

Friend function

```
#include <iostream>

class B;

class A
{
    public:
    void showB(B&);
};

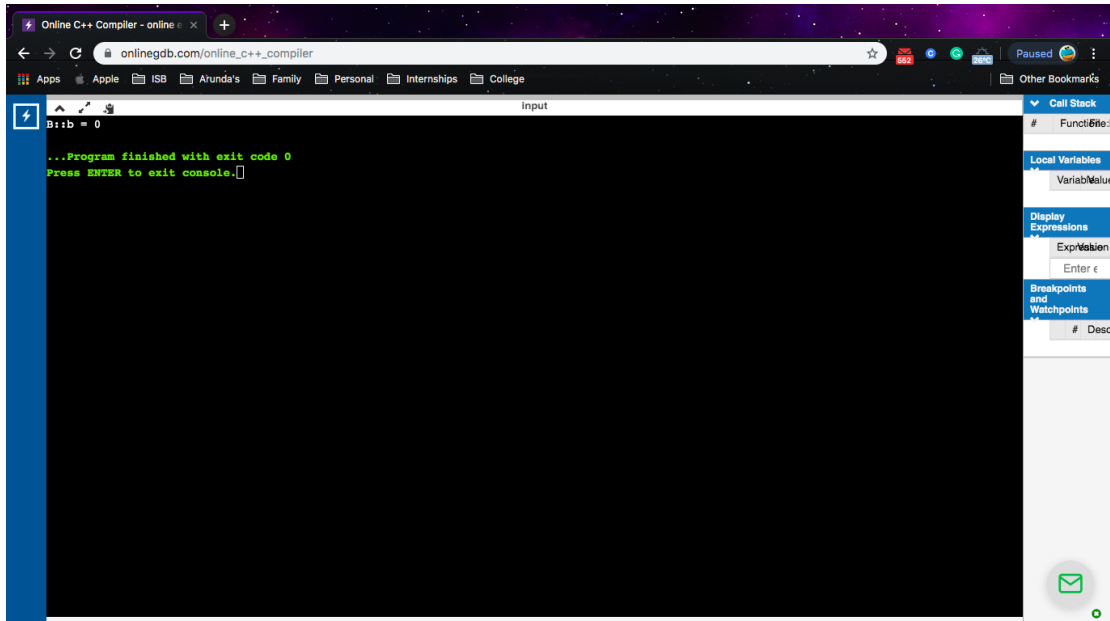
class B
{
    private:
    int b;

    public:
    B() { b = 0; }
    friend void A::showB(B& x); // Friend function
};

void A::showB(B& x)
{
    // Since showB() is friend of B, it can
    // access private members of B
    std::cout << "B::b = " << x.b;
}

int main()
{
    A a;
    B x;
    a.showB(x);
    return 0;
}
```

