MA323 Lab-6

Expected mean for sample size of **100 = 1.961443608123114**

95% Confidence interval for the sample = **(1.872823133542063, 2.0500640827041647)**

Expected mean for sample size of **1000 = 1.9927801544376602**

95% Confidence interval for the sample = **(1.9652536387862014, 2.020306670089119)**

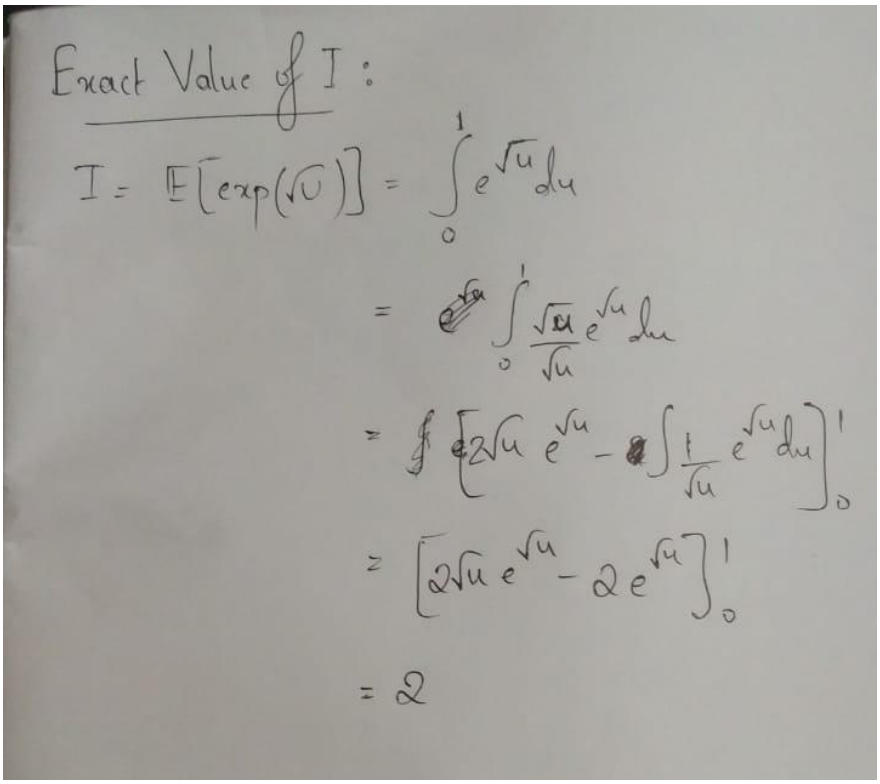
Expected mean for sample size of **10000 = 2.0010780631266667**

95% Confidence interval for the sample = **(1.992468161871091, 2.0096879643822425)**

Expected mean for sample size of **100000 = 1.9993724225622276**

95% Confidence interval for the sample = **(1.9966377687611498, 2.002107076363305)**

Calculation for exact value of I:



Value of Error:

For m=100 - 0.038556391876886
For m=1000 - 0.00721984556233398
For m=10000 - 0.0010780631266667
For m=100000- 0.0006275774377724

The value of Error for different mean reduces to 0 as m increases.