**JRassignment 7**

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

#include<stdio.h>

int main()

{

int n,a=-1,b=1,f=0,i;

printf("Enter the Nth number ");

scanf("%d",&n);

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

{

f=a+b;

a=b;

b=f;

}

printf("%d",f);

return 0;

}

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

#include<stdio.h>

int main()

{

int n,a=-1,b=1,f=0,i;

printf("Enter the Nth number ");

scanf("%d",&n);

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

{

f=a+b;

a=b;

b=f;

printf("%d ",f);

}

return 0;

}

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

#include<stdio.h>

int main()

{

int n,a=-1,b=1,f=0,i;

printf("Enter a number");

scanf("%d",&n);

if(n==0)

printf("Yes");

while(n)

{

f=a+b;

if(f>5){

printf("%d number is not in fibonacci series",n);

break;

}

if(f==n)

{

printf("%d number is in fibonacci series",n);

break;

}

else

{

a=b;

b=f;

}

}

return 0;

}

//4. Write a program to calculate HCF of two numbers.

#include<stdio.h>

int main()

{

int a,b,i;

printf("Enter two numbers");

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

for(i=a<b?a:b;i>=1;i--)

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

break;

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

return 0;

}

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

#include<stdio.h>

int main()

{

int a,b,i,min;

printf("Enter two number to check");

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

min=a<b?a:b;

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

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

break;

if(i==min+1)

printf("%d and %d are co-prime numbers",a,b);

else

printf("%d and %d are not co-prime number",a,b);

return 0;

}

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

#include<stdio.h>

int main()

{

int i,j;

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

for(j=2;j<=i-1;j++)

if(i%j==0)

break;

if(i==j)

printf("%d ",i);

}

return 0;

}

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

#include<stdio.h>

int main()

{

int a,b,i,j;

printf("Enter two number for range");

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

for(i=a;i<=b;i++){

for(j=2;j<=i-1;j++)

if(i%j==0)

break;

if(i==j)

printf("%d ",i);

}

}

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

#include<stdio.h>

int main()

{

int n,i,j;

printf("Enter a number to find next prime");

scanf("%d",&n);

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

{

for(j=2;j<=i-1;j++)

if(i%j==0)

break;

if(i==j){

printf("%d",i);

break;

}

}

return 0;

}

//9. Write a program to check whether a given number is an Armstrong number or no.

#include<stdio.h>

int main()

{

int n,re,s=0,k;

printf("Enter a number");

scanf("%d",&n);

k=n;

while(n)

{

re=n%10;

s=s+re\*re\*re;

n=n/10;

}

if(s==k)

printf("%d number is in armstrong",k);

else

printf("%d number is not in armstrong",k);

return 0;

}

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

#include<stdio.h>

int main()

{

int i,re,k,s;

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

{

s=0;

k=i;

while(k)

{

re=k%10;

s=s+re\*re\*re;

k=k/10;

}

if(s==i)

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

}

return 0;

}