Assignment-7

1.write a program to find nth term of fabonnaci series.

#include<stdio.h>

int main()

{

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

printf("enter a number");

scanf("%d",&n);

for(i=0;i<=n-1;i++)

{

next=prev+cur;

prev=cur;

cur=next;

}

printf(" %d ",next);

getch();

}

2.write a program to find n term of fabonnaci series.

#include<stdio.h>

int main()

{

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

printf("enter a number");

scanf("%d",&n);

printf("1");

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

{

next=prev+cur;

prev=cur;

cur=next;

printf(" %d ",next);

}

getch();

}

3. write a program to check wether a given number is there in fabonnaci series or not.

#include<stdio.h>

int main()

{

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

printf("enter a number");

scanf("%d",&n);

for(i=0;i<=n-1;i++)

{

next=prev+cur;

prev=cur;

cur=next;

if(next==n)

{

printf("number found");

break;

}

if(next>n)

{

printf("not found");

break;

}

}

getch();

}

4.write a program to calculate hcf of two numbers.

#include<stdio.h>

int main()

{

int a,b,h=1,i;

printf("enter a number");

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

int min=a<b?a:b;

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

{

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

h=i;

}

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

return 0;

}

5. write a program to check wether a given number are co prime or not .

#include<stdio.h>

int main()

{

int a,b,h,i;

printf("enter a number");

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

int min=a<b?a:b;

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

{

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

break;

}

if(i==min+1)

printf("co prime");

else

printf("not co prime");

return 0;

}

6.write a program to print all prime number under 100.

#include<stdio.h>

int main()

{

int i,n,count;

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

{

count=0;

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

{

if(n%i==0)

{

count++;

break;

}

}

if(count==0&&n!=1)

printf(" %d ",n);

}

return 0;

}

7.write a program to print all prime number between two given number

#include<stdio.h>

int main()

{

int a,b,i,x;

printf("enter two number");

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

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

{

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

if(i%x==0)

break;

if(x==i)

printf(" %d ",i);

}

return 0;

}

8.find next prime number of given number.

#include<stdio.h>

int main()

{

int i,n,count=0;

for(n=10;1;n++)

{

count=0;

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

{

if(n%i==0)

count=1;

}

if(count==0)

{

printf(" %d ",n);

break;

}

}

return 0;

}

9. write a program to check wether a given number are armstrong number or not .

#include<stdio.h>

int main()

{

int n,r,c,arm=0;

printf("amstrong number");

scanf("%d",&n);

c=n;

while(n>0)

{

r=n%10;

arm=arm+r\*r\*r;

n=n/10;

}

if(c==arm)

printf(" amstrong ");

else

printf("not amstrong");

getch();

}

10.write a program to print all amstrong number under 1000.

#include<stdio.h>

int main()

{

int n,s,x,r;

printf("amstrong number");

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

{

s=0;

x=n;

while(x!=0)

{

r=x%10;

s=s+r\*r\*r;

x=x/10;

}

if(s==n)

printf(" %d ",n);

}

}