,cname");
scanf("%d%d%d%s",&srno,&premr,&prsmr,&cname);
nu=prsmr-premr;
if(nu<=200)
{
bill=nu*2.00;
printf("the bill is %f",bill);
}
else if(nu>200&&nu<400)
{
bill=nu*3.00;
printf("the bill is%f",bill);
}
else if(nu>=400&&nu<600)
{
bill=nu*4.00;
printf("the bill is%f",bill);
}
else
{
bill=nu*5.00;
printf("the  bill is%f",bill);
```

```
        }
        return 0;
}
```

Employee salary:

```
#include<stdio.h>
int main()
{
        int eno,basic;
        float ta,da,pf,hra,ns;
        char ename[10];
        printf("enter eno,basic,ename");
        scanf("%d%d%s",&eno,&basic,&ename)
        if(basic<=3000)
        {
        ta=10,da=20,hra=15,pf=5;
        ns=basic+ta+da+hra-pf;
        printf("%f",ns);
}
   else if(basic>3000&&basic<5000)
   {
   ta=15,da=25,hra=20,pf=10;
```

```
    ns=basic+ta+da+hra-pf;
    printf("%f",ns);
}
        else if(basic>=5000&&basic<10000)
{
        ta=20,da=30,hra=25,pf=15;
        ns=basic+ta+da+hra-pf;
        printf("%f",ns);
}
        else
{
        ta=25,da=35,hra=30,pf=20;
        ns=basic+ta+da+hra-pf;
        printf("%f",ns);
        }
        return 0;
}
```

Even or odd:

```
#include<stdio.h>
int main()
{
```

```
    int a;
    printf("enter a value");
    scanf("%d",&a);
    if(a%2==0)
    printf("a is even number");
    else
    printf("a is odd number");
    return 0;
}
```

Factorial:

```
#include<stdio.h>
int main()
{
int i,fact=1,number;
printf("Enter a number: ");
scanf("%d",&number);
for(i=1;i<=number;i++){
fact=fact*i;
}
printf("Factorial of %d is: %d",number,fact);
return 0;
```

}

Greatest among 3 numbers:

```
#include <stdio.h>

int main()
{
  int n1, n2, n3;

  printf("Enter three numbers: ");
  scanf("%d%d%d",&n1,&n2,&n3);
  if (n1>=n2&&n1>=n3)
    printf("%d is the largest number.", n1);
  else if (n2>=n3)
    printf("%d is the largest number.", n2);
  else
    printf("%d is the largest number.", n3);
  return 0;
}
```

Leap year or not:

```
#include <stdio.h>
int main() {
  int year;
  printf("Enter a year: ");
  scanf("%d", &year);
  if (year % 400 == 0) {
    printf("%d is a leap year.", year);
  }
  else if (year % 100 == 0) {
    printf("%d is not a leap year.", year);
  }
  else if (year % 4 == 0) {
    printf("%d is a leap year.", year);
  }
  else {
    printf("%d is not a leap year.", year);
  }

  return 0;
}
```

Quadratic equations:

```
# include<stdio.h>
# include<math.h>
int main ()
{
  float a,b,c,r1,r2,d;
  printf("enter a,b,c values");
  scanf("%f%f%f", &a,&b,&c);
  d=b*b-4*a*c;
  if (d>0)
  {
    r1=-b+sqrt(d)/(2*a);
    r2 =-b-sqrt(d)/(2*a);
    printf("The real roots=%f%f", r1, r2);
  }
  else if(d==0)
  {
    r1 = -b/(2*a);
    r2 = -b/(2*a);
    printf ("roots are equal =%f %f", r1, r2);
  }
```

```
  else
    printf("Roots are imaginary");
  return 0;
}
```

Greater among two numbers:

```
#include<stdio.h>
int main()
{
        int a,b;
        printf("enter a,b values");
        scanf("%d%d",&a,&b);
        if(a>b)
        printf("a is greater ");
        else
        printf("b is greter number");
        return 0;
}
```

Area of circle:

```
#include<stdio.h>
# define ri 3.14
int main()
{
        int r,area;
        printf("enter r value");
        scanf("%d",&r);
        area=r*r*3.14;
        printf("area of circle is %d",area);
        return 0;
}
```

Area of triangle:

```
#include<stdio.h>
# define ri 0.5
int main()
{
        int b,h,area;
        printf("enter b & h values");
        scanf("%d%d",&b,&h);
        area=b*h*0.5;
        printf("area of circle is %d",area);
```

```
    return 0;
}
```

Multiplication table progam:

```
#include<stdio.h>
int main()
{
    int i,n,p;
    printf("enter n value");
    scanf("%d",&n);
    for(i=1;i<=10;i++)
    {
        printf("%d * %d = %d\n",n,i,n*i);
    }
    return 0;
}
```

Palindrome:

We get the same number while reverse the number also.

