

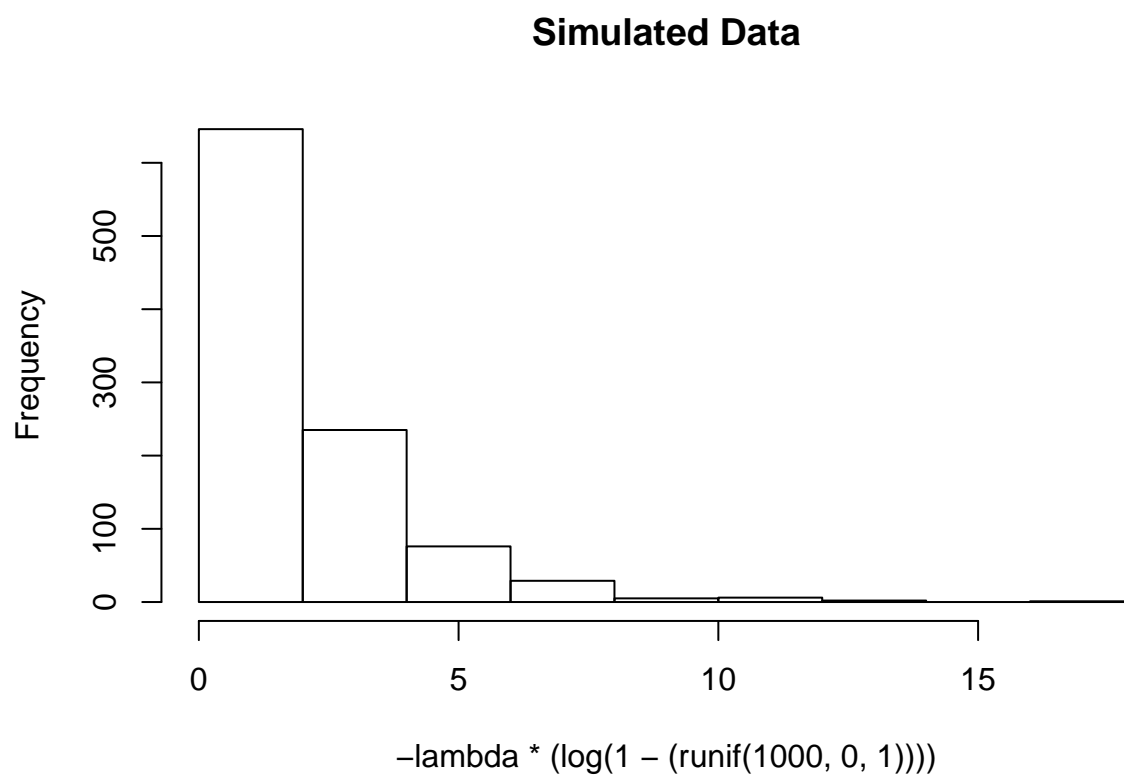
Theory HW 1

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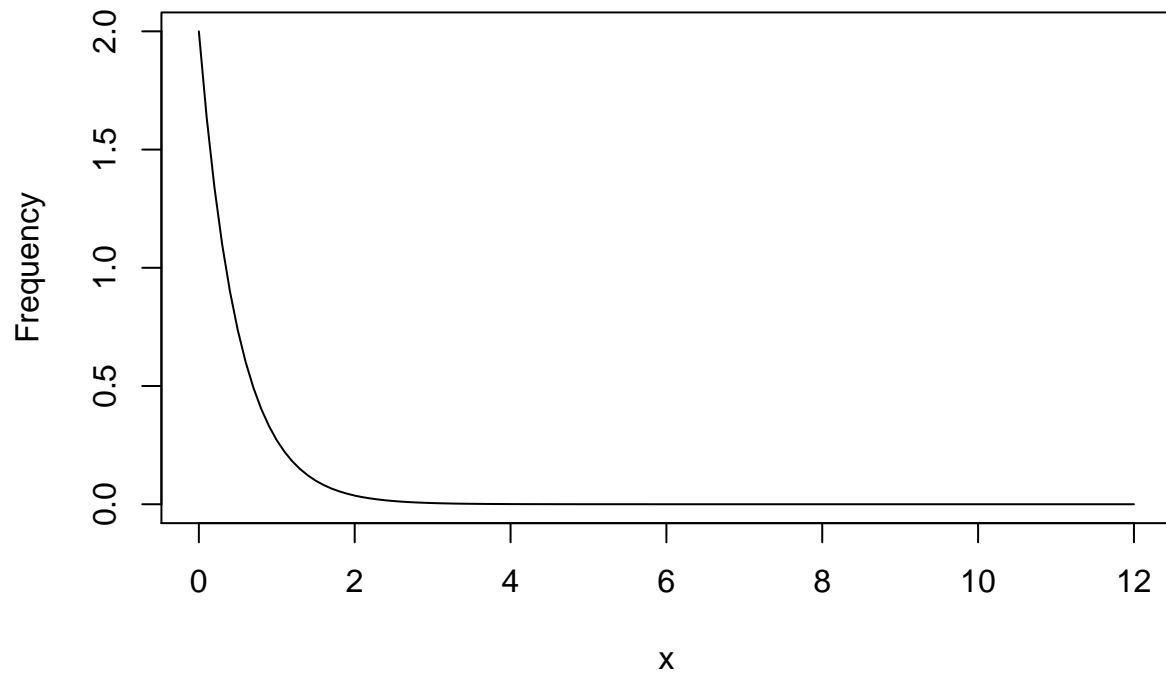
Sam's R code:

```
lambda <- 2  
hist(-lambda * (log(1-(runif(1000,0,1)))), main = "Simulated Data")
```



```
x <- seq(0,12,0.1)  
plot(x,dexp(x,lambda),type = "l",main = "True Distribution",ylab = "Frequency")
```

True Distribution



It looks like the simulated data is a pretty good approximation of the true distribution.