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1  /*
2  *   - student.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 "student.hpp"
12
13 using namespace std;
14
15 // ***** Student Class ***** //
16
17 // define implementations for the get and set functions
18 string Student::getFirstName() const
19 {
20     return this->firstName;
21 }
22
23 void Student::setFirstName(string s)
24 {
25     this->firstName = s;
26 }
27
28 string Student::getLastName() const
29 {
30     return this->lastName;
31 }
32
33 void Student::setLastName(string s)
34 {
35     this->lastName = s;
36 }
37
38 float Student::getCGPA() const
39 {
40     return this->CGPA;
41 }
42
43 void Student::setCGPA(float c)
44 {
45     this->CGPA = c;
46 }
47
48 int Student::getResearchScore() const
49 {
50     return this->researchScore;
51 }
52
53 void Student::setResearchScore(int rs)
54 {
55     this->researchScore = rs;
56 }
57
58 // default constructor, initialize ints/floats to 0.0 and strings to ""
59 Student::Student()
60 {
61     this->setFirstName("");
62     this->setLastName("");
63     this->setCGPA(0.0);
64     this->setResearchScore(0);
65 }
66
67 // ***** Common functions used by both DomesticStudent and
68 // InternationalStudent ***** //

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```
69  int compareTwoNumbers(int n1, int n2)
70  {
71      if (n1 > n2) return 1;
72      if (n1 < n2) return -1;
73      return 0;
74  }
75
76  int compareTwoNumbers(float n1, float n2)
77  {
78      if (n1 > n2) return 1;
79      if (n1 < n2) return -1;
80      return 0;
81  }
82
83  int compareTwoStrings(string s1, string s2)
84  {
85      for (int i = 0; i < s1.size(); i++) if (s1[i] >= 'a' && s1[i] <= 'z') s1[i] -= ('a' -
86      'A');
87      for (int i = 0; i < s2.size(); i++) if (s2[i] >= 'a' && s2[i] <= 'z') s2[i] -= ('a' -
88      'A');
89      return s1.compare(s2);
90  }
```