

3) (5 pts) ALG (Stacks)

Evaluate the following postfix expression, showing the state of the stack at each of the indicated points.

9 8 5 1^A * - 3^B 2 * +^C / 9 + 5 /

1
5
8
9

A

3
3
9

B

9
9

C

Value of the Expression: 2

Grading: 1 pt for each stack (must be correct to get point), 2 pts for the final answer (no partial)

Computer Science Foundation Exam

August 27, 2022

Section B

ADVANCED DATA STRUCTURES

SOLUTION

Question #	Max Pts	Category	Score
1	5	ALG	
2	10	ALG	
3	10	DSN	
TOTAL	25		

You must do all 3 problems in this section of the exam.

Problems will be graded based on the completeness of the solution steps and not graded based on the answer alone. Credit cannot be given unless all work is shown and is readable. Be complete, yet concise, and above all be neat. For each coding question, assume that all of the necessary includes (stdlib, stdio, math, string) for that particular question have been made.