

# Department of Computer Science

## 420-101-VA Programming 1

Teacher: Nagat Drawel

### Week 09 part 2: Java Methods

1. Write a class named `stringArrayTools` that includes the following static methods:
  - a. `charToString`. This method accepts a char array as an argument and converts it to a String object. The method should return a reference to the String object.
  - b. `wordCount`. This method should accept a reference to a String object as an argument and return the number of words contained in the object.
  - c. `HideCharacter`. This method accepts a string, and an index, then creates a string, in which all characters in the string are hidden (display as dash "-") and only the one at that idx is displayed. If the idx is out of the range (too big or too small), then just return the original string.
  - d. `mostFrequent`. This method accepts a reference to a String object as an argument and returns the character that occurs the most frequently in the object.
  - e. `toTitlecase`: This method accepts a reference to a String object and convert a string to title case (the first letter is upper case, and the rest of the string are lower case.) (This method must use for loop; **the substring () method in the String class is not allowed.**)
  - f. `toCamelcase`: This method accepts a reference to a String object and convert a string to camel case (remove all the spaces, and bring the next character to uppercase. The first character of the whole string should also be uppercase.) (This method must use for loop; **the substring () method in the String class is not allowed**)
  - g. `countStringScore`: This method accepts a reference to a String object and count a score of a string. Hint:
    - i. Each English character worth a score of 2
    - ii. Each space worth a score of 03
    - iii. Each digit worth a score of 1
    - iv. Each other symbol worth a score of 3
    - v. The final score of a string is the total score divided by the length of the string
    - vi. null strings and empty strings have a score of 0