C++ Notes – 18092020

/* WAP to count a number of factors of a number */

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

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

	for(i=1;i<=n;i++)
	{
		if(n%i==0)
		{
			c = c + 1;
		}
	}
	cout<<"\nRequired number of Factors are: "<<c;
}
```

/* Nested For Loop - WAP to print the prime number series */

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

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

	for(i=1;i<=n;i++)
	{
		temp = i;
		c = 0;
		for(j=1;j<=temp;j++)
		{
			if(temp%j==0)
			{
				c++;
			}
		}
		if(c == 2)
		{
			cout<<" "<<temp;
		}
	}
}
```

/* WAP to check a number is Prime or not */

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

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

	for(i=1;i<=n;i++)
	{
		if(n%i==0)
		{
			c = c + 1;
		}
	}

	if(c == 2)
	{
		cout<<"\nPrime Number";
	}
	else
	{
		cout<<"\nComposite Number";
	}
}
```

/* WAP to check a number is Co-Prime or not
15 = 1,3,5,15
17 = 1,17
(15,17) = Both are Co-Prime
***/**

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

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

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

```
        if(h==1)
        {
                cout<<"\nCo-Prime numbers";
        }
        else
        {
                cout<<"\nnot a Co-Prime numbers";
        }
}
```