

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

```
#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 | | | | |
|---------------|--|--|--|--|
|---------------|--|--|--|--|

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