# aProgramming Concepts II – Exam Review/In-Class Exercise 5

This review and the exam are broken up into snippets of code and a class, all of which can be tested in a single Windows form with multiple buttons & input fields … and one rich-text message area.

1. (1 Mark) Create a *Fertilizer* Class with three properties (**Name** (string), **Password** (string), **Start** (DateTime)). Add an instance Edit method, with no parameters, that throws an exception with all error messages encountered:
   1. **Name** is required and cannot be empty, null or just spaces.
   2. **Password** must be 6 characters or more & must contain at least one each of a letter, a digit, and a punctuation symbol (neither letter nor digit).
   3. **Start** cannot be in the future.
   4. Create a form with 3 textboxes (one for each property) and a button. Have it validate your inputs using the Edit method in your class. Display all error messages at once in a rich-text box, one line per error.
2. (1 mark) Add a method to the above class to write the three properties to file as a single delimited record, using the default location for your file (ie: no path specified). Add a second method to your form to accept an object of the class and use its method to add the object’s properties to the file if it passes the edits.
3. (1 Mark) Add textbox and a button to the form. Each time the button is clicked, add the input to a List<String>.
   1. Add another button which:
      1. Creates an array with the same length as the number of entries in the List<>
      2. Copies each item from the List into the array, in reverse order, removing all punctuation
      3. Displays the results in the rich text box, one line per item: index - value.

## Hand In:

Zip and upload your solution to the appropriate drop-box on eConestoga.ca