```
1 //
 2 // Shaun Chemplavil U08713628
 3 // shaun.chemplavil@gmail.com
 4 // C/C++ Programming III : Intermediate Programming with Objects
 5 // 151116 Raymond L. Mitchell III
 6 // Person.h
 7 // Win10
 8 // Visual C++ 19.0
10 // File contains the Person class definition
11 //
12 #ifndef SHAUNCHEMPLAVIL PERSON H
13 #define SHAUNCHEMPLAVIL_PERSON_H
14
15 #include<iostream>
16 #include<string>
17 using std::istream;
18 using std::ostream;
19 using std::string;
20
21 namespace ShaunChemplavil
22 {
23
      class Person
24
25
         friend istream & operator>>(istream & in, Person & person);
26
         friend ostream & operator<<(ostream & out, const Person & person);</pre>
27
      private:
28
29
         string firstName;
30
         string lastName;
31
          int ageYears;
32
          double heightInches;
          double weightPounds;
33
34
      };
35 }
36 #endif
37
```

```
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 2 // Shaun Chemplavil U08713628
 3 // shaun.chemplavil@gmail.com
 4 // C/C++ Programming III : Intermediate Programming with Objects
 5 // 151116 Raymond L. Mitchell III
 6 // Person.cpp
 7 // Win10
 8 // Visual C++ 19.0
10 // File contains the member functions for the Person class
11 //
12
13 #include "Person.h"
14
15 namespace ShaunChemplavil
16 {
       //place contents of a Person object into an output stream
17
       ostream &operator<<(ostream &out, const Person &person)</pre>
19
20
          out << person.firstName << " "</pre>
             << person.lastName << " "
21
             << person.ageYears << " "</pre>
22
             << person.heightInches << " "</pre>
23
             << person.weightPounds;</pre>
24
25
26
          return out;
27
       }
28
       //place from input stream into a Person object
29
       istream &operator>>(istream &in, Person &person)
30
31
          in >> person.firstName
32
             >> person.lastName
33
             >> person.ageYears
34
             >> person.heightInches
35
             >> person.weightPounds;
36
37
          return in;
38
       }
39 }
40
```

```
1 //
 2 // Shaun Chemplavil U08713628
 3 // shaun.chemplavil@gmail.com
 4 // C/C++ Programming III : Intermediate Programming with Objects
 5 // 151116 Raymond L. Mitchell III
 6 // hw8.cpp
 7 // Win10
 8 // Visual C++ 19.0
 9 //
10 // Test Program for the Person class
11 //
12
13 #include "Person.h"
14 #include<fstream>
15 #include<sstream>
17 using std::cerr;
18
19 using std::cout;
20 using std::ostringstream;
21 using std::string;
22 using std::ifstream;
23 using std::ios;
24
25 using ShaunChemplavil::Person;
26
27 const string INPUT_FILE = "hw8-input.txt";
28
29 int main()
30 {
         ifstream in(INPUT_FILE, ios::in);
31
         ostringstream out;
32
33
        Person person;
34
35
        //check if file open was successful
36
        if (!in)
37
38
            cerr << "Error opening file\n";</pre>
39
            return(1);
40
         }
41
        // Extract next person from file, add newline char, and insert this into a
42
43
         // stringstream
44
        while (in >> person)
45
            out << person << "\n";</pre>
46
47
         // Output the contents of the stringstream to the display
48
        cout << out.str();</pre>
49 }
50
                                     ohn Smith 37 72.25 189.37
                                    Gally Jones 26 60.18 107.88
Aaron Anderson 12 55.5 89.3
Janet Anderson 10 49 60.98
                                    Brian Doe 28 76.11 238
Brett Daniels 48 69.01 189.74
                                    :\Users\schem\source\repos\schemp98\Cpp_Certification_Course\Debug\Exercise.exe
(process 27416) exited with code 0.
                                    o automatically close the console when debugging stops, enable Tools->Options-
lebugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```