Question 3 :

N = 10 numbers in list, for 1000 experiemnts
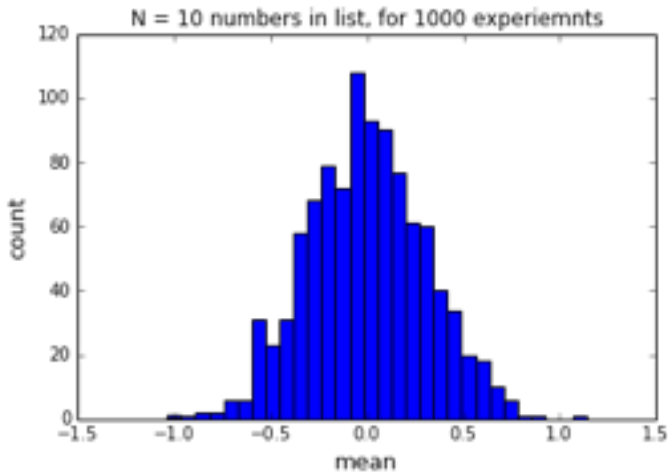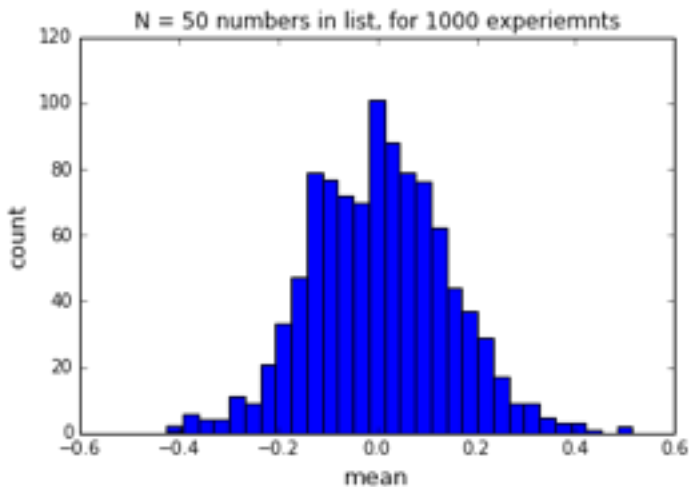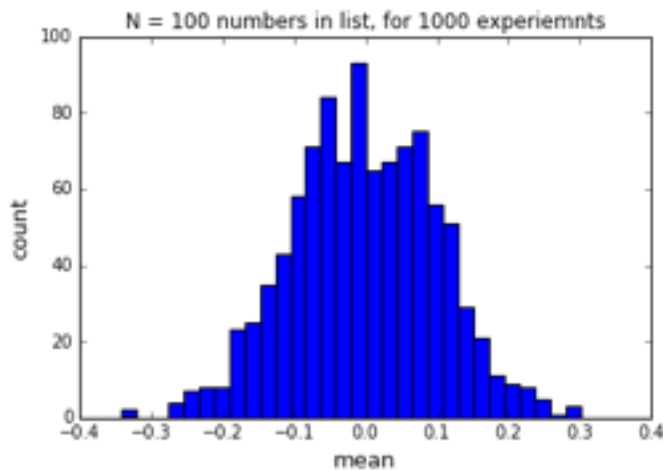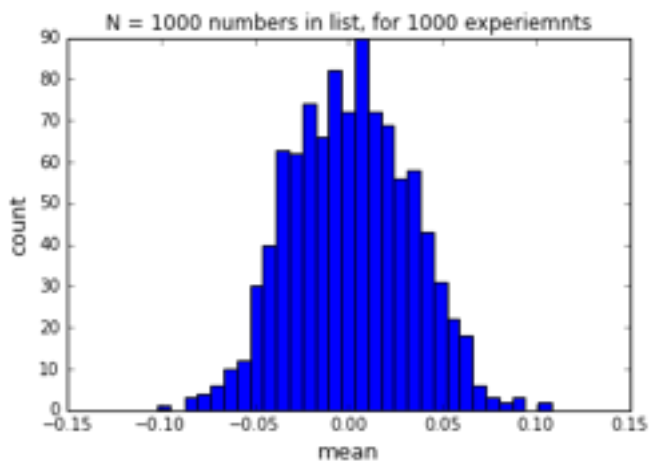
N=10
mean :-0.00948400059966
standard deviation: 0.323160945998
Number of experiments within 1 sigma: 685
Number of experiments within 2 sigma: 954
Number of experiments within 3 sigma: 998

N = 50 numbers in list, for 1000 experiemnts

N=50
mean :0.00157182550714
standard deviation: 0.141286741226
Number of experiments within 1 sigma: 671
Number of experiments within 2 sigma: 959
Number of experiments within 3 sigma: 997

N = 100 numbers in list, for 1000 experiemnts

N=100
mean :-0.0022772056286
standard deviation: 0.100830644397
Number of experiments within 1 sigma: 693
Number of experiments within 2 sigma: 958
Number of experiments within 3 sigma: 997

N = 1000 numbers in list, for 1000 experiemnts

N=1000
mean :-0.0016694934232
standard deviation: 0.0323115057255
Number of experiments within 1 sigma: 693
Number of experiments within 2 sigma: 948
Number of experiments within 3 sigma: 1000