

## Assignment-1

2. Write a program to find the  $N^{\text{th}}$  term of fibonacci series.

```
#include <stdio.h>
```

```
int main()
```

```
{  
    int i, f1=0, f2=1, f3=0, n;
```

```
    printf("Enter a Number");
```

```
    scanf("%d", &n);
```

```
    printf("*****\n");
```

```
    printf("%d, %d, ", f1, f2);
```

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

```
{
```

```
        f3 = f1 + f2;
```

```
        f1 = f2;
```

```
        f2 = f3;
```

```
        printf("%d", f3);
```

```
}
```

```
    return 0;
```

```
}
```

② Write a program to print first Nth of the Fibonacci Series.

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
int l, f1=0, f2, f3=0, n;
```

```
printf("Enter a Number");
```

```
scanf("%d", &n);
```

```
printf("*****\n");
```

```
for(l=0; l<n; l++)
```

```
{
```

```
    f3 = f1 + f2;
```

```
    f1 = f2;
```

```
    f2 = f3;
```

```
}
```

```
    printf("%d", f3);
```

```
    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 c, f1=0, f2=1, f3=0, n, x;
```

```
printf("Enter a Number");
```

```
scanf("%d", &n);
```

```
printf("*****\n");
```

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

```
{
```

```
    f3 = f1 + f2;
```

```
    if (f3 == n)
```

```
        x = 1;
```

```
    else
```

```
        f1 = f2;
```

```
        f2 = f3;
```

```
}
```

```
if (x == 1)
```

```
    printf("Fibonacci Series");
```

```
else
```

```
    printf("Not in Fibonacci Series");
```

```
return 0;
```

```
}
```

11) Write a program to calculate HCF of two Number:

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    int i, a, b, h = 0;
```

```
    printf("Enter two Number: ");
```

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

```
    for(i = 2; i <= (a * b); i++)
```

```
    {
```

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

```
            break;
```

```
    }
```

```
    h = (a * b) / i;
```

```
    printf("HCF of two %d and %d is: %d", a, b, h);
```

```
    return 0;
```

```
}
```

5 Write a program to check whether two given Numbers are co-prime Number or not

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
int x, y, i, c=0;
```

```
printf("Enter two Number");
```

```
scanf("%d %d", &x, &y);
```

```
if (x > y)
```

```
{
```

```
for (i=1; i<=x; i++)
```

```
{
```

```
if ((x%i==0) || (y%i==0))
```

```
c++;
```

```
}
```

```
else
```

```
{
```

```
for (i=1; i<=y; i++)
```

```
{
```

```
if ((x%i==0) || (y%i==0))
```

```
c++;
```

```
}
```

```
if (c==2)
```

```
printf("Both are co-prime");
```

```
else
```

```
printf("Not are co-prime");
```

```
return 0;
```

```
}
```

Signature.....



⑥ Write a program to check print all Prime Numbers under 100.

```
# include <stdio.h>
```

```
int main()
```

```
{
```

```
int n=2, x=100;
```

```
while (x)
```

```
{
```

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

```
if (n%i == 0)
```

```
break;
```

```
if (i == n)
```

```
{ printf("Print %d \n", n);
```

```
x--;
```

```
}
```

```
n++;
```

```
} return 0;
```

```
}
```

1. Write a program to all prime between two Number.

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
int u, l, i, x;
```

```
printf("Enter two Number");
```

```
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", x);
```

```
}
```

```
return 0;
```

```
}
```

⑧ Write a program to find Next Prime Number;

```
#include <stdio.h>
int main()
```

```
{
```

```
int x, i, j, c;
```

```
printf("Enter a Number");
```

```
scanf("%d", &x);
```

```
printf("*****\n");
```

```
for(i = (x+1); i > 0; i++)
```

```
{
```

```
for(j = 2; j < i; j++)
```

```
{
```

```
if (i % j == 0)
```

```
continue;
```

```
}
```

```
if (c == 2)
```

```
{
    printf("%d", i);
```

```
break;
```

```
}
```

```
}
```

```
return 0;
```

```
}
```



7. Write a program to check whether a given Number is an Armstrong Number or not:

```
#include <stdio.h>
```

```
#include <math.h>
```

```
int main()
```

```
{
```

```
    int n, c, r, s = 0, t = 0, x;
```

```
    printf("Enter a Number");
```

```
    scanf("%d", &n);
```

```
    c = n
```

```
    x = n;
```

```
    while(n)
```

```
    {
```

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

```
        {
```

```
            n = n / 10;
```

```
            t++;
```

```
        }
```

```
    }  
    while(x > 0)
```

```
    {
```

```
        r = x % 10
```

```
        s = s + pow(r, t);
```

```
        x = x / 10;
```

```
    }
```

```
    if(s == c)
```

```
        printf("Armstrong Number");
```

```
    else
```

```
        printf("Not Armstrong Number");
```

```
    return 0;
```

```
}
```

10) Write a program to print all Armstrong Number under 100;

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    int n, s, r, x;
```

```
    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", s);
```

```
    }
```

```
    return 0;
```

```
}
```