Lab09

VY

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Question 2

```
set.seed(3000)
fun1 <- function(n = 100, k = 4, lambda = 4) {
  x <- NULL

  for (i in 1:n)
    x <- rbind(x, rpois(k, lambda))

  return(x)
}

f1 <-fun1(1000,4)
mean(f1)
```

```
## [1] 4.08125
```

```
fun1alt <- function(n = 100, k = 4, lambda = 4) {
  # YOUR CODE HERE
  x <- matrix( rpois(n*k, lambda) , ncol=4)

  return(x)
}
f1 <- fun1alt(50000,4)

# Benchmarking
microbenchmark::microbenchmark(
  fun1(),
  fun1alt()
)
```

```
## Unit: microseconds
##       expr     min       lq      mean   median       uq      max neval
##     fun1() 458.352 671.1595 813.42021 730.1550 967.9000 2426.483   100
##  fun1alt()  27.463  33.3570  79.70849  37.7835  45.3635 3514.327   100
```