

## The Department of Computer Science & CINSAM

## **Summer Computing Workshop 2015**

Day 1 Project:

Part 1: Examine the Teaser Program on the website to see how it works. Now, write your own version of a Teaser program which will input information from the user and make snide remarks about everything that they input. Use some of the following String messages to change anything they input to something else.

- toUpperCase() returns a new String with all characters in upper case
- toLowerCase() returns a new String with all characters in lower case
- charAt(x) this returns the single character at position x, we start counting at 0, so charAt(0) is the first character and charAt(n-1) is the last character assuming that there are n characters in the String
- length() returns an int value
- replace(char1, char2) returns a new version of the String replacing every version of char1 with char2
- substring(x, y) returns a new String from the original String starting at character x and ending at y 1 (for instance, substring(3, 6) returns a String made up of characters 3-5)
- trim() returns the same String but with any leading/trailing white space removed
- concat(s1, s2) returns the new String created when concatenating s1 and s2 (same as +)

Use your imagination and have fun with it, but don't say anything that you might regret! Keep it clean in case your parents want to see it.

Part 2: Random Number Generator. Write a program that plays a game between the user and the computer as follows. First, input the user's name. Roll a 6 sided die 3 times (generate 3 random numbers between 1-6) adding the 3 rolls together. This is amount1. Roll an 8 sided die twice and add the two numbers together to get amount2. Now do the same but add the 3 6-sided die to amount2 and the 2 8-sided die to amount1. The user gets amount1 and the computer gets amount2. Output who won using an if statement like this:

if(yourSum>computerSum)

System.out.println("You win!"); else Systemout.println("Computer wins");

We will study more complicated logic tomorrow to make a better program.