ASSIGNMENT - 7

1. Write a Program to find the Nth term of the ~~fibonnaci~~ fibonnaci Series.

```
#include <stdio.h>
int main ()
{
   int a=-1, b=1, c, n;
   Printf ("Enter the Nth Term");
   Scanf (%d", &n);
   while (n)
   {
      c = a+b;
      a = b;
      b = c;
      n--;
   }
   Printf ("Nth Term of fibonnaci is %d", c);
   return 0;
}
```

2. Write a Program to Print first N term of fibonaccic series:

```
#include <stdio.h>
int main ()
{
   int a=-1, b=1, c, n;
   Printf ("Enter N number");
   Scanf ("%d", &n);
   for (; n; n--)
   { c = a+b
      a = b;
      b = c;
      Printf ("Series is %d"; c);
   }
   return 0;
}
```

3. Write a Program to Check whether a given number there in the fibonacci series or not.

```
#include <Stdio.h>
int main ( )
{
    int a = -1 , b = 1, c = 0 , x, i;
    Printf (" Enter a number:" );
    Scanf (" %d", & x) ;
    for (i = 0 ; 1 ; i++ )
    {
        c = a+b ;
        a = b ;
        b = c ;
        if ( c == x )
        {
        Printf (" Yes it is fibonacci series ) ;
        break ;
        }
        if ( c > x )
        {
        Printf (" NOT a fibonacci series" ) ;
        break ;
        }
        return 0 ;
}
```

4. ~~Write a Program to Check whether a given number is there in the fibonacci series or not.~~ Calculate HCF of Two numbers.

```
#include<Stdio.h>
int main ( )
{
    int a, b, hcf ;
    Printf (" Enter Two number : " ) ;
    Scanf (" %d %d", & a , & b ) ;
    hcf = a > b ; a : b ;
```

```
for (hcf; hcf >=1 ; hcf --)
{
 if (a % hcf == 0 && b % hcf == 0)
    break ;
}
Printf("HCF if %d and %d %d", a, b, hcf);
return 0;
}
```

5. Write a Program to Cheak whether two numbers are Co-Prime number or not.

```
#include <Stdio.h>
int main()
{
    int
```

8. Write a Program to find next prime number of a given number.

```
#include <stdio.h>
int main()
{
  int a, i, x;
  printf("Enter a number");
  scanf("%d", &a);
  for (x = a+1; 1; x++)
  {
    for (i = 2; i < x; i++)
    {
      if (x % i == 0)
        break;
    }
    if (x == i)
      break;
  }
  printf("Next Prime number is %d", i);
  return 0;
}
```

9. Write a program to cheak wheather a give numbe is an Armstrong number or Not.

```
#include <stdio.h>
int main ()
{
   int x, rem s, n, y;
   Printf (" Enter a Number ");
   Scanf (" %d", &x);
   for (n=1; n<=x; n++)
   {
      S=0;
      y=x
   while (x!=0)
   {
    rem = x%10;
    S = S+ (rem * rem * rem);
    x = x/10;
   }
   if (y==5)
   Printf ("yes it is armstrong num");
   else
   Printf (" Not an armstrong number");
   }
   return 0;
}
```

10. Write a Program to Print all armstrong numbers unde 1000:

```
#include <stdio.h>
int main()
{
    int x, n, s, rem;
    for (n=1; n<=1000; n++)
    {
        x=n;
        s=0;
        while(x!=0)
        {
        rem = x%10;
        s = s+(rem*rem*rem);
        x = x/10;
        }
        if (n==s)
        Printf("%d", n);
    }
        if (n==s)
        Printf("%d", n);
    }
    return 0;
}
```