

Exercise 3, chapter 3

In this exercise I have to use simulation to approximate $\int_0^1 e^{e^x} dx$.

```
1 simba <- function(n){ #Function to estimate the given integral
2   gem <- c()
3   for (i in 1:n) {
4     x <- runif(1)
5     evalsimba <- exp(exp(x)) #evaluate the function.
6     gem <- c(evalsimba,gem) #Store my function values.
7   }
8   estimat <- sum(gem)/n #calculate the estimate.
9   return(estimat)
10 }
11 n=100000
12 simba(n)
```

By this simulation the approximation is 6.320417