MATLAB

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| clear all, close all;    load sequence1.mat;  p = [0 0 0 0 0; 0 0 0 0 0; 0 0 0 0 0; 0 0 0 0 0; 0 0 0 0 0; 0 0 0 0 0];  x = test\_sequence;  N = length(test\_sequence);  p(1,1) = sum(1==conv(1/1 \* [1], test\_sequence))/N;  p(1,2) = sum(1==conv(1/2 \* [1 1], test\_sequence))/N;  p(1,3) = sum(1==conv(1/3 \* [1 1 1], test\_sequence))/N;  p(1,4) = sum(1==conv(1/4 \* [1 1 1 1], test\_sequence))/N;  p(1,5) = sum(1==conv(1/5 \* [1 1 1 1 1], test\_sequence))/N;    load sequence2.mat;  x = test\_sequence;  N = length(test\_sequence);  p(2,1) = sum(1==conv(1/1 \* [1], test\_sequence))/N;  p(2,2) = sum(1==conv(1/2 \* [1 1], test\_sequence))/N;  p(2,3) = sum(1==conv(1/3 \* [1 1 1], test\_sequence))/N;  p(2,4) = sum(1==conv(1/4 \* [1 1 1 1], test\_sequence))/N;  p(2,5) = sum(1==conv(1/5 \* [1 1 1 1 1], test\_sequence))/N;    load sequence3.mat;  x = test\_sequence;  N = length(test\_sequence);  p(3,1) = sum(1==conv(1/1 \* [1], test\_sequence))/N;  p(3,2) = sum(1==conv(1/2 \* [1 1], test\_sequence))/N;  p(3,3) = sum(1==conv(1/3 \* [1 1 1], test\_sequence))/N;  p(3,4) = sum(1==conv(1/4 \* [1 1 1 1], test\_sequence))/N;  p(3,5) = sum(1==conv(1/5 \* [1 1 1 1 1], test\_sequence))/N;    load sequence4.mat;  x = test\_sequence;  N = length(test\_sequence);  p(4,1) = sum(1==conv(1/1 \* [1], test\_sequence))/N;  p(4,2) = sum(1==conv(1/2 \* [1 1], test\_sequence))/N;  p(4,3) = sum(1==conv(1/3 \* [1 1 1], test\_sequence))/N;  p(4,4) = sum(1==conv(1/4 \* [1 1 1 1], test\_sequence))/N;  p(4,5) = sum(1==conv(1/5 \* [1 1 1 1 1], test\_sequence))/N;    load sequence5.mat;  x = test\_sequence;  N = length(test\_sequence);  p(5,1) = sum(1==conv(1/1 \* [1], test\_sequence))/N;  p(5,2) = sum(1==conv(1/2 \* [1 1], test\_sequence))/N;  p(5,3) = sum(1==conv(1/3 \* [1 1 1], test\_sequence))/N;  p(5,4) = sum(1==conv(1/4 \* [1 1 1 1], test\_sequence))/N;  p(5,5) = sum(1==conv(1/5 \* [1 1 1 1 1], test\_sequence))/N;    load sequence6.mat;  x = test\_sequence;  N = length(test\_sequence);  p(6,1) = sum(1==conv(1/1 \* [1], test\_sequence))/N;  p(6,2) = sum(1==conv(1/2 \* [1 1], test\_sequence))/N;  p(6,3) = sum(1==conv(1/3 \* [1 1 1], test\_sequence))/N;  p(6,4) = sum(1==conv(1/4 \* [1 1 1 1], test\_sequence))/N;  p(6,5) = sum(1==conv(1/5 \* [1 1 1 1 1], test\_sequence))/N; |

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|  | 1 head | 2 head | 3 head | 4 head | 5 head |
| Company1 | 0.5003 | 0.2505 | 0.1255 | 0.0629 | 0.0315 |
| Company2 | 0.5000 | 0 | 0 | 0 | 0 |
| Company3 | 0.5002 | 0.2916 | 0.1040 | 0.0102 | 0.0052 |
| Company4 | 0.5000 | 0.4286 | 0.3571 | 0.2857 | 0.2143 |
| Company5 | 0.5013 | 0.2521 | 0.1265 | 0.0634 | 0.0322 |
| Company6 | 0.4003 | 0.1619 | 0.0654 | 0.0261 | 0.0105 |
| Numeric value | 0.5 | 0.25 | 0.125 | 0.0625 | 0.03125 |

Company2 is absolutely fraud.

Company4 has a possibility to have flipped head-favorable coin.

Company6 has a good chance to have flipped tail-favorable coin.