## **CSC7426: Basics of Software and Data Engineering**

## J Paul Gibson, D311

paul.gibson@telecom-sudparis.eu

http://jpaulgibson.synology.me/Teaching/TSP/CSC7426/

## The Balance Problem

http://jpaulgibson.synology.me/Teaching/TSP/CSC7426/L1-TheBalanceProblem.pdf

## The Ternary Weight System

A simple class to weigh - on a balance with 2 cups - a given integer value using a ternary weight set:

```
1, 3, 9, 27, 81, 243, ...
```

Input (on the command line) should be a valid integer value

If there is no valid integer value input on the command line then the default value of 100 will be used.

The output will be a text string on system.out of the form:

```
To weigh 100 in right cup of balance, one needs to place the ternary weights in the left (L) and right (R) cups as follows - L: 81
L: 27
R: 9
L: 1
```

This is to represent the balance in the state:

TO DO: Develop this application (in whatever language you wish) and demonstrate your best Software and Data Engineering techniques/skills.