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1  /*
2  *   - domesticstudent.cpp -
3  *   ENSC 251 - Lab Assignment 2
4  *   May 31, 2019
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7  */
8
9  // make sure to include the hpp file for the declarations; this file will be
10 // actually implementing the functions in the class
11 #include "domesticstudent.hpp"
12
13 using namespace std;
14
15 // ***** DomesticStudent Class ***** //
16
17 // define implementations for the get and set functions
18 string DomesticStudent::getProvince() const
19 {
20     return this->province;
21 }
22
23 void DomesticStudent::setProvince(string s)
24 {
25     this->province = s;
26 }
27
28 // define implementations for custom operators
29
30 ostream& operator << (ostream& outs, const DomesticStudent &object)
31 {
32     outs << setw(14) << left << object.getFirstName() << " " << setw(18) << left <<
33     object.getLastName();
34     outs << setw(10) << left << object.getProvince();
35     outs << setw(6) << left << object.getCGPA();
36     outs << setw(4) << left << object.getResearchScore() << endl;
37     return outs;
38 }
39
40 istream& operator >> (istream &ins, DomesticStudent &object)
41 {
42     string s_tmp;
43     getline(ins, s_tmp, ',');
44     object.setFirstName(s_tmp);
45     getline(ins, s_tmp, ',');
46     object.setLastName(s_tmp);
47     getline(ins, s_tmp, ',');
48     object.setProvince(s_tmp);
49     getline(ins, s_tmp, ',');
50     object.setCGPA(atof(s_tmp.c_str()));
51     getline(ins, s_tmp, ',');
52     object.setResearchScore(atoi(s_tmp.c_str()));
53     return ins;
54 }
55
56 // default constructor, initialize strings to ""
57 DomesticStudent::DomesticStudent()
58 {
59     this->setProvince("");
60 }
61
62 // ***** Friend functions of DomesticStudent Class ***** //
63
64 int compareCGPA(DomesticStudent student1, DomesticStudent student2)
65 {
66     return compareTwoNumbers(student1.getCGPA(), student2.getCGPA());
67 }
68
69 int compareResearchScore(DomesticStudent student1, DomesticStudent student2)

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69 {
70     return compareTwoNumbers(student1.getResearchScore(), student2.getResearchScore());
71 }
72
73 int compareFirstName(DomesticStudent student1, DomesticStudent student2)
74 {
75     return compareTwoStrings(student1.getFirstName(), student2.getFirstName());
76 }
77
78 int compareLastName(DomesticStudent student1, DomesticStudent student2)
79 {
80     return compareTwoStrings(student1.getLastName(), student2.getLastName());
81 }
82
```