

## Lab 04b Program 1: Evaluating Booleans

By submitting this assignment, I agree to the following:

“Aggies do not lie, cheat, or steal, or tolerate those who do”

“I have not given or received any unauthorized aid on this assignment”

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### Variable definitions

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```
1 a = True
2 b = True
3 c = False
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### Problem A

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```
1 a or b and c
2 True or (b and c)
3 True
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### Problem B

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```
1 (not (a and not b) or (not c and b)) and (not b) or (not a and b and not c) or (a and not b)
2 (not (True and not True) or (not False and True)) and (not True) or (not True and True and not False) or
  ⇨ (True and not True)
3 (not (True and False) or (True and True)) and False or (False and True and True) or (True and False)
4 (not False or True) and False or False or False
5 True and False or False or False
6 False
```

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### Problem C

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```
1 (not ((b or not c) and (not a or not c))) or (not (c or not (b and c))) or (a and not c) and (not a or (a
  ⇨ and b and c) or (a and ((b and not c) or (not b))))
2 (not ((True or not False) and (not True or not False))) or (not (False or not (True and False))) or (True
  ⇨ and not False) and (not True or (True and True and False) or (True and ((True and not False) or (not
  ⇨ True))))
3 (not ((True or True) and (False or True))) or (not (False or not (True and False))) or (True and True) and
  ⇨ (False or (True and True and False) or (True and ((True and True) or False)))
4 (not (True and True)) or (not (False or not False)) or True and (False or False or (True and (True or
  ⇨ False)))
5 (not True) or (not True) or True and (False or False or (True and True))
6 False or False or True and (False or False or (True and True))
7 False or False or True
8 True
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