Start with your working version of the Smart **Array** project that has the 3 Unit Tests we did in class. (Not the Smart **Stack** project.)

The test code already has test cases for:

1. *SmartArray should initialize with all zeros*
2. *SmartArray should allow setting the 0 location*
3. *SmartArray throw exception trying to set location 15*

Add 8 *or more* new test methods to test for these 8 conditions. Please think a while and create solid tests for each of these 8 conditions.

1. Can successfully add some value (doesn’t matter what it is) to each and every location in SmartArray
2. SmartArray should throw a particular exception if you try specifying a negative index
3. SmartArray should be able to return true if a value is in the array and you search for it
4. SmartArray should return false if you search for a value that is not in the array
5. SmartArray should allow changing the size of an array of size 5 up to 10 without causing an error. (Use array.length to test)
6. SmartArray should preserve the values of location 0 through 4 if you resize an array of size 5 up to an array of size 10
7. SmartArray should allow changing the size of an array of size 10 down to 5 without causing an error. (Use array.length to test)
8. SmartArray should preserve the values of location 0 through 4 if you resize an array of size 10 down to an array of size 5.