Consistency for Exponential Parameter with theta

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#Consistency-I  
#Q6  
#Let x be a r.v having exponential distribution with location parameter theta. Conduct simulation Study to demonstrate consistency of estimator of theta.

rm(list=ls(all=T))  
n=c(50,100,250,500,750,1000);  
theta=2.6;eps=0.05;  
est.prop\_1=0;Est.prob2=0;  
for (i in 1:length(n))   
{  
 Y=matrix(runif(n[i]\*n[i],0,1),n[i],n[i]); #CDF OF Uniform (0,theta) follow Uniform(0,1)  
 x=theta-log(1-Y);  
 T1=apply(x,1,min);  
 T2=apply(x,1,mean);  
 est.prop\_1[i]=mean(abs(T1-theta)<eps);  
 Est.prob2[i]=mean(abs(T2-theta)<eps);  
   
}  
cbind(n,est.prop\_1,Est.prob2)

## n est.prop\_1 Est.prob2  
## [1,] 50 0.88 0  
## [2,] 100 0.99 0  
## [3,] 250 1.00 0  
## [4,] 500 1.00 0  
## [5,] 750 1.00 0  
## [6,] 1000 1.00 0