**Reflection  
RunConstantScenario(int n)**

-- This method simply does some math on the input n one time.

-- It is classified O(1) because no matter what the int n input it is executed one time only, therefore no change in timing.

-- The runtime was unchanged between the smallest and the largest test sizes (10, 1000, 100000).

**RunLinearScenario(int n)**

-- This method sums in a loop n times.

-- It is classified as O(n) because it will change the number of times directly proportional to the int n input.

-- The runtime was unchanged between the smallest and the largest test size in milliseconds (10, 1000, 100000).

**RunQuadraticScenario(int n)**

-- This method has nested loops that run n times multiplied by n times and does some math inside of that. That makes it quadratic; n multiplied by n is squared.

-- It is classified as O(n^2) because it will change the number of times it runs based on n, which will result in exponential growth in time required to execute.

-- Here the time grew exponentially as input of int n=10 took 0 milliseconds, n=1000 took 2 milliseconds, and n=100000 took 12234 milliseconds!