NAME SUMIT GUPTA

ASSIGNMENT 7

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

*#include*<stdio.h>

int main ()

{

    int a=-1,b=1,c,i,n;

    printf("Enter a number\n");

    scanf("%d",&n);

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

    {

        c=a+b;

        a=b;

        b=c;

    }

    printf("the Nth term of the Fibonnaci series is %d",c);

*return* 0;

}

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

*#include*<stdio.h>

int main ()

{

    int a=-1,b=1,c,i,n;

    printf("Enter a number \n");

    scanf("%d",&n);

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

    {

        c=a+b;

        a=b;

        b=c;

     printf(" %d\n",c);

    }

    printf("\n");

}

*/\*3. Write a program to check whether a given number is there in the Fibonacci*

*series or not.\*/*

*#include*<stdio.h>

int main ()

{

    int a=-1,b=1,c,n;

    printf("Enter a number");

    scanf("%d",&n);

*if*(n==a || n==b)

    {

        printf("fibonacci series ");

    }

*else*

     {

          c=a+b;

*while* (c<n)

          {

            a=b;

            b=c;

            c=a+b;

          }

*if*(c==n)

          {

             printf("fibonacci series ");

          }

*else*

        {

             printf("not fibonacci series ");

        }

    }

*return* 0;

}

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

*#include*<stdio.h>

int main ()

{

    int a,b,H;

    printf("Enter the two number is ");

    scanf("%d%d",&a,&b);

*for*(H=a>b?a:b;H>=1;H--)

*if*(a%H==0 && b%H==0)

*break*;

        printf("the HCF  of two number is %d",H);

*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 a two number ");

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 number is co-prime",a,b);

}

*else*

{

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

}

*return* 0;

}

*// prime number*

*#include*<stdio.h>

int main ()

{

    int i,x=2,N=100;

*//  printf("Enter a number\n");*

*// scanf("%d",&N);*

*while* (N)

    {

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

*if*(x%i==0)

*break*;

*if*(i==x)

            {

                printf("%d\n",x);

            N --;

            }

         x++;

    }

*return* 0;

}

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

*#include*<stdio.h>

int main (){

    int l,u,x,i;

    printf("Enter a lower and upper number\n");

    scanf("%d%d",&l,&u);

*for*(x=l-1;x<=u-1;x++)

    {

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

*if*(x%i==0)

*break*;

*if*(i==x)

        printf("%d\n",x);

    }

    printf("\n");

*return* 0;

}

*10*

*#include*<stdio.h>

int main ()

{

    int n,r,s,x;

    printf("armstrong number\n");

*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",n);

    }

*return* 0;

}

*/\*9. Write a program to check whether a given number is an Armstrong number*

*or not\*/*

*#include*<stdio.h>

int main ()

{

    int n,x,r,s,i;

    printf("Enter a number");

    scanf("%d",&n);

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

        s=0 ;

        x=n;

*while* (x!=0)

        {

            r=x%10;

            s=s+r\*r\*r;

            x=x/10;

        }

*if*(s==n)

        {

            printf("the given number is armstrong number %d",s);

        }

*else*

        printf("not armstrong number");

*return* 0;

}