COM S 331
Homework 6

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October 6, 2017

1. The following CFG satisfies problem 1:
   $G = (\{S, T\}, \{0, 1\}, S, P)$ where
   $P = \{S \to 0S1|T|\epsilon, T \to 1T0|\epsilon\}$

2. The following CFG satisfies problem 2:
   $G = (\{S, T\}, \{a, b\}, S, P)$ where
   $P = \{S \to aT|W|\epsilon, T \to aU|W, U \to aSb, W \to Wb|b\}$

3. The following CFG satisfies problem 3:
   $G = (\{S, T, F\}, \{t, f, \vee, \wedge, \neg, (,), =\}, S, P)$ where
   $P = \{S \to T = t|F = f,$
   $T \to t|\neg(F)|(T \wedge T)|(T \vee T)|(T \vee F)|(F \vee T),$
   $F \to f|\neg(T)|(F \vee F)|(F \wedge F)|(F \wedge T)|(T \wedge F)\}$