1. **Write a program to find the Nth term of the Fibonnaci series.**

#include<stdio.h>

int main()

{

int n,a=0,b=1,c,i;

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

scanf("%d",&n);

if(n==1)

c=0;

else if(n==2)

c=1;

else

{

for(i=0;i<n-2;i++)

{

c=a+b;

a=b;

b=c;

}

}

printf("%d term of fibonacci series is %d",n,c);

return 0;

}

1. **Write a program to print first N terms of Fibonacci series**

#include<stdio.h>

int main()

{

int n,a=0,b=1,c,i;

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

scanf("%d",&n);

if(n==1)

printf("0");

else if(n==2)

printf("0 1");

else

{

printf("0 1 ");

for(i=0;i<n-2;i++)

{

c=a+b;

a=b;

b=c;

printf("%d ",c);

}

}

return 0;

}

1. **Write a program to check whether a given number is there in the Fibonacci series or not.**

#include<stdio.h>

int main()

{

int n,a=0,b=1,c,temp=0;

printf("Enter a number: ");

scanf("%d",&n);

if(n==0)

printf("0 is part of Fibonacci series");

else if(n==1)

printf("1 is part of Fibonacci series");

else

{

while(c<=n)

{

c=a+b;

a=b;

b=c;

if(c==n)

{

temp=1;

}

}

if(temp==1)

printf("%d is part of fibonacci series.",n);

else

printf("%d is not part of fibonacci series.",n);

}

return 0;

}

1. **Write a program to calculate HCF of two numbers**

#include<stdio.h>

int main()

{

int a,b,i,hcf;

printf("Enter 2 numbers: ");

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

if(a>=b)

{

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

{

if(a%(b/i)==0)

{

hcf=b/i;

break;

}

}

}

else

{

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

{

if(b%(a/i)==0)

{

hcf=a/i;

break;

}

}

}

printf("HCF of %d and %d is %d",a,b,hcf);

return 0;

}

1. **Write a program to check whether two given numbers are co-prime numbers or not**

#include<stdio.h>

int main()

{

int i,a,b,temp=0;

printf("Enter 2 numbers: ");

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

if(a>=b)

{

for(i=2;i<=b;i++)

{

if(b%i==0&&a%i==0)

{

temp=1;

break;

}

}

}

else

{

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

{

if(b%i==0&&a%i==0)

{

temp=1;

break;

}

}

}

if(temp==1)

printf("%d and %d are not co-primes.",a,b);

else

printf("%d and %d are co-primes.",a,b);

return 0;

}

1. **Write a program to print all Prime numbers under 100**

#include<stdio.h>

int main()

{

int i,j,temp;

for(i=1;i<=100;i++)

{

temp=0;

for(j=2;j<=i/2;j++)

{

if(i%j==0)

{

temp=1;

break;

}

}

if(temp==0)

printf("%d ",i);

}

return 0;

}

1. **Write a program to print all Prime numbers between two given numbers**

#include<stdio.h>

int main()

{

int a,b,i,j,temp;

printf("Enter 2 numbers: ");

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

for(i=a;i<=b;i++)

{

temp=0;

for(j=2;j<=i/2;j++)

{

if(i%j==0)

{

temp=1;

break;

}

}

if(temp==0)

printf("%d ",i);

}

return 0;

}

1. **Write a program to find next Prime number of a given number**

#include<stdio.h>

int main()

{

int i,j,n,temp;

printf("Enter a number: ");

scanf("%d",&n);

for(i=n+1;1;i++)

{

temp=0;

for(j=2;j<=i/2;j++)

{

if(i%j==0)

{

temp=1;

break;

}

}

if(temp==0)

break;

}

printf("Next prime number after %d is %d",n,i);

return 0;

}

1. **Write a program to check whether a given number is an Armstrong number or not**

#include<stdio.h>

int main()

{

int n,temp,count=0,a,i,j,sum=0;

printf("Enter a number: ");

scanf("%d",&n);

temp=n;

while(temp)

{

temp/=10;

count++;

}

temp=n;

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

{

a=1;

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

{

a\*=(temp%10);

}

sum+=a;

temp/=10;

}

if(sum==n)

printf("%d is Armstrong number.",n);

else

printf("%d is not Armstrong number.",n);

return 0;

}

1. **Write a program to print all Armstrong numbers under 1000**

#include<stdio.h>

int main()

{

int i,j,k,sum,count,temp,a;

for(i=1;i<=1000;i++)

{

temp=i;

count=0;

sum=0;

while(temp)

{

temp/=10;

count++;

}

temp=i;

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

{

a=1;

for(k=1;k<=count;k++)

{

a\*=(temp%10);

}

sum+=a;

temp/=10;

}

if(sum==i)

printf("%d ",i);

}

return 0;

}

1. **Write a program to find the position of first 1 in LSB.**

#include<stdio.h>

int main()

{

int x,count=0,lsb=0;

printf("Enter a number: ");

scanf("%d",&x);

while(lsb!=1)

{

lsb=x&1;

count+=1;

x=x>>1;

}

printf("Position of 1st 1 is %d",count);

return 0;

}