Assignment 1

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Markov Models

(a) Write down a transition probability matrix for this Markov chain.

(b) How many cycles must elapse by the time [3] 25% of the population is dead? Show all hand calculations using matrix algebra (you may use TreeAge software or Excel to check your calculations).

(c) For persons who are ill, what is the 5-year survival probability? [Hint: consider your starting population]