

sp24-pa6-Andy2Tran/src/Address.cpp

```
1 // Title : Address.cpp
2 // Desc : Implementation for Address class
3 // Name : An Tran
4
5 #include <iostream>
6     using std::getline;
7
8 #include <iomanip>
9     using std::setw;
10    using std::left;
11    using std::right;
12
13 #include <algorithm>
14
15 #include "Address.h"
16
17 // constructor
18 Address::Address() : street(""), city(""), state(""), zipCode(0){};
19 Address::Address(const string& street, const string& city, const string& state, const
size_t& zipCode)
20     : zipCode(zipCode) {
21         setStreet(street);
22         setCity(city);
23         setState(state);
24     };
25
26 // getter
27 string Address::getStreet(){
28     return street;
29 };
30
31 string Address::getCity(){
32     return city;
33 };
34
35 string Address::getState(){
36     return state;
37 };
38
39 size_t Address::getZip(){
40     return zipCode;
41 };
42
43 // setter
44 void Address::setStreet(const string& newStreet) {
45     street = newStreet;
46     transform(street.begin(), street.end(), street.begin(), toupper);
47 }
48
49 void Address::setCity(const string& newCity) {
50     city = newCity;
51     transform(city.begin(), city.end(), city.begin(), toupper);
52 }
```

```
53
54 void Address::setState(const string& newState) {
55     state = newState;
56     transform(state.begin(), state.end(), state.begin(), toupper);
57 }
58
59 void Address::setZip(const size_t& newZipCode) {
60     zipCode = newZipCode;
61 }
62
63 // other
64 std::ostream& operator<<(std::ostream& os, Address& addr) {
65     os << left << setw(13) << "STREET" << ":" << right << setw(21) << addr.street << '
66     \n'
67     << left << setw(13) << "CITY" << ":" << right << setw(21) << addr.city << '\n'
68     << left << setw(13) << "STATE" << ":" << right << setw(21) << addr.state << '
69     \n'
70     << left << setw(13) << "ZIP CODE" << ":" << right << setw(21) << addr.zipCode <
71     < '\n';
72     return os;
73 }
74
75 std::istream& operator>>(std::istream& input, Address& addr) {
76     getline(input, addr.street);
77     getline(input, addr.city);
78     getline(input, addr.state);
79     input >> addr.zipCode;
80
81     if (input.peek() == '\n') {
82         input.ignore();
83     };
84
85     addr.setStreet(addr.street);
86     addr.setCity(addr.city);
87     addr.setState(addr.state);
88     return input;
89 }
```