Assignment (7)

① write a program to find the Nth term of the fibonnac Series.

```
#include <stdio.h>
int main()
{
    int n, i, a=0, b=1, c;
    Printf("Enter number of n term (>2) :");
     Scanf("%d", &n)
    for (i=1; i<=n; i++)
    {
        printf("%d ", a);
        c=a+b;
        a=b;
        b=c;
    }
    Printf("The fibonacci term is: %d\n", a);
}
```

② Write a program to print first N terms of fibonacci series

```
#include <stdio.h>
int main()
{
    int n, i, a=0, b=1, c;
    Printf ("Enter number of terms");
    Scanf ("%d", &n);
    while (i<=n)
    {
        printf("%d ",a);
        i++;
        c=a+b;
        a=b;
        b=c;
    }
}
```

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

④ write a program to calculate HCF of two numbers.

```
#include <stdio.h>
int main()
{
    int a, b, HCF, i;
    Printf("Enter two number");
    Scanf("%d %d", &a, &b);
   for (i=1; i<=a || i<=b; i++)
   {
      if (a%i==0) && (b%i==0))
      {
         HCF=i;
      }
    }
    Printf("\n the HCF is : %d", HCF);
}
```

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

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

```
#include <stdio.h>
int main()
{
   int i,n;
   Printf("All prime number under 100 \n");
   for (i=2 ; i<100; i++)
   {
     for(n=2; n<i; n++);
     {
        if (i%n==0)
         Break;
       else
        if(i==n+1)
         Printf("%d \n",i);
     }
   }
}
```

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

```
#include <stdio.h>
 int main()
 {
    int i, j, n1, n2;
   Printf(" All prime numbers between two number");
   Scanf("%d %d", &n1,&n2);
   for (i= n1; i<=n2 ; i++)
   {
     for (j=2; j<=i; j++)
     {
       if (i%j ==0)
           break;
     }
       if(i==j)
      Printf("%d\n", j);
```

(9) Write a program to check whether a given number is an Armstrong number or not.

```
#include <stdio.h>
int main()
{
  int num, remainder, total=0, temp;
  Printf("Enter the number:");
  Scanf("%d", &num);
  temp = num;
  while(n>0)
  {
    remainder = num%10;
    total = total + (remainder x remainder x remainder");
    num = num/10;
  }
    if (temp == total)
    Printf("This number is armstrong number");
    else
    Printf("This number is not armstrong number");
}
```

num = 1
total = 0
remainder = 1

(10) write a program to print all armstrong under 1000

```
#include <Stdio.h>
int main()
{
   int num, i=1, digit, Sum=0;
   Printf("The armstrong number is \n");
   while(i<=1000)
   {
     num = i;
     Sum =0;
     while(num)
     {
      digit = num%10;
     Sum = Sum+(digit*digit*digit);
     num = num/10;
    }
if (i==Sum)
   {
     printf("%d Armstrong number\n", i);
  }
    i++;
}
return 0;
}
```