Q1-> Write a program to find the Nth term of the Fibonnaci series.

Answer:

#include<stdio.h>

int main()

{

int a,i=2,b=0,c=1,result=0;

printf("Enter a Nth number of febonacci series: ");

scanf("%d",&a);

if(a>2)

{

    while(i<a)

    {

        result=b+c;

        b=c;

        c=result;

        i++;

    }

printf("The %d positioned febonaci number is: %d",a,result);

}

else

{

    if(a==1)

        printf("The %d positioned febonaci number is: %d",a,0);

    else

        printf("The %d positioned febonaci number is: %d",a,1);

}

    return 0;

}

Q2-> Write a program to print first N terms of Fibonacci series

Answer:

#include<stdio.h>

int main()

{

int a,i=2,b=0,c=1,result=0;

printf("Enter a Nth number of febonacci series: ");

scanf("%d",&a);

if(a>2)

{

        printf("%d\n",b);

        printf("%d\n",c);

    while(i<a)

    {

        result=b+c;

        b=c;

        c=result;

        printf("%d\n",result);

        i++;

    }

}

    return 0;

}

Q3-> Write a program to check whether a given number is there in the Fibonacci series or not.

Answer:

#include<stdio.h>

int main()

{

int a=3,i=0,b=0,c=1,result=0,d;

printf("Enter a number to know fibonacci Number: ");

scanf("%d",&d);

    while(result<=d)

    {

        result=b+c;

        b=c;

        c=result;

        if(result==d || d==0)

        {

            printf("This is Fibonacci Number");

            i++;

        }

    }

    if(i==0)

    {

        printf("This is not a fibonacci Number");

    }

    return 0;

}

Q4-> Write a program to calculate HCF of two numbers

Answer:

#include<stdio.h>

int main()

{

int HCF,a,b,i=1,lowest,div1,div2;

printf("Enter the two number to find HCF: ");

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

if(a<b)

    lowest=a;

else

    lowest=b;

while(i<=lowest)

{

   div1=a%i;

   div2=b%i;

   if(!div1&&!div2)

    {

        HCF=i;

    }

    i++;

}

printf("The HCF of two number is: %d",HCF);

    return 0;

}

Q5-> Write a program to check whether two given numbers are co-prime numbers or not

Answer:

#include<stdio.h>

int main()

{

int HCF,a,b,i=1,lowest,div1,div2;

printf("Enter the two number to find Co-Prime: ");

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

if(a<b)

    lowest=a;

else

    lowest=b;

while(i<=lowest)

{

   div1=a%i;

   div2=b%i;

   if(!div1&&!div2)

    {

        HCF=i;

    }

    i++;

}

if(HCF==1)

    printf("This two number are Co-Prime");

else

    printf("This two number is not Co-Prime");

    return 0;

}

Q6-> Write a program to print all Prime numbers under 100

Answer:

#include<stdio.h>

int main()

{

int a=100,b=2,div;

    while(a>=1)

    {

        while(b<a)

        {

            div=a%b;

            if(!div)

            {

                a--;

                b=2;

            }

            else

            {

                b++;

            }

        }

        printf("%d ",a);

        a--;

        b=2;

    }

    return 0;

}

Q7-> Write a program to print all Prime numbers between two given numbers

Answer:

#include<stdio.h>

#include<stdlib.h>

int main()

{

int a,b,divisor=2,Rem=0;

printf("Enter two different number to find prime number between those numbers: ");

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

while(a<=b)

    {

        while(divisor<a)

            {

                Rem=a%divisor;

                divisor++;

                if(Rem==0 && a<=b)

                    {

                        if(a==b)

                            {

                                exit(0);

                            }

                        else

                            {

                                a++;

                                divisor=2;

                            }

                    }

            }

        printf("%d ",a);

        a++;

        divisor=2;

    }

return 0;

}

Q8-> Write a program to check whether a given number is an Armstrong number or not

Answer:

#include<stdio.h>

#include<stdlib.h>

int main()

{

int a,sum=0,i=0,x=1,mul=1,k,j,Rem,ActualValue;

printf("Enter the number: ");

scanf("%d",&a);

while(a>=x)

    {

        x\*=10;

        i++;

    }

j=i;

k=i;

ActualValue=a;

while(j)

{

    Rem=a%10;

    a=a/10;

    while(i)

    {

        mul=mul\*Rem;

        i--;

    }

    sum=sum+mul;

    j--;

    i=k;

    mul=1;

}

if(ActualValue==sum)

    printf("This is Armstrong Number");

else

    printf("This is not Armstrong Number");

return 0;

}

Q10-> Write a program to print all Armstrong numbers under 1000

Answer:

#include<stdio.h>

#include<stdlib.h>

int main()

{

int a,sum=0,i=0,x=1,mul=1,k,j,Rem,ActualValue,b=1;

while(b<=1000)

{

    a=b;

    i=0;

    while(a>=x)

        {

            x\*=10;

            i++;

        }

    j=i;

    k=i;

    ActualValue=a;

    while(j)

    {

        Rem=a%10;

        a=a/10;

        while(i)

        {

            mul=mul\*Rem;

            i--;

        }

        sum=sum+mul;

        j--;

        i=k;

        mul=1;

    }

    if(sum==ActualValue)

    printf("%d ",ActualValue);

    b++;

    x=1;

    sum=0;

}

return 0;

}