CS 5435: Security and Privacy Concept

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# 1. T is the empty set, i.e., the algorithm uses no example passwords.

The strategy for is based on the real passwords.

1. Generate new word character-wise based on the real passwords
   1. For blocks of Letters (charBlock):
      1. randomly toggle between uppercase and lowercase
      2. randomly substitute with a letter
      3. randomly shuffle the sequence of the letters
   2. For blocks of Digits (digitBlock):
      1. randomly substitute with a digit
   3. For blocks of Special Characters (specialBlock):
      1. no operations
2. Randomly shuttle the sequence of the blocks
3. Repeat the abovementioned procedure if the sweetword generated equals real password

# 2. T is the set of the 100 most common RockYou passwords.

# 3. T is the full RockYou dataset

The strategy is based on (a) T set and (b) real passwords.