/\*\*\*A C Program to the Nth term of the Fibonnaci series \*\*\*/

#include <stdio.h>

int main ()

{

int i,n,n1,n2,fib=0;

printf ("Finding Nth term of the Fibonnaci series\n");

printf ("Please enter value of n :-- "); scanf ("%d", &n);

n1=0;n2=1;

if(n>2){

for(i=1;i<=n-2;i++){

fib=n1+n2;

n1=n2;

n2=fib;

}

}else if(n==1){

fib=n1;

}else{

fib=n2;

}

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

return 0;

}



/\*\*\*A C Program to to print first N terms of Fibonacci series \*\*\*/

#include <stdio.h>

int main ()

{

int i,n,n1,n2,add;

printf ("Please enter value of n :-- "); scanf ("%d", &n);

int fib[n];

printf ("Printing first %d terms of Fibonacci series :-- ",n);

n1=0;n2=1;

fib[0]=0;fib[1]=1;

fib[2]=n1+n2;

for(i=2;i<=n;i++){

fib[i]=n1+n2;

n1=n2;

n2=fib[i];

}

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

{

printf("%d ",fib[i]);

}

return 0;

}



/\*\*\*A C Program to check whether a given number is there in the Fibonacci

series or not\*\*\*/

#include <stdio.h>

#include<math.h>

int main()

{

int n,sq,ps,sq1;

printf("Please enter an integer number :-- ");

scanf("%d",&n);

/\*Checking hether a given number is there in the Fibonacci

series or not\*/

sq=5\*(n\*n)-4;

ps =sqrt(sq);

sq1=ps\*ps;

if(sq1==sq){

printf("%d is a in the Fibonacci series",n);

}else{

printf("%d is a not in the Fibonacci series",n);

}

return 0;

}



/\*\*\*\*A C Program to calculate HCF of two numbers \*\*\*\*/

#include <stdio.h>

int main()

{

int i=2,j=0,n1,n2,n2[100],n1[100];

printf("Please enter a two integer number \n");

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

while(i<=n1){

if(n1%i==0){

n1[j]=i;

j++;

}

i++;

}

printf("%d",)

j=0;

while(i<=n2){

if(n2%i==0){

n2[j]=i;

j++;

}

i++;

}

return 0;

}

/\*\*\* A C program to check whether two given numbers are co-prime

numbers or not\*\*\*/

#include <stdio.h>

int main()

{

int i,div1=0,div2=0,n1,n2;

printf("please neter a range print Prime for n1 to n2\n");

printf("n1="); scanf("%d",&n1);

printf("n2="); scanf("%d",&n2);

for(i=2;i<n1;i++){

if(n1%i==0){

div1++;

}

if(div1<1){

break;

}

}

//printf("%d ===>%d ",n1,div1);

for(i=2;i<n2;i++){

if(n2%i==0){

div2++;

}

if(div2<2){

break;

}

}

if(div2==0&&div1==0){

printf("%d & %d are co-prime numbers ",n1,n2);

}

else{

printf("%d & %d are not co-prime numbers ",n1,n2);

}

return 0;

}

A screenshot of a computer

Description automatically generated with medium confidence

/\*\*\*A C program to print all Prime numbers under 100\*\*\*/

#include <stdio.h>

int main()

{

int i,n,j,pr=1;

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

n=i;

pr=0;

for(j=2;j<=n;j++){

if(n%j==0)

{

pr++;

}

}

if(pr==1){

printf("%d ",i);

}

}

return 0;

}

/\*\*\*A C program to print all Prime numbers from given range \*\*\*/

#include <stdio.h>

int main()

{

int i,n,j,pr=1,n1,n2;

printf("please enter to range print Prime for n1 to n2\n");

printf("n1="); scanf("%d",&n1);

printf("n2="); scanf("%d",&n2);

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

n=i;

pr=0;

for(j=2;j<=n;j++){

if(n%j==0)

{

pr++;

}

}

if(pr==1){

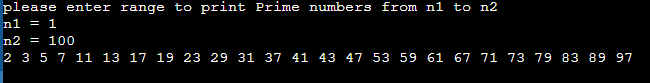
printf("%d ",i);

}

}

return 0;

}



/\*\*\* A C program to find next Prime number of a given number \*\*\*/

#include <stdio.h>

int main()

{

int i,n,j,n1,pr=0,pr1=0;

printf("please enter a Prime Number :---> ");

enter:

scanf("%d",&n1);

for(j=2;j<=n1;j++){

if(n1%j==0)

{

pr++;

}

}

if(pr==1){

printf("Finding Next Prime Number \n");

}

else{

printf("please enter a valide Prime Number \n");

goto enter ;

}

for(i=n1;i<=100;i++){

n=i;

pr=0;

for(j=2;j<=n+100;j++){

if(n%j==0)

{

pr++;

}

}

if(pr==1){

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

pr1++;

}

if(pr1==2){

break;

}

}

printf("%d ",i);

return 0;

}

A screenshot of a computer screen

Description automatically generated with medium confidence

/\*\*\* A C program to check whether a given number is an Armstrong number

or not \*\*\*/

#include <stdio.h>

int main()

{

int n,n1,r,q=1,nc=0,dig[10],i=0;

long sum=0,cb;

printf("Please enter an number number is an Armstrong numberor not :-- ");

scanf("%d",&n);

n1=n;

while (q>0){

q=n/10;

r=n%10;

dig[i]=r;

n=q;

nc++;i++;

}

for(i=0;i<nc;i++){

cb = dig[i]\*dig[i]\*dig[i] ;

sum += cb;

}

if(sum==n1){

printf("%d number is number is an Armstrong number \n",n1);

}

else{

printf("%d number is not number is an Armstrong number \n",n1);

}

return 0;

}



/\*\*\* A C program to print all Armstrong numbers under 1000 \*\*\*/

#include <stdio.h>

int main()

{

int n,j=1;

void check(int );

printf("Printing all Armstrong numbers under 1000 :--\n");

while(j<10){

printf("%d ",j);

j++;

}

for(j=10;j<=1000;j++){

check(j);

}

return 0;

}

void check(int n2){

int n1,r,q=1,j,nc=0,dig[10],i=0;

long sum=0,cb;

n1=n2;

while (q>0){

q=n2/10;

r=n2%10;

dig[i]=r;

n2=q;

nc++;i++;

}

for(i=0;i<nc;i++){

cb = dig[i]\*dig[i]\*dig[i] ;

sum += cb;

}

if(sum==n1){

printf("%d ",n1);

}

}



/\*\*\* A C program to calculate HCF of two numbers \*\*\*/

#include <stdio.h>

int main()

{

int i,k,j1=0,nc1[50],nc2[50],n1,n2,j=0;

long hcf=1;

printf("please enter a two integer numbers N1 & N2 to calculate HCF\n");

printf("N1="); scanf("%d",&n1);

printf("N2="); scanf("%d",&n2);

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

if(n1%i==0)

{

n1=n1/i;

nc1[j]=i;

j++;

}

}

for(i=1;i<=n2;i++){

if(n2%i==0)

{

n2=n2/i;

nc2[j1]=i;

j1++;

}

}

for(i=0;i<j1||i<j;i++){

for(k=0;k<j;k++){

if(nc1[i]==nc2[k]){

hcf \*= nc1[i];

}

}

}

printf("HCF = %ld ",hcf);

}