```
#include<stdio.h>
int main()
{
int n,rev=0,r,original_number;
```

```
printf("Enter the value of number\n");
scanf("%d",&n);
original_number=n;
while(n!=0)
{
r=n%10;
rev=rev*10+r;
n=n/10;
}
if(original_number==rev)
printf("given number is an palindrome=%d",original_number);
else
printf("given number is not an palindrome=%d",original_number);
return 0;
}
```

Square root:

```
#include<stdio.h>
#include<math.h>
#define pe 0.5
int main()
{
        int n;
```

```
    float sqrt;
    printf("enter the number");
    scanf("%d",&n);
    sqrt=pow(n,0.5);
    printf("the square root of a number is%f is",sqrt);
    return 0;
}
```

Or

```
#include<stdio.h>
#include<math.h>
#define pe 0.5
int main()
{
    int n;
    float r;
    printf("enter the number");
    scanf("%d",&n);
    r=sqrt(n);
    printf("the square root of a number is%f is",r);
    return 0;
}
```

Amicable or not

```
#include<stdio.h>
int main()
{
int i,firstNumber,firstDivisorSum=0,secondDivisorSum = 0;
printf("Enter number");
scanf("%d",&firstNumber);
for(i=1;i<firstNumber;i++)
{
if(firstNumber%i== 0)
{
firstDivisorSum = firstDivisorSum + i;
}
}
for(i=1;i<firstDivisorSum;i++)
{
if(firstDivisorSum%i==0){
secondDivisorSum=secondDivisorSum + i;
}
}
if(secondDivisorSum==firstNumber)
{
```

```
printf("number is amicable");
}
else
{
printf("number is not amicable");
}
return 0;
}
```

Ascii value for alphabet:

```
#include<stdio.h>
int main()
{
    char a;
    printf("enter any character");
    scanf("%c",&a);
    printf("the ascii value of %c is %d",a,a);
    return 0;
}
```

Palindrome or not:

```
#include<stdio.h>
int main()
{
```

```
int n,rev=0,r,original_number;
printf("Enter the value of number\n");
scanf("%d",&n);
while(n!=0)
 {
        original_number=n;
r=n%10;
rev=rev*10+r;
n=n/10;
}
if(original_number==rev)
printf("given number is an palindrome",original_number);
else
printf("given number is not an palindrome",original_number);
return 0;
}
```

Program on bitwise operator:

```
#include <stdio.h>
int main()
{
 printf("complement = %d\n",~35);
 printf("complement = %d\n",~-12);
```

```
 return 0;
}
```

Absolute value of number:

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

int main () {
   int a, b;
   a = abs(2);
   printf("value of a = %d\n", a);

   b = abs(-10);
   printf("value of b = %d\n", b);

   return(0);
}
```

Printing c value

```
#include <stdio.h>
 int main()
 {
   printf("    ######\n");
   printf("  ##      ##\n");
```

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

        return(0);
}
```

Program on bitwise operators:

```
#include <stdio.h>
main()
{
 int a = 60;
 int b = 13;
int c = 0;
c = a & b;
printf("Line 1 - Value of c is %d\n", c );
c = a | b;
printf("Line 2 - Value of c is %d\n", c );
c = a ^ b;
```

```
 printf("Line 3 - Value of c is %d\n", c );
 c = ~a;
 printf("Line 4 - Value of c is %d\n", c );
 c = b << 2;
 printf("Line 5 - Value of c is %d\n", c );
 c = a >> 2;
 printf("Line 6 - Value of c is %d\n", c );
}
```

Coordinate points:

```
#include <stdio.h>
int main()
{
        int co1,co2;

        printf("Input the values for X and Y coordinate : ");
        scanf("%d %d",&co1,&co2);
        if( co1 > 0 && co2 > 0)
          printf("The coordinate point (%d,%d) lies in the First
quandrant.\n",co1,co2);
        else if( co1 < 0 && co2 > 0)
          printf("The coordinate point (%d,%d) lies in the Second
quandrant.\n",co1,co2);
```

