## Freshman seminar homework2

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```
library(rbenchmark)
#fun1 is about loop
fun1 <- function(n){</pre>
  tmp <- 0
  for(i in seq_len(n)){
    tmp <- tmp + i</pre>
  return(tmp)
#fun2 is about lapply
fun2 <-function(n){</pre>
 z <- lapply(list(c(1:n)),sum)</pre>
 return(z)
res <- benchmark(fun1(1000000),fun2(1000000),replications=10,
                  columns=c("test","elapsed","relative","user.self","sys.self"))
res
            test elapsed relative user.self sys.self
##
## 1 fun1(1e+06)
                     0.40
                             2.667
                                         0.41
                                                     0
## 2 fun2(1e+06)
                     0.15
                             1.000
                                         0.13
#so there are some differences between loop and lapply.
#The lapply's speed is faster (usually 2~3 times, watch the relative part) than loop's speed.
```