Assignment no 7

1. #include<stdio.h>

int main(){

int n,i=1,k=0,j=1,f;

printf("Enter which term of fibonnaci series you want : ");

scanf("%d",&n);

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

f=k+j;

j=k;

k=f;

}

if(n==1){

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

}

if(n>1){

printf("%d",f);

}

return 0;

}

2. #include<stdio.h>

int main(){

int n,i=1,k=0,j=1,f;

printf("Enter how many terms of fibonnaci series you want : ");

scanf("%d",&n);

printf("%d\n",i-1);

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

f=k+j;

j=k;

k=f;

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

}

return 0;

}

3. #include<stdio.h>

int main(){

int n,i=1,k=0,j=1,f=1;

printf("Enter which term of fibonnaci series : ");

scanf("%d",&n);

if(n==0){

printf("The number is present in the fibonnaci series");

}

if(n>0){

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

f=k+j;

j=k;

k=f;

if(n==f){

break;

}

if(f>n+n){

break;

}

}

if(n==f){

printf("The given number is there in fibonnaci series");

}

else{

printf("The given number is not there in fibonnaci series");

}

}

return 0;

}

4. #include<stdio.h>

int main(){

int n1,n2,i,d,h;

printf("Enter two numbers : ");

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

if(n1>n2){

d=n1-n2;

if((n1%d==0)&&(n2%d==0)){

printf("hcf of %d and %d is %d",n1,n2,d);

}

else{

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

h=d/i;

if((n1%h==0)&&(n2%h==0)){

break;

}

}

if((n1%h==0)&&(n2%h==0)){

printf("hcf of %d and %d is %d",n1,n2,h);

}

}

}

else{

d=n2-n1;

if((n1%d==0)&&(n2%d==0)){

printf("hcf of %d and %d is %d",n1,n2,d);

}

else{

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

h=d/i;

if((n1%h==0)&&(n2%h==0)){

break;

}

}

if((n1%h==0)&&(n2%h==0)){

printf("hcf of %d and %d is %d",n1,n2,h);

}

}

}

return 0;

}

5. #include<stdio.h>

int main(){

int n1,n2,i,c,count=0;

printf("Enter any two numbers : ");

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

n1>n2?(c=n2):(c=n1);

for(i=1;i<=c/2;i++){

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

count++;

}

}

if(count==1){

printf("The numbers are coprime");

}

else{

printf("The numbers are not coprime");

}

return 0;

}

6. #include<stdio.h>

int main(){

int i=2,j;

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

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

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

if(i%j==0){

break;

}

}

if(i%j!=0){

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

}

}

return 0;

}

7. #include<stdio.h>

int main(){

int i=2,j,n1,n2;

printf("Enter the ranges to print prime numbers from beginning to end : ");

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

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

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

if(i%j==0){

break;

}

}

if(i%j!=0){

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

}

}

return 0;

}

8. #include<stdio.h>

int main(){

int i=2,j,n1,n2;

printf("Enter any number : ");

scanf("%d",&n1);

for(i=n1+1;i<=n1+10;i++){

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

if(i%j==0){

break;

}

}

if(i%j!=0){

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

break;

}

}

return 0;

}

9. #include<stdio.h>

int main(){

int count=0,n,a=0,p=1,tr,t,r;

printf("Enter any number : ");

scanf("%d",&n);

t=n;

while(t>0){

tr=t%10;

t=t/10;

count++;

}

tr=n;

while(tr>0){

r=tr%10;

tr=tr/10;

t=count;

while(count>0){

p=r\*p;

count--;

}

count=t;

a=p+a;

p=1;

}

if(a==n){

printf("The number is an armstrong number");

}

else{

printf("The number is not an armstrong number");

}

return 0;

}

10.#include <stdio.h>

int main(){

int temp, digit1, digit2, digit3;

printf("All Armstrong numbers between 1 and 1000 are:\n");

for(int n=1;n<=1000;n++){

if(n<=9){

printf("%d ",n);

}

else{

digit1 = n % 10;

digit2 = (n % 100)/10;

digit3 = (n % 1000)/100;

temp = (digit1\*digit1\*digit1) + (digit2\*digit2\*digit2) + (digit3\*digit3\*digit3);

if (temp == n){

printf("%d ", temp);

}

}

}

return 0;

}