ASSIGNMENT 4 HCF & LCM of 3 integers.
DATE: 22/03/2021 Monday

CODE:

```
#include<iostream>
using namespace std;

int lcm(int, int, int);
int hcf(int, int, int);
int main()
{
    int a,b,c;

    cout<<"Enter 1st number: ";
    cin>>a;
    cout<<"Enter 2nd number: ";
    cin>>b;
    cout<<"Enter 3rd number: ";
    cin>>c;


    cout<<"LCM of "<<a<<","<<b<<","<<c<<" is = "<<lcm(a,b,c)<<endl;
    cout<<"HCF of "<<a<<","<<b<<","<<c<<" is = "<<hcf(a,b,c)<<endl;
    return 0;
}

int lcm(int x,int y, int z)
{
    long max,lcom, count, flag=0;
    if(x>=y&&x>=z)
        max=x;
    else if(y>=x&&y>=z)
        max=y;
    else if(z>=x&&z>=y)
        max=z;
    for(count=1;flag==0;count++)
    {
        lcom=max*count;
        if(lcom%x==0 && lcom%y==0 && lcom%z==0)
        {
            flag=1;
        }
    }
```

```
        return lcom;
}

int hcf(int p, int q, int r)
{
        int gcf=1,flag=0, count;
        for(count=1; flag==0;count++)
        {
                if(p%count==0&&q%count==0&&r%count==0)
                        gcf=count;
                if(count>p&&count>q&&count>r)
                {
                        flag=1;
                }
        }
        return gcf;
}
```

OUTPUT:

```
Enter 1st number: 2
Enter 2nd number: 3
Enter 3rd number: 4
LCM of 2,3,4 is = 12
HCF of 2,3,4 is = 1


...Program finished with exit code 0
Press ENTER to exit console.
```