

```

1  /*
2  * - internationalstudent.hpp -
3  * ENSC 251 - Lab Assignment 2
4  * May 31, 2019
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6  * 301377893
7  */
8
9  // multiple inclusion prevention
10 #ifndef INTERNATIONALSTUDENT_HPP
11 #define INTERNATIONALSTUDENT_HPP
12
13 #include <iostream>
14 #include <iomanip>
15 #include <string>
16 #include "student.hpp"
17 #include "toeflscore.hpp"
18
19 using namespace std;
20
21 // this class shares properties with the Student class above since it's a child
22 // class but it also has new members unique to InternationalStudent only
23 class InternationalStudent : public Student
24 {
25 public:
26     // declare the get and set functions as public so that the main program can
27     // access them
28     string getCountry() const;
29     void setCountry(string c);
30     ToeflScore getToeflScore() const;
31     void setToeflScore(ToeflScore t);
32     void setToeflScore(int reading, int listening, int speaking, int writing);
33     // redundant access to the getReading, getWriting, etc. found in ToeflScore
34     int getReading() const;
35     void setReading(int r);
36     int getListening() const;
37     void setListening(int l);
38     int getSpeaking() const;
39     void setSpeaking(int s);
40     int getWriting() const;
41     void setWriting(int w);
42     int getTotalScore() const;
43     // overload the insertion operator to print out the object's information
44     friend ostream& operator << (ostream& outs, const InternationalStudent &object);
45     // overload the extraction operator to copy a file line into the class
46     friend istream& operator >> (istream &ins, InternationalStudent &object);
47     // define friend functions for this class - friend functions can access
48     // any of the private members in this class but they don't belong to a
49     // particular class
50     friend int compareCGPA(InternationalStudent student1, InternationalStudent student2);
51     friend int compareResearchScore(InternationalStudent student1, InternationalStudent
student2);
52     friend int compareFirstName(InternationalStudent student1, InternationalStudent
student2);
53     friend int compareLastName(InternationalStudent student1, InternationalStudent
student2);
54     // create a constructor
55     InternationalStudent();
56
57 private:
58     // declare the actual variables as private so that the main program can't
59     // access them and overwrite by accident
60     ToeflScore toeflScore;
61     string country;
62 };
63
64 #endif
65

```