Java Assignment March 2019 – 20%

Arrays and Methods

1. ~~Write a method that checks if a word is a palindrome i.e. it can be spelt the same backwards and forwards. The method should take in the word, print if the word is a palindrome and return a Boolean to that effect. This method should only be visible at package level.~~ **~~(3 marks)~~**
2. ~~Write a method that takes in a string and calculates the number of vowels used in the word. You can assume that the word is 100% alphabetic in composition, you are then asked to calculate the number of consonants in the word as well.~~ **~~(3 marks)~~**
3. ~~Write a method that takes in a set of integers && checks for the uniqueness of each character. The method will return true if there are no repeats, false if there are repeats. While the method does not need to return any values, it should only be visible to classes in the package and subclasses~~ **~~(4 marks)~~**
4. ~~Write a method that takes in a set of names, converts each name to a set of characters and returns a 2D array of these names. This method should only be visible to the class itself.~~ **~~(5 marks)~~**
5. ~~Write a method that takes in a set of integer values and does the following tasks~~
   1. ~~Returns the largest value~~
   2. ~~Returns the smallest value~~
   3. ~~Returns the length of the array~~
   4. ~~Returns the average value of the array~~
   5. ~~Prints all returned values~~ **~~(5 marks)~~**

Distinct marks shall be given for

1. Planning and evidence of research - include all documentation if needed. This may also include the use of “test” data i.e. data which we should know the result of before processing it.
2. Appropriately placed Comments
3. Appropriate variable datatypes, names and conventions.

Deliverables

Zip file including

* Java files / files
* All other support documentation (if it helped in answering the assignment, **include it!**)

Due Date

Sunday, 31st March

Notes