**LEBANESE AMERICAN UNIVERSITY**

**School of Arts and Sciences**

**Department of Computer Science and Mathematics**

**LAB 3**

October 23, 2012

* Create a folder in *MyDocuments* and name it *FamilyName\_IDnumber*
* Save all your java files in this folder.
* Login to your PC2 by the user name and password provided to you.
* Submit every problem you finish coding via PC2 and continue working on other problems while waiting the submitted problems to be judged.

**Problem 1:**

Write a program that would read a string of length 4 (small letters) from the user then capitalize it and print each character on a separate line. For example, if the user input is java, the output should look as follows:

 Please enter a word of length 4: java

 J

 A

 V

 A

Solution: <http://www.javaproblems.com/2013/12/how-to-capitalize-string-in-java.html>

**Problem 2:**

Write a program that would read an input from the user that represents the month value. Then the code will display the name of the month based on this value, using the switch statement. For example, if the user input is:

Please enter the month number:

4

The month selected is: APRIL

**Solution:** [**http://www.javaproblems.com/2013/12/how-to-represent-month-value-from\_16.html**](http://www.javaproblems.com/2013/12/how-to-represent-month-value-from_16.html)

**Problem3:**

Nour and Jad start-out the game with a cumulative score of zero. Then each player rolls three dices and a random number appears for each dice. The summation of each number is added in each player’s score. The winner is the player that has the highest score in x turns based on what the players initially decided.

The output should be as follows:

 Please enter the number of turns:

 3

 Jad's score is: 26

 Nour's score is: 27

 Nour is the winner

*Note: If Jad’s score and Nour’s score are equal, let the program prints: Jad and Nour have equal scores, else let the program print who is the winner.*

Solution: <http://www.javaproblems.com/2013/12/rolling-dices-through-random-class-in_16.html>

**Problem 4:**

Write an application that creates and prints a random phone number of the form xxx-xxx-xxxx. Include
the dashed in the output. Do not let the first three digits contain an 8 or 9. And make sure that the second set of three digits is not greater than 742 (i.e. ≤ 742). Hint: Think through the easiest way to construct he phone number. Each digit does not have to be determined
separately.

Output

016-326-5981

Note: Every time you run the program a different phone number will be generated since it is done randomly.

Solution: <http://www.javaproblems.com/2013/12/generating-phone-number-in-java.html>

**Goodluck**