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

Ans #include<stdio.h>

int main()

{

int prev=0,curr=1,next=0,n,i;

printf("Enter a number :");

scanf("%d",&n);

if(n==0 || n==1)

printf("%d",n);

else

next = prev + curr;

for(i=3;i<=n;i++)

{

next = prev + curr;

prev = curr;

curr = next;

}

printf("\n %dth term of the Fibonnaci series is %d ",n,next);

return 0;

}

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

Ans #include<stdio.h>

int main()

{

int prev=0,cur=1,next=0,n,i;

printf("Enter a number :");

scanf("%d",&n);

printf("%d %d ",prev,cur);

for(i=3;i<=n;i++)

{

next=prev+cur;

printf("%d ",next);

prev=cur;

cur=next;

}

return 0;

}

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

Ans #include<stdio.h>

int main()

{

int prev=0,curr=1,next=0,n,i;

printf("Enter a number :");

scanf("%d",&n);

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

{

prev = curr;

curr = next;

next = prev + curr;

if(next==n)

{printf("%d is in Fibonnaci Series",n);

break;

}

if(next>n)

{

printf("Not Found");

break;

}

}

return 0;

}

4. Write a program to calculate HCF of two numbers

Ans #include<stdio.h>

int main()

{

int a,b,i,min=0,hcf=1;

printf("Enter Two number :");

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

min=a<b?a:b;

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

{

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

hcf=i;

}

printf("HCF is %d",hcf);

return 0;

}

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

Ans #include<stdio.h>

int main()

{

int a,b,i,min=0,hcf=1;

printf("Enter Two number :");

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

min=a<b?a:b;

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

{

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

hcf=i;

}

if(hcf==1)

printf("co-prime");

else

printf("Not co-prime");

return 0;

}

6. Write a program to print all Prime numbers under 100

Ans #include<stdio.h>

int main()

{

int i,j,k=0;

for(i=2;i<=100;i++)

{

k=0;

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

{

if(i%j==0)

k=1;

}

if(k==0)

printf("%d ",i);

}

return 0;

}

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

Ans #include<stdio.h>

int main()

{

int i,j,k=0,n1,n2;

printf("Enter two number :");

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

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

{

k=0;

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

{

if(i%j==0)

k=1;

}

if(k==0)

printf("%d ",i);

}

return 0;

}

8. Write a program to find next Prime number of a given number

Ans #include<stdio.h>

int main()

{

int i,j,k=0,n1;

printf("Enter a number :");

scanf("%d",&n1);

for(i=n1; 1 ;i++)

{

k=0;

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

{

if(i%j==0)

k=1;

}

if(k==0)

{

printf("%d ",i);

break;

}

}

return 0;

}

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

Ans #include<stdio.h>

#include<math.h>

int main()

{

int num,x,y,rem,digit=0,sum=0;

printf("Enter a Number : ");

scanf("%d",&num);

x=num;

while(x)

{

x=x/10;

digit++;

}

y=num;

while(y)

{

rem=y%10;

y=y/10;

sum=sum + pow(rem,digit);

}

if(sum==num)

printf("%d is an Armstrong number",num);

else

printf("%d is Not an Armstrong number",num);

return 0;

}

10. Write a program to print all Armstrong numbers under 1000

Ans #include<stdio.h>

#include<math.h>

int main()

{

int x,y,rem,digit=0,sum=0,i;

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

{

x=i;

while(x)

{

x=x/10;

digit++;

}

y=i;

while(y)

{

rem=y%10;

y=y/10;

sum=sum + pow(rem,digit);

}

if(sum==i)

{

printf("%d ",sum);

}

digit=0;

sum=0;

}

return 0;

}