**Final Exam 2021 - Part B**

**Q1**

(a)    Write a method called ***countContains()*** that takes an array of Strings as a parameter and returns number of strings in the array that contain at least one ‘A’

***(6 marks)***

(b)   Modify your code to ensure that your method is:

* + - * case insensitive (a or A)
      * as useful as possible by including the character as a parameter in the method.

***(4 marks)***

**You may submit 2 different versions for (a) and (b)**

**Q2**

(a)    Write a method called ***removeEnd***() that takes two parameters:  an Arraylist of integers and an integer n, and removes the last n values from the ArrayList of integers.

 For example, if the Arraylist stores this sequence of values:  [8, 17, 9, 24, 42, 3, 8] and n=4 then the Arraylist should store the following values after the method is called:    [8, 17, 9]

***(7 marks)***

(b)     Modify your code to ensure that your method deals with a value of n that is greater than the number of elements in the list (by removing all the elements from the list).

***(3 marks)***

**Q3**

Write a method called ***repeat()*** that takes an Arraylist of integers as parameter and triples the size of a list of integers by twice appending the original sequence to the end of the arraylist.

For example, if the Arraylist stores this sequence of values: [1, 3, 2, 7] then it should store the following values after the method is called: [1, 3, 2, 7, 1, 3, 2, 7, 1, 3, 2, 7]

**(10 marks)**