

Lab Program Tests

Test 1 – Member fields and Constructors

`Student Test1(string last, string first, int idNo)`

For this test you will add member fields and constructors to the Student class.

The private member fields to add are a string to represent a first name, a string to represent a last name and an int to represent an identification number.

You must also provide the default (no parameter) constructor and one overloaded constructor that will accept two strings (last name and first name) and one int (id number).

The default constructor should set first and last names to "" (no space between the quotation marks) and the id number to 100000 (1 million)

After making the specified additions in the Student class, create and then return a new Student object using the provided parameters.

Test 2 – Getters and Setters

`Student Test2(string last, string first, int idNo)`

For this test, you are to add public getters and setters for the Student class member fields. The methods are to be named:

GetFirstName

GetLastName

GetIDNumber

SetFirstName

SetLastName

SetIDNumber

After making the specified additions in the Student class, create and then return a new Student object using the provided parameters.

Test 3 – Insert in array

`bool Test3(Student [] enrollment, Student enrolled)`

Given a Student array, enrollment, and a string, enrolled, search the array to find an empty slot (null). If an empty slot is located, place acquired in the empty slot and return true. If there are no available slots, return false.

Test 4 – Remove from array

`bool Test4(Student [] enrollment, int idNumber)`

Given a Student array, enrollment, and an int, idNumber, search the array to find idNumber. If idNumber is found, mark the array location as empty (null) and return true. If idNumber is not found, return false.

Test 5 – Retrieve from array

`Student Test5(Student [] enrollment, int idNumber)`

Given a Student array, enrollment, and an int, idNumber, search the array to find idNumber. If idNumber is found, return the Student with the id number idNumber. If idNumber is not found, return null.

