


Can class can be private ?

Yes, it can but we cannot use.

```
class Box {
```

```
    int width;
```

```
    Box(int _w) : width(_w) {};
```

```
public:
```

```
    int getWidth() const
```

```
{
```

```
    return width;
```

```
}
```

```
    void setWidth(int _val)
```

```
{
```

```
        width = _val;
```

```
}
```

```
};
```

```
int main() {
```

```
    Box b(5);
```

```
    cout << b.getWidth();
```

```
}
```

} it will only work if class is public

But if we don't initialize instance then class can be private.

why we make ctor private?

Box ka directly koi object create nhi
kar paye

↓, how? to make object

using boxfactory friend class

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

class Box{
    int width;
    // ctor
    Box(int _w) : width(_w) {};

public:
    void setWidth(int _val){
        width = _val;
    }

    int getWidth(){
        return width;
    }

    friend class BoxFactory;
};

class BoxFactory{
    int count;
    // to track how many is made

public:
    Box getBox(int _w){
        ++count;
        return Box(_w);
    }
};

int main(){
    BoxFactory bfact;
    Box b = bfact.getBox(5);
    cout << b.getWidth();
}
```

Reference ctor



Constructor C++ microsoft

