C++ Programming Notes – 14092020

/* WAP to show the value of a factorial */
```cpp
#include<iostream.h>
#include<conio.h>

void main()
{
        int i,n,fact=1;
        cout<<"Enter the range: ";
        cin>>n;

        for(i=1;i<=n;i++)
        {
                fact = fact * i;
        }
        cout<<"\nValue of Factorial: "<<fact;
}
```

/* WAP to print the fibonacci series */
```cpp
#include<iostream.h>
#include<conio.h>

void main()
{
        int i,n;
        int a = 0, b = 1,c = 0;
        cout<<"Enter the range: ";
        cin>>n;

        cout<<a<<" "<<b;
        for(i=0;i<(n-2);i++)
        {
                c = a + b;
                cout<<" "<<c;
                a = b;
                b = c;
        }
}
```

```cpp
/* WAP to print the sum of fibonacci series */
#include<iostream.h>
#include<conio.h>

void main()
{
        int i,n;
        int a = 0, b = 1,c = 0, sum = 1;
        cout<<"Enter the range: ";
        cin>>n;

        for(i=0;i<(n-2);i++)
        {
                c = a + b;
                sum = sum + c;
                a = b;
                b = c;
        }
        cout<<"Sum is: "<<sum;
}
```

```cpp
/* WAP to print odd numbers of fibonacci series */
#include<iostream.h>
#include<conio.h>

void main()
{
        int i,n;
        int a = 0, b = 1,c = 0;
        cout<<"Enter the range: ";
        cin>>n;

        if(a%2!=0)
        {
                cout<<a;
        }

        if(b%2!=0)
        {
                cout<<b;
        }
```

```cpp
        for(i=0;i<(n-2);i++)
        {
                c = a + b;
                if(c%2 != 0)
                {
                        cout<<" "<<c;
                }
                a = b;
                b = c;
        }
}
```

/* WAP to print the sum of factors of a number */

```cpp
#include<iostream.h>
#include<conio.h>

void main()
{
        int i,n,sum=0;
        cout<<"Enter the number: ";
        cin>>n;

        for(i=1;i<=n;i++)
        {
                if(n%i==0)
                {
                        sum = sum + i;
                }
        }
        cout<<"\nSum of factors are: "<<sum;
}
```

/* WAP to print the HCF & LCM */

```cpp
#include<iostream.h>
#include<conio.h>

void main()
{
        int m,n,p=1,h,l,i;
        cout<<"Enter the numbers: ";
        cin>>m>>n;

        p = m*n;
```

```cpp
        for(i=1;i<=p;i++)
        {
                if(m%i==0 && n%i==0)
                {
                        h = i;
                }
        }
        l = p/h;

        cout<<"Required HCF: "<<h;
        cout<<"\nRequired LCM: "<<l;
}
```

/* WAP to print the factors of a number */
```cpp
#include<iostream.h>
#include<conio.h>

void main()
{
        int i,n;
        cout<<"Enter the number: ";
        cin>>n;

        for(i=1;i<=n;i++)
        {
                if(n%i==0)
                {
                        cout<<" "<<i;
                }
        }
}
```

Try to work out at your home:
- WAP to print the sum of factors of a number
- WAP to print the even and odd factors of a number simultaneously
- WAP to check a number is prime or not