1. Program to display all the prime numbers within a range.

#include<stdio.h>

int main()

{

int a;

printf("enter a range ");

scanf("%d",&a);

for (int i=2;i<=a;i++)

{

int c=0;

for(int j=2;j<.i;j++)

{

if((i%j)== 0)

{

c=1;

}

}

if(c==0)

printf("%d " ,i);

}

return 0;

}

1. Input an integer and find the sum of the numbers at even positions and product of the numbers at odd positions. [Hint: N=1234. ,1234%10 is 4, 1234/10 is 123]

#include<stdio.h>

int main()

{

printf("Enter a number ");

int a,s=0,p=1,i=1,d;

scanf("%d",&a);

int c=a;

while(c !=0)

{

d=c%10;

c=(c-d)/10;

if(i%2==0)

s=s+d;

else

p=p\*d;

i++;

}

printf("The sum and product of even and odd place digits are %d and %d respectively",s,p);

return 0;

}

1. Input a number and check if the number is palindrome. (Hint: A number is palindrome if the number equal to reverse of the number. Find the reverse of a given number with the following hints: N=1234. ,1234%10 is 4, 1234/10 is 123. 4321 can be obtained by adding 4320+1 in the last iteration)

#include<stdio.h>

int main()

{

printf("Enter a number ");

int a,s=0,d;

scanf("%d",&a);

int c=a;

while(c !=0)

{

d = c % 10;

c = (c - d) / 10;

s = s \* 10 + d;

}

if(s==a)

printf("Palindrome");

else

printf("Not Palindrome");

return 0;

}

1. Produce FIBONACCI series 0,1,1,2,3,5,8,… . Read a limit n from the user which is the number of elements in the series.{Hint: Each element of the series is obtained by adding the current term and previous term- 1=0+1,2+1=3,2+3=5….etc]

#include<stdio.h>

int main()

{

int i=0;

int j=1;

while(i<=150)

{

printf("%d %d ",i,j);

i=i+j;

j=i+j;

}

return 0;

}

1. Find out the highest common factor (H.C.F) or greatest common divisor (G.C.D) of two numbers .[Hint: The highest common factor (H.C.F) or greatest common divisor (G.C.D) of two numbers is the largest positive integer that perfectly divides the two given numbers. For example, the H.C.F of 12 and 14 is 2.]

#include<stdio.h>

int main()

{

int a,b,c,d;

printf("Enter the numbers ");

scanf("%d%d",&a,&b);

for(int i=a;i>=1;i--)

{

c=((a%i)==0);

d=((b%i)==0);

if(c&&d)

{

printf("The Hcf of the numbers is %d",i);

break;

}

}

return 0;

}

1. Write a program which prints all perfect numbers in a given interval (Start,End) Implement the functions:

#include<stdio.h>

int main()

{

int a,b;

printf("Enter the range ");

scanf("%d%d",&a,&b);

printf("The perfect numbers in the range are ");

for(int j=a;j<=b;j++)

{

int c=0;

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

{

if((j%i)==0)

{

c=c+i;

}

}

if(j==c)

{

printf("%d ",j);

}

}

return 0;

}

1. Produce the following sequence and print the sum of the sequence x2+x4+…+xn, where the exponents need to be even number. If the n entered by the user is odd, give a message and read again a new value for n.

#include<stdio.h>

#include<math.h>

int main()

{

printf("Enter a number ");

int x;

scanf("%d",&x);

printf("Enter a power range ");

int a,c=0;

scanf("%d",&a);

while(a%2==1)

{

printf("You entered a odd power range. \nEnter a power range ");

scanf("%d",&a);

}

for(int i=2;i<=a;i+=2)

{

c=c+pow(x,i);

printf("%d^%d + ",x,i);

}

printf("\nThe sum of the sequence is %d",c);

return 0;

}

1. Write a program to swap the first and last digit of a number

#include<stdio.h>

#include<math.h>

int main()

{

int a,c,s=0,d,g;

printf("enter a number " );

scanf("%d",&a);

c=a;

while(c !=0)

{

d = c % 10;

c = (c - d) / 10;

s = s +1;

}

d=a%10;

c=a;

c=(c-d)/10;

s=s-1;

g=a/pow(10,s);

c=c\*10+g;

c=d\*pow(10,s)+c;

printf("\n%d",c);

return 0;

}

1. Given two numbers find the Least Common Multiple(LCM) of those numbers

#include <stdio.h>

int main()

