

Trained 1000 Hmm models each with 200 iterations of re-estimation.
These implementation does not re-estimate the A matrix instead uses the
diagraph matrix constructed from English corpus.
Length of observation sequence-> 1000

Final value of b matrix

P=a-----> C=d----->0.9999999999991129
P=b-----> C=e----->0.6591042225683762
P=c-----> C=f----->0.4229222430326472
P=d-----> C=g----->0.9507114273636709
P=e-----> C=h----->0.9843479197240947
P=f-----> C=i----->0.6443718960460982
P=g-----> C=j----->0.7074387342678542
P=h-----> C=k----->0.9887664851724817
P=i-----> C=l----->0.9999906144944264
P=j-----> C=a----->0.8109167455682632
P=k-----> C=w----->0.5808461194929125
P=l-----> C=o----->0.9330607850239687
P=m-----> C=p----->0.6933591758754144
P=n-----> C=q----->0.8598401372416627
P=o-----> C=r----->1.0
P=p-----> C=s----->0.632216961195429
P=q-----> C=t----->0.7109198732213262
P=r-----> C=u----->0.8883150039869266
P=s-----> C=v----->0.9948977413943725
P=t-----> C=w----->0.9755642826486275
P=u-----> C=x----->0.9629772495723893
P=v-----> C=y----->0.6941678273621655
P=w-----> C=z----->0.8366197134165715
P=x-----> C=*----->0.8409574809991391
P=y-----> C=a----->0.6971022542169545
P=z-----> C=g----->0.8824257871015868
P=*-----> C=c----->0.99999999998083889

So apart from the highlighted ones, rest plaintext ciphertext mappings are
predicted correctly.

Hence accuracy=24/27