

OOP244 Quiz 7

```
#include <iostream>
using namespace std;
class DblContainer {
    double *valAdd_;
public:
    DblContainer() {
        valAdd_ = new double;
    }
    DblContainer(double value) {
        valAdd_ = new double(value);
    }
    DblContainer(const DblContainer& D) {
        valAdd_ = new double(*D.valAdd_);
    }
    DblContainer& operator=(const DblContainer& D) {
        if (this != &D) {
            *valAdd_ = *D.valAdd_;
        }
        return *this;
    }
    ~DblContainer() {
        delete valAdd_;
    }
    ostream& display(ostream& os) const {
        return os << (*valAdd_);
    }
    istream& read(istream& is) {
        return is >> (*valAdd_);
    }
    double& operator=(const double& Ref) {
        *valAdd_ = Ref;
        return *valAdd_;
    }
};
ostream& operator<<(ostream& os, const DblContainer& Dbl) {
    return Dbl.display(os);
}
istream& operator >> (istream& is, DblContainer& Dbl) {
    return Dbl.read(is);
}
```

The above class is a double container that keeps a single double value dynamically and give other programmers access to read print and access its double value.

Convert the above class to a template and rename it to “Container” so it can be used to keep any object and not only a double.

Also after converting explain for what capabilities an object must have to be able to be held by container.

Container template example:

```
int main() {
    Container<double> D = 2.34;
    cout << D << endl;
    Container<Employee> E;
    cin >> E;
    cout << E << endl;
    return 0;
}
```

```
}
```

Submit your answer as follows:

Create a file called `quiz7.txt` and answer the question in it.
Submit that file with this command:

```
~fardad.soleimanloo/submit oop_q7
```