

## CSCE4123 Assignment 4

### Assignment tasks (50 points each):

1. Task problem <https://www.spoj.com/problems/GDCOFTI/>  
Note: should be straightforward using the Euclidean algorithm
2. Task problem <https://www.spoj.com/problems/ARTHEVAL/>
  - a. Hint: This is the simple expression evaluation tree. A stack (post order traversal) should solve it easily.
3. Task problem <https://www.spoj.com/problems/AGGRCOW/>
  - a. Hint: binary search in a (discrete) solution space from the minimum gap to the max gap between any two stalls.
  - b. To validate a solution with a cow distance of  $x$ , simply place one cow at the left most stall. Use a greedy algorithm to find where is the next stall you can place the next cow. Check if the barn can hold all cows.