{

int n1, n2, i, gcd, lcm;

printf("Enter two positive integers: ");

scanf("%d %d", &n1, &n2);

for (i = 1; i <= n1 && i <= n2; ++i)

{

if (n1 % i == 0 && n2 % i == 0)

gcd = i;

}

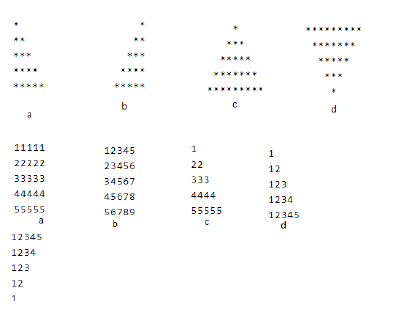
lcm = (n1 \* n2) / gcd;

printf("The LCM of two numbers %d and %d is %d.", n1, n2, lcm);

return 0;

}

1. Write C programs to print the following patterns.



1. #include<stdio.h>

int main()

{

for(int i=0;i<5;i++)

{

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

{

printf("\*");

}

printf("\n");

}

}

1. #include<stdio.h>

int main()

{

int c=3,d;

for(int i=0;i<5;i++)

{

d=0;

while(d<=c)

{

printf(" ");

d++;

}

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

{

printf("\*");

}

printf("\n");

c--;

}

}

1. #include<stdio.h>

int main()

{

int c=3,d;

for(int i=0;i<5;i++)

{

d=0;

while(d<=c)

{

printf(" ");

d++;

}

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

{

printf("\*");

}

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

{

printf("\*");

}

printf("\n");

c--;

return 0;

}

}

1. #include<stdio.h>

int main()

{

int c=0,d;

for(int i=5;i>0;i--)

{

d=0;

while(d<c)

{

printf(" ");

d++;

}

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

{

printf("\*");

}

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

{

printf("\*");

}

printf("\n");

c++;

}

}

1. #include<stdio.h>

int main()

{

for(int i=0;i<5;i++)

{

for(int j=0;j<5;j++)

{

printf("%d",i+1);

}

printf("\n");

}

}

1. #include<stdio.h>

int main()

{

for(int i=0;i<5;i++)

{

int c=0;

for(int j=i;c<5;j++)

{

printf("%d",j+1);

c++;

}

printf("\n");

}

}

1. #include<stdio.h>

int main()

{

for(int i=0;i<5;i++)

{

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

{

printf("%d",i+1);

}

printf("\n");

}

}

1. #include<stdio.h>

int main()

{

for(int i=0;i<5;i++)

{

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

{

printf("%d",j+1);

}

printf("\n");

}

}

1. #include<stdio.h>

int main()

{

for(int i=5;i>=1;i--)

{

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

{

printf("%d",j);

}

printf("\n");

}

}

1. Cloning Toys (922A)

Imp likes his plush toy a lot.

Recently, he found a machine that can clone plush toys. Imp knows that if he applies the machine to an original toy, he additionally gets one more original toy and one copy, and if he applies the machine to a copied toy, he gets two additional copies. Init*ia*lly, Imp has only one original toy. He wants to know if it is possible to use machine to get exactly *x* **copied** toys and *y* **original** toys? He can't throw toys away, and he can't apply the machine to a copy if he doesn't currently have any copies.

**Input**

No

The only line contains two integers *x* and *y* (0 ≤ *x*, *y* ≤ 109) — the number of copies and the number of original toys Imp wants to get (including the initial one).

**Output**

Print "Yes", if the desired configuration is possible, and "No" otherwise. You can print each letter in arbitrary case (upper or lower).

**Examples**

**input**

6 3

Output

Yes

**input**

4 2

**Output**

**No**

**Input**

1000 1001

**output**

**Note**

In the first example, Imp has to apply the machine twice to original toys and then twice to copies.

#include<stdio.h>

int main()

{

printf("Enter the number of original and copy toys he need ");

int x,y,d=0;

scanf("%d%d",&x,&y);

x=x-1;

int i=x;

int f=y-x;

if(y<i)

{

printf("No");

}

else if(y==x)

{

printf("Yes");

}

else

{

for(int j=1;j<f;j++)

{

if((j\*2)==f)

{

printf("Yes");

d=0;

break;

}

else

{

d=9;

}

}

}

if(d==9)

{

printf("No");

}

return 0;

}