S.No: 27	Exp. Name: ***Develop a C program which takes two numbers as command line arguments and finds all the common factors of those two numbers.***	Date:2023-04-03

Aim:

Develop a C program which takes two numbers as command line arguments and finds all the common factors of those two numbers.

Sample input output

```
Sample input output -1:

Cmd Args : 10 20
Common factors for 10 and 20 are: 1    2      5        10


Sample input output -2:

Cmd Args : 45 23
Common factors for 45 and 23 are: 1
```

Note: Do use the printf() function with a newline character (\n) at the end.

Source Code:

common_factors.c

```c
#include<stdio.h>
#include<stdlib.h>
int main(int argc,char *argv[])
{
    int a,b;
    int i,small;
    a=atoi(argv[1]);
    b=atoi(argv[2]);
    small=(a<b)?a:b;
    printf("Common factors for %d and %d are: ",a,b);
    for(i=1;i<=small;i++)
    {
        if(a%i==0&&b%i==0)
        printf("%d\t",i);
    }
    printf("\n");
    return 0;
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Common factors for 10 and 20 are: 1   2   5   10

Test Case - 2

User Output
Common factors for 18 and 39 are: 1   3