

Template_Rmd

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November 8, 2020

Part 1: explanation of the variables and the parameters of the population:

nSims: Number of simulations
N: Population size
n: Sample size
y: Population generated from $N(\theta, \sigma^2)$
 θ : Mean of y
 σ^2 : Variance of y
Y: Sample selected without replacement from y
 $\bar{\theta}$: Mean of the sample
 var : Variance of Monte Carlo Draws

Part 2: Presenting the findings

```
nSims=10000
theta=2
sigma2=1
N=10000
n=c(100,1000,5000,9000,9900)
type='normal'
```

```
library(kableExtra)
for (i in 1:length(n)){
  cat(paste0('n=',n[i],'\n'))
  kable(simulation(nSims,theta,sigma2,N,n[i],type))
  cat('\n\n\n')
}
```

```
## n=100
##
##
##
## n=1000
##
##
## n=5000
##
##
```

```
##  
## n=9000  
##  
##  
##  
## n=9900
```