```
        else if( co1 < 0 && co2 < 0)
          printf("The coordinate point (%d, %d) lies in the Third
quandrant.\n",co1,co2);
        else if( co1 > 0 && co2 < 0)
          printf("The coordinate point (%d,%d) lies in the Fourth
quandrant.\n",co1,co2);
        else if( co1 == 0 && co2 == 0)
          printf("The coordinate point (%d,%d) lies at the
origin.\n",co1,co2);
          return 0;
}
```

Sizeof operator:

```
#include <stdio.h>
int main()
{
 printf("Storage size for int : %d \n", sizeof(int));

 return 0;
}
#include <stdio.h>
#include <limits.h>
int main()
{
```

```
 printf("Storage size for int : %d \n", sizeof(int));
        printf("Minimum float positive value: %E\n", INT_MIN );
 printf("Maximum float positive value: %E\n", INT_MAX );



 return 0;
}
#include <stdio.h>
#include <limits.h>
int main()
{
 printf("Storage size for int : %d \n", sizeof(int));
        printf("Minimum float positive value: %E\n", INT_MIN );
 printf("Maximum float positive value: %E\n", INT_MAX );



 return 0;
}
```

Infinte loop:

```
#include <stdio.h>
int main ()
{
```

```
 for( ; ; )
 {
 printf("This loop will run forever.\n");
 }
 return 0;
}
```

Functions:

```
#include<stdio.h>
int myFunction(int x) {
  return 5 + x;
}

int main() {
        int c;
        c=myFunction(3);
  printf("Result is: %d",c);
  return 0;
}
```

Factorial using functions:

```
#include<stdio.h>
int fact(int);
int main()
```

```
{
int n,factorial;
printf("enter  value");
scanf("%d",&n);
factorial=fact(n);
printf("factorial of n is %d",n,factorial);
}
int fact(int n)
{
        int i,x=1;
        for(i=1;i<=0;i++)
        {
                x=x*i;
        }
        return x;
        }
```

Distance between two points:

```
#include <stdio.h>
#include <math.h>
int main()
 {
        float x1, y1, x2, y2, gd;
```

```
        printf("Input x1: ");
        scanf("%f", &x1);
        printf("Input y1: ");
        scanf("%f", &y1);
       printf("Input x2: ");
        scanf("%f", &x2);
        printf("Input y2: ");
        scanf("%f", &y2);
        gd= ((x2-x1)(x2-x1))+((y2-y1)(y2-y1));
        printf("Distance between the said points: %.4f", sqrt(gd));
        printf("\n");
        return 0;
}
```

Addition of functions:

```
#include<stdio.h>
int sum();
int main()
{
        int result;
        printf("the sum of two numbers");
        result=sum();
        printf("%d",result);
```

```
}
int sum()
{
        int a,b;
        printf("enter two numbers");
        scanf("%d%d",&a,&b);
        return a+b;
}
```

Area of circle using functions:

```
#include<stdio.h>
void area();
void main()
{
        area();
}
float area,radius;
printf("enter the radius");
scanf("%d",&radius);
area=3.14*radius*radius;
printf("area is circle %f",area);
}
```

Addition of functions:

```
#include<stdio.h>
int sum();
void main()
{
        int result;
        printf("sum of two numbers");
        result=sum();
        printf("%d",result);
        }
int sum(){
        int a,b;
        printf("enter   two numbers");
        scanf("%d%d",&a,&b);
        return a+b;
}
```

Area of square:

```
#include<stdio.h>
int square();
int main()
{
        printf("area of square");
        float area=square();
```

```
	printf("the area of square is %f",area);
}
int square()
{
	float side;
	printf("enter the lenght of side ");
	scanf("%f",&side);
	return side*side;
}
```

Addition using arguments:

```
#include<stdio.h>
int sub(int,int);
int main()
{
	int a,b,result;
	printf("the sum of two numners");
	printf("enter two numbers");
	scanf("%d%d",&a,&b);
	result=sub(a,b);
	printf("the sub is %d",result);
}
int sub(int a,int b)
```

```
{
        return a-b;
}
```

Program using functions:

```
#include<stdio.h>
void myFunction(char ) {
  printf("Hello %s\n", name);
}

int main() {
  myFunction("Liam");
  myFunction("Jenny");
  myFunction("Anja");
  return 0;
}
```

Program using functions:

