

Selected at random

MCG output

From T to AAAAAAAAATTTC

$s = \text{"T"}$

From A to TTTTTTTTTTTTTTTCCCCC

$s = \text{"TA"}$

From T to AAAAAAAAAAATTTC

$s = \text{"TAT"}$

From C to AAAAAAAAAGGGGGGGGGGGGG

$s = \text{"TATC"}$

From G to AAAAAAAAAAAAAAATTTTT

$s = \text{"TATCG"}$

From T to AAAAAAAAAATTCCCCCCCCC

$s = \text{"TATCGT"}$

From T to AAAAAAAAAATTCCCCCCCC

$s = \text{"TATCGTT"}$

From C to AAAAAAAAGGGGGGGGGGGGG

$s = \text{"TATCGTTC..."}$

The Markov Chains Generator

The Markov Chains Generator. The principle of operation of a Markov Chains Generator (MCG) is shown for the first eight steps. Starting at the top of the figure, the s-sequence from the MCG output begins randomly with one of the four letters. In this case the first letter was "T". The next random selection is made from the string associated with state "T" (i.e Jar[2]) and the randomly selected letter in this case was "A". Thus, the next random selection is made from the string corresponding to state "A" (i.e Jar[1]) and the randomly selected letter in this case was "T". Thus, the next random selection is made from the string corresponding to state "T" (i.e Jar[2]). These steps continue until the machine is stopped.



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