

# Copy constructor elision Exercises

- What is meant by "copy constructor elision"?
- Give some examples where copy constructor elision occurs

- What is meant by "return value optimization"?
- What is meant by "named return value optimization"?

- If the code on the next page is executed, how many times will "Copy made" be printed out?
- Explain your answer
- Convert the code to a working program and run it. What do you observe?
- If your compiler supports `-fno-elide-constructors`, compile the program with this option and run it again

```
class X {  
    public:  
        X() {}  
        X(const X& other) { cout << "Copy made\n"; }  
};
```

```
X func() {  
    X x;  
    return x;  
}
```

```
X x = func();
```