```
#include<stdio.h>
void myFunction();
int main()
{
  myFunction();
}
```

```
void myFunction()
{
  printf("I just got executed!");
  return 0;
}
#include<stdio.h>
void myFunction(int myNumbers[5]) {
  for (int i = 0; i < 5; i++) {
    printf("%d\n", myNumbers[i]);
  }
}

int main() {
  int myNumbers[5] = {10, 20, 30, 40, 50};
  myFunction(myNumbers);
  return 0;
}
#include<stdio.h>
int myFunction(int x, int y) {
  return x + y;
}
int main() {
```

```
        int a;
        a=myFunction(5,3);
  printf("Result is: %d", myFunction(5, 3));
  return 0;
}
```

Printing date and time:

```
#include <stdio.h>
main() {
 printf("File :%s\n", __FILE__ );
 printf("Date :%s\n", __DATE__ );
 printf("Time :%s\n", __TIME__ );
 printf("Line :%d\n", __LINE__ );
 printf("ANSI :%d\n", __STDC__ );
}
```

Programs using ctype:

```
#include<stdio.h>
#include<ctype.h>
int main()
{
 char ch;
 printf("Enter any character/digit:");
```

```
 ch=getchar();
 if(isalpha(ch)>0)
 printf("it is a alphabet:%c\n",ch);
 else if(isdigit(ch)>0)
 printf("it is a digit:%c\n",ch);
 else
 printf("it is a alphanumeric:%c\n",ch);
 return 0;
}
#include<stdio.h>
#include<ctype.h>
int main()
{
 char ch;
 printf("Enter any alphabet either in lower or uppercase:");
 ch=getchar();
 if(islower(ch))
 putchar(toupper(ch));
 else
 putchar(tolower(ch));
 return 0;
}
```

Program using gets:

```
#include<stdio.h>
int main()
{
char str[40];
printf("Enter String name:");
gets(str);
printf("Print the string name%s:",str);
return 0;
}
#include<stdio.h>
int main()
{
char str[40];
puts("Enter String name:");
gets(str);
puts("Print the string name:");
puts(str);
return 0;
}
```

Height:

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

```
int main()
{
   float PerHeight;
   printf("Input the height of the person (in centimetres) :");
   scanf("%f", &PerHeight);
   if (PerHeight < 150.0)
      printf("The person is Dwarf. \n");
   else if ((PerHeight >= 150.0) && (PerHeight < 165.0))
      printf("The person is  average heighted. \n");
   else if ((PerHeight >= 165.0) && (PerHeight <= 195.0))
      printf("The person is taller. \n");
   else
      printf("Abnormal height.\n");
      return 0;
}
```

Program to convert upper to lower:

```
#include<stdio.h>
int main()
{
        char ch;
        printf("enter a cahrcater in lower  case");
        scanf("%c",&ch);
```

```
        printf("th upper case %c is %c",ch,ch-32);
        return 0;
}
```

Adding digits:

```
#include<stdio.h>
int main ()
{
int num, sum = 0;
num = 1234;
printf("The number is = %d\n",num);
while(num!=0)
{
sum+= num % 10;
num = num / 10;
}
printf("Sum: %d\n",sum);
return 0;
}
```

Convert the days into weeks and years:

```
#include<stdio.h>
int main()
{
```

```
    int days,yrs,wks,rdays;
    printf("enter th no of days");
    scanf("%d",&days);
    yrs=days/365;
    wks=(days%365)%7;
    rdays=(days%365)%7;
    printf("%d days=%d years=%d weeks=%d",days,wks,yrs,rdays);
    return 0;
}
```

Mulitiplication of numbers:

```
#include<stdio.h>
int main()
{
    int n,r,mul=1;
    printf("enter number");
    scanf("%d",&n);
    for(;n>0;)
    {
        r=n%10;
        mul=mul*r;
        n=n/10;
    }
```

```
        printf("%d",mul);
        return 0;
}
```

No of notes:

```
#include<stdio.h>
int main()
{
        int n,r,mul=1;
        printf("enter number");
        scanf("%d",&n);
        for(;n>0;)
        {
                r=n%10;
                mul=mul*r;
                n=n/10;
        }
        printf("%d",mul);
        return 0;
}
```

Null statememt:

