**Analysis**

1. Calculate average rate of cell changes
   1. 0.152
2. Analytically estimate average rate of LA changes
   1. At i = 0
      1. 0.15256
   2. At i = 1
      1. 0.06974
   3. At i = 2
      1. 0.02561
   4. At i = 3
      1. 0.0
3. Calculate update costs as msg/s
   1. At i = 0
      1. 0.45768
   2. At i = 1
      1. 0.20922
   3. At i = 2
      1. 0.07683
   4. At i = 3
      1. 0.0
4. Calculate average lookups rate
   1. 0.1
5. Calculate average search costs as msg/s
   1. At i = 0
      1. 0.4
   2. At i = 1
      1. 0.7
   3. At i = 2
      1. 1.9
   4. At I = 3
      1. 6.7