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

#include<stdio.h>

#include<math.h>

int main()

{

   int n,i,j;

   int x=0, y=1;

   scanf("%d",&n);

   for(i=1;i<=n-1;i++)

   {

      j=x+y;

      x=y;

      y=j;

   }

   printf("\n%dth fibonacci number is %d",n,x);

}

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

#include<stdio.h>

#include<math.h>

int main()

{

   int n,i,j;

   int x=0, y=1;

   scanf("%d",&n);

   for(i=1;i<=n;i++)

   {

      printf(" %d",x);

      j=x+y;

      x=y;

      y=j;

   }

}

3. Write a 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,i,j,k=0;

   int x=0, y=1;

   scanf("%d",&n);

   while(x<=n)

   {

      j=x+y;

      x=y;

      y=j;

      printf(" %d",x);

      if(x==n){

       k=1;

       break;}

   }

   if(k==1)

     printf("\n It is present");

   if(k==0)

     printf("\nNot present");

}

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

#include<stdio.h>

#include<math.h>

int main()

{

   int x,y,i,min;

   printf("Enter two numbers= ");

   scanf("%d%d",&x,&y);

   min=x<y?x:y;

   for(i=min;i>0;i--)

   {

      if(x%i==0 && y%i==0)

         break;

   }

   printf("HCF is %d",i);

}

5. Write a program to check whether two given numbers are co-prime

numbers or not.

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

#include<stdio.h>

#include<math.h>

int main()

{

   int x=2,i,j;

   while(x<=100)

   {

      j=1;

      for(i=2;i<=x-1;i++)

      {

        if(x%i==0)

         {  j=0;

            break; }

      }

      if(j==1)

        {printf(" %d",x);}

      x++;

   }

}

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

#include<stdio.h>

#include<math.h>

int main()

{

  int x, y, i, j;

  scanf("%d%d",&x,&y);

  int min=x<=y?x:y;

  int max=x>=y?x:y;

  printf("%d  %d ",min,max);

  while(min<=max)

   { j=1;

      for(i=2;i<min;i++)

        {

          if(min % i==0)

           {

            j=0;

            break;

           }

        }

      if(j==1)

            printf("%d ",min);

      min++;

   }

}

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

#include<stdio.h>

#include<math.h>

int main()

{

  int x, y, i, j;

  scanf("%d",&x);

  while(1)

   {j=1;

      for(i=2;i<x;i++)

        {

          if(x % i==0)

           {

            j=0;

            break;

           }

        }

      if(j==1)

           { printf("%d ",x);

            break;}

      if(j==0)

        x++;

   }

}

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

or not.