ASSIGNMENT-3 REPORT

- As more data is observed, the variance of the posterior decreases and the probability density of the mean increases, indicating that the mean finally converges to a particular value with a high probability.
- Both procedures yield the same output. Sequential approach is used when a lot of data has to be processed.
- Central limit theorem holds in this case indicating that the final posterior distribution approaches that of a Guassian as the sample size increases. If $U_{ML} = 0.5$, the final distribution approximately becomes a Guassian with mean 0.5.

Gamma Distribution params a:36 b:134.Samples:1