

Answer on Question#37635 - Programming, C++

1. Write a c++ program to read two integer numbers and pass them to a function to return the largest common divisor?

Solution.

```
#include <iostream>
#include <string>
#include <stdlib.h>
#include <stdio.h>

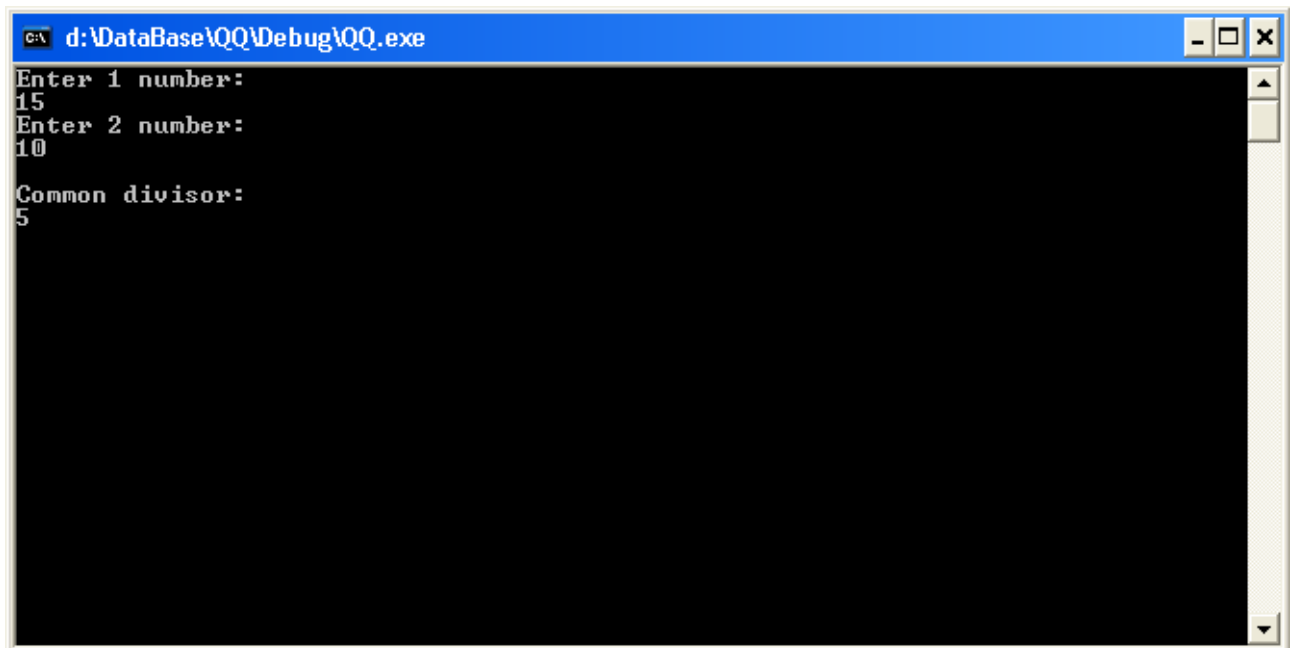
using namespace std;

int commonDivisor(int a, int b);
int main(int argc, char* argv[])
{
    int a,b;
    cout <<"Enter 1 number:"<<endl;
    cin>>a;
    cout <<"Enter 2 number:"<<endl;
    cin>>b;
    cout <<endl<<"Common divisor:"<<endl;
    cout <<commonDivisor(a,b)<<endl;

    system("pause");
    return 0;
}

int commonDivisor(int a, int b)
{
    int j=0;
    if(a>b)
    {
        for(int i=a; i>0; i--)
        {
            if(a%i==0 && b%i==0)
            {j=i; break;}
        }
    }
    else
    {
        for(int i=b; i>0; i--)
        {
            if(a%i==0 && b%i==0)
            {j=i; break;}
        }
    }

    return j;
}
```



```
C:\ d:\DataBase\QQ\Debug\QQ.exe
```

```
Enter 1 number:  
15  
Enter 2 number:  
10  
  
Common divisor:  
5
```

The image shows a Windows command prompt window with a blue title bar. The title bar text is "C:\ d:\DataBase\QQ\Debug\QQ.exe". The window content is black with white text. The text shows a program that prompts for two numbers, 15 and 10, and then outputs their common divisor, 5. The window has standard Windows window controls (minimize, maximize, close) in the top right corner and a vertical scrollbar on the right side.