Output

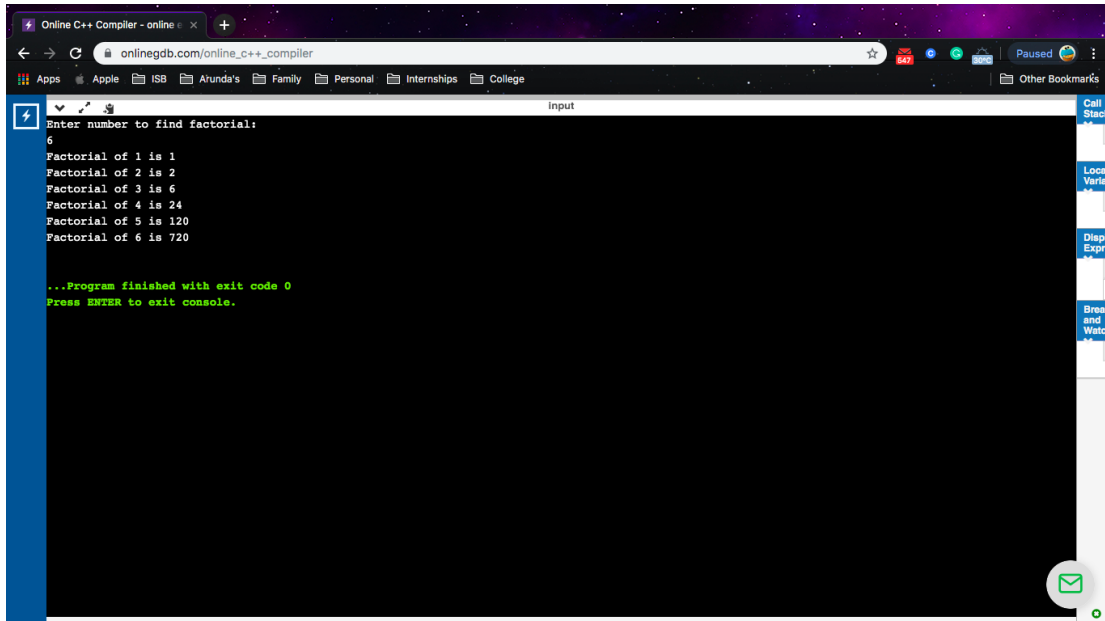


Inline function

```
#include <iostream>
#include <conio.h>
using namespace std;
inline void factorial(int x)
{
    int i,f=1,p=1;
    for(i=1;i<=x;i++)
    {
        f=f*i;
    }
    cout<<"Factorial of "<<x<<" is "<<f<<endl;
}

int main()
{
    int i, N;
    cout<<"Enter number to find factorial:"<<endl;
    cin>>N;
    for(i=1;i<=N;i++)
    {
        factorial(i);
    }
    getch();
    return 0;
}
```

Output

A screenshot of a web browser displaying an online C++ compiler interface. The browser's address bar shows 'onlinegdb.com/online_c++_compiler'. The compiler's input area contains the text 'Enter number to find factorial:' followed by the number '6'. The output area shows the results of the program: 'Factorial of 1 is 1', 'Factorial of 2 is 2', 'Factorial of 3 is 6', 'Factorial of 4 is 24', 'Factorial of 5 is 120', and 'Factorial of 6 is 720'. Below the output, it states '...Program finished with exit code 0' and 'Press ENTER to exit console.' The right sidebar of the compiler shows various debugging tools like 'Call Stack', 'Local Variables', 'Display Expressions', and 'Breakpoints and Watchpoints'.

```
Enter number to find factorial:
6
Factorial of 1 is 1
Factorial of 2 is 2
Factorial of 3 is 6
Factorial of 4 is 24
Factorial of 5 is 120
Factorial of 6 is 720

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

Destructor in c++

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

```
class Marks
```

```
{
```

```
public:
```

```
    int maths;
```

```
    int science;
```

```
    //constructor
```

```
    Marks()
```

```
    {
```

```
        cout << "Inside Constructor"<<endl;
```

```
        cout << "Object created"<<endl;
```

```
    }
```

```
    //Destructor
```

```
    ~Marks()
```

```
    {
```

```
        cout << "Inside Destructor"<<endl;
```

```
        cout << "Object destructed"<<endl;
```

```
    }
```

```
};
```

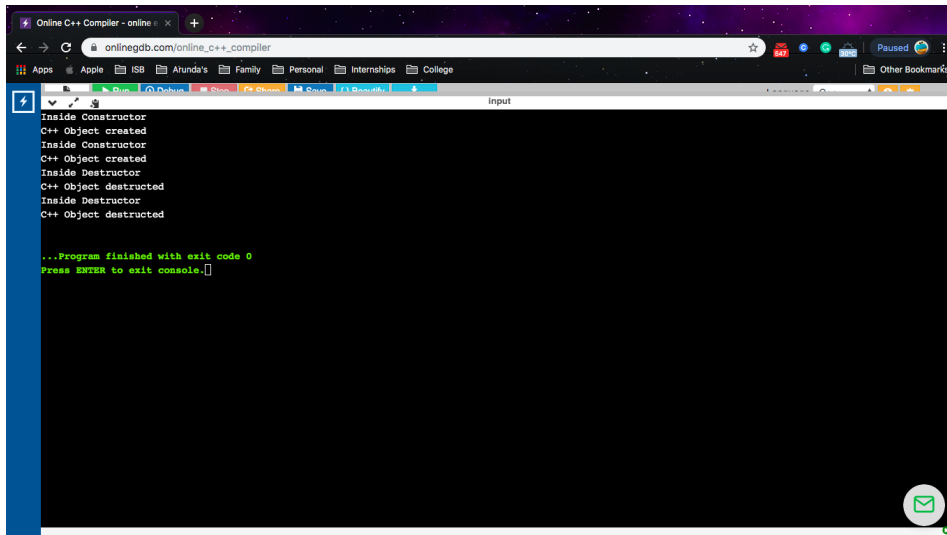
```
int main( )
```

```
{
```

```
    Marks m1;
```

```
Marks m2;  
return 0;  
}
```

Output



```
Inside Constructor  
C++ Object created  
Inside Constructor  
C++ Object created  
Inside Destructor  
C++ Object destructed  
Inside Destructor  
C++ Object destructed  
...Program finished with exit code 0  
Press ENTER to exit console.
```