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