```cpp
#include<iostream>
#include<iomanip>
using namespace std;
int main ()
{

        //TASK 1
int e,f,HCF,LCM;
    cout << "Enter the first number "<<endl;
    cin>>e;
    cout<<"Enter the second number "<<endl;
    cin>>f;
    if (f!=0){
       HCF=e%f;
      }
    LCM=(e*f)/HCF;
    cout<<"LCM is "<<LCM;



        //TASK 2
        int a,b,d,n,sum;
        cout<<"enter first number of series ";
        cin>>a;
        cout<<"enter second number of sereis ";
        cin>>b;
        cout<<"enter total number of elements in series ";
        cin>>n;
        d=b-a;
        sum=(n/2)*(2*a+(n-1)*d);
        cout<<"the sum is equal to "<<sum<<endl;
```

```cpp
        //TASK 3
    cout<<"\t   "<<setfill('*')<<setw(1)<<""<<endl;
    cout<<"\t   "<<setfill('*')<<setw(3)<<""<<endl;
    cout<<"\t  "<<setfill('*')<<setw(5)<<""<<endl;
        cout<<"\t "<<setfill('*')<<setw(7)<<""<<endl;
        cout<<"\t"<<setfill('*')<<setw(9)<<""<<endl;
        cout<<"\t "<<setfill('*')<<setw(7)<<""<<endl;
    cout<<"\t  "<<setfill('*')<<setw(5)<<""<<endl;
    cout<<"\t   "<<setfill('*')<<setw(3)<<""<<endl;
        cout<<"\t    "<<setfill('*')<<setw(1)<<""<<endl;



        //TASK 4
        int dec,bin,ind;
        cout<<"enter your number ";
        cin>>dec;
        while (dec>=1)
        {
        ind=dec%2;
        cout<<ind;
        dec=dec/2;
        }


        return 0;
}
```

The collective console is:

```
Enter the first number 1
Enter the second number 2
LCM is 2
enter first number of series 2
enter second number of sereis 3
enter total number of elements in series 5
the sum is equal to 16
          *
         ***
        *****
       *******
      *********
       *******
        *****
         ***
          *
enter your number 23
number in binary is11101
--------------------------------
Process exited after 33.73 seconds with return value 0
Press any key to continue . . .
```