Andrea Siejna

CS232 - Project #2

Rotaluclac Design

**Classes**:

1. public class Rotaluclac implements Calculator

**\*** will use a Linked-List Stack (Collection, Stack, Node)

\* public String calculate (String postfixEqn) throws InvalidEquationException

2. InvalidEquationException extends Exception

3. InvalidNumberFormatException extends RuntimeException

**Tests:**

1. InvalidNumberFormatException thrown when a number has an invalid base "4Ed"

2. InvalidEquationException thrown

when an equation has an invalid operation "6 5 &"

incorrect number of inputs "5 + "

\*\* too many / not enough operands

incorrect number of operations, results in two values "1000 4 5 + "

\*\* too many / not enough operators

3. Proper calculation

simple calculation "3 4 + " = 7

complex calculation "4 2 5 \* + 1 3 2 \* + / " = 2

4. Proper base conversion (take last number's bases)

one for each (b, o, d, h), so 4 altogether

combinations of each, so 16 altogether