

CSCI 150 HW: boolean practice

Due: Wednesday, September 6

To receive full credit, for each exercise you should do the following:

1. **Predict:** First, complete the exercise *without* using the Python interpreter.
2. **Check:** Run the code in a Kaggle notebook. Does the actual output agree with what you wrote down in step 1?
3. **Evaluate:** If your answer in step 1 was different than the actual output, keep experimenting with it, consult an online reference, ask a friend or TA or professor, *etc.* until you can explain why the code works the way it does *and* what your misunderstanding(s) were in part 1.

For each expression, decide whether it will evaluate to **True** or **False**.

1. `False and (True or False)`
2. `(True and (not (False or False))) and (False or (True or False))`
3. `3 ** 2 + 4 ** 2 == 5 ** 2`
4. `50 < 99 / 3`
5. `((1 < 2) and ("hi" > "there")) or (99 != 9)`
6. `"egg" < "excellent"`
7. `"arm" < "aardvark"`
8. `False != (True != (False != (False != True)))`

Your solution should be hand-written (or typed) and contain the following:

- For each line of code above, write down your *original* prediction.
- If your check (step 2) matched, put a check mark. Otherwise, put an X.
- If you wrote an X, then write a brief sentence explaining what you got wrong initially and why the code produces the answer it does.

Specifications

- To be considered **complete** you must work each given problem, and you must have the correct answer (after step 2 if needed), along with correct explanations where appropriate.
- An assignment will be considered **partial** if there are no more than 2 wrong answers (after step 2) and no more than two explanations that are given are incorrect.