

Due: Oct 03

1. Give context-free grammars for the following languages. Describe the language derived by each variable in your grammar. Is your grammar ambiguous? Why or why not?
 - (a) $\{x\#y : x, y \in \{0, 1\}^*, |x| \neq |y| \vee x = y^R\}$ (Recall that y^R denotes the reverse of y ; for example, $0101^R = 1010$.)
 - (b) $\{a^m b^n c^p : m + n = p\}$

2. **implementation** You can find the description on Canvas under Assignments → Programming Assignments → DFA2. Submit the programming assignment to Gradescope.

Here, you can find a 4-hour tutorial for Python: [Python for beginners](#)