```
#include<stdio.h>
int main()
```

```
{
	int i;
	for(i=1;i<=5;i++)
	{
		if(i%2==0)
		;
		else
		printf("%d\n",i);
		return 0;
	}
}
```

Password correct :

```
#include<stdio.h>
int main()
{
	int i;
	for(i=1;i<=5;i++)
	{
		if(i%2==0)
		;
		else
		printf("%d\n",i);
```

```
            return 0;
        }
}
```

Profit or loss:

```
#include<stdio.h>
int main()
{
        int i;
        for(i=1;i<=5;i++)
        {
                if(i%2==0)
                ;
                else
                printf("%d\n",i);
                return 0;
        }
}
```

Reverse of characters:

```
#include <stdio.h>
 int main()
 {
    char char1 = 'X';
```

```
    char char2 = 'M';
    char char3 = 'L';

        printf("The reverse of %c%c%c is %c%c%c\n",
                char1, char2, char3,
                char3, char2, char1);

        return(0);
}
#include <stdio.h>
int main()
{
        int x;
        float y;
        printf("Input total distance in km: ");
        scanf("%d",&x);
        printf("Input total fuel spent in liters: ");
        scanf("%f", &y);
        printf("Average consumption (km/lt) %.3f ",x/y);
        printf("\n");
        return 0;
}
```

FILES:

```
#include <stdio.h>
int main(){
 FILE *fp;
fp = fopen("file.txt", "w");//opening file
 fprintf(fp, "Hello file by fprintf...\n");//writing data into file
fclose(fp);//closing file
return 0;
}
```

First digit and last digit:

```
#include<stdio.h>
int main()
{
        int n,last_digit,fd,p;
        printf("enter any number");
        scanf("%d",&n);
        last_digit=n%10;
        while(n>=10)
        {
                n=n/10;
        }
        fd=n;
```

```
    printf("%d\n%d",fd,last_digit);
    return 0;
}
```

Dollars to Rupees:

```
#include<stdio.h>
int main()
{
    float dollars,rupees;
    printf("enter th eamount in dollars");
    scanf("%f",&dollars);
    rupees=(dollars*82.74);
    printf("%.2f dollars is equal to the %.2f  rupees",dollars,rupees);
    return 0;
}
```

Program on 2's complement:

```
#include <stdio.h>
int main()
{
  int n;  // variable declaration
  printf("Enter the number of bits do you want to enter :");
  scanf("%d",&n);
  char binary[n+1];  // binary array declaration;
  char onescomplement[n+1]; // onescomplement array declaration
```

```
  char twoscomplement[n+1]; // twoscomplement array declaration
  int carry=1; // variable initialization
  printf("\nEnter the binary number : ");
  scanf("%s", binary);
  printf("%s", binary);
  printf("\nThe ones complement of the binary number is :");

  // Finding onescomplement in C
  for(int i=0;i<n;i++)
  {
     if(binary[i]=='0')
     onescomplement[i]='1';
     else if(binary[i]=='1')
     onescomplement[i]='0';
  }
  onescomplement[n]='\0';
  printf("%s",onescomplement);


printf("\nThe twos complement of a binary number is : ");

// Finding twoscomplement in C
for(int i=n-1; i>=0; i--)
   {
      if(onescomplement[i] == '1' && carry == 1)
      {
         twoscomplement[i] = '0';
      }
      else if(onescomplement[i] == '0' && carry == 1)
      {
         twoscomplement[i] = '1';
         carry = 0;
      }
      else
```

```
            {
                twoscomplement[i] = onescomplement[i];
            }
        }
    twoscomplement[n]='\0';
    printf("%s",twoscomplement);
    return 0;
    }
```

```
#include<stdio.h>
#include<limits.h>
int main()
{
    short int var1=SHRT_MIN;
    short int var2=SHRT_MAX;
    printf("range of short signed integer is from %d to %d",SHRT_MIN,SHRT_MAX);
    return 0;
}
```

```
#include<stdio.h>
#include<limits.h>
int main()
{
    short unsigned int var1=0;
    short unsigned int var2=USHRT_MAX;
    printf("range of short unsigned integer is %u to %u",var1,var2);
    return 0;
```

```
}


#include<stdio.h>
int main()
{
        FILE *Fpointer;
        Fpointer=fopen("anil.txt","w");
        if(Fpointer==NULL)
        {
                printf("unable to create the file");
        }
        else{
                printf("file opened successfully");
                fclose(Fpointer);           }
                return 0;
}
```