

HW#2

2023-20200 박건도

2023-03-20

for loop

```
A <- matrix(runif(100 * 1000), nrow=100, ncol=1000)

start_time <- Sys.time()
### WORK ###
res <- c()
for (i in 1:1000){
  res[i] <- mean(A[,i])
}
#####
end_time <- Sys.time()
elapsed_time <- as.numeric(difftime(time1 = end_time,
                                   time2 = start_time,
                                   units = "secs"))
cat("elapsed time : ",sprintf("%.3f",elapsed_time),"sec",sep="")

## elapsed time : 0.022sec
```

apply

```
start_time <- Sys.time()
### WORK ###
res <- apply(A, 2, mean)
#####
end_time <- Sys.time()
elapsed_time <- as.numeric(difftime(time1 = end_time,
                                   time2 = start_time,
                                   units = "secs"))
cat("elapsed time : ",sprintf("%.3f",elapsed_time),"sec",sep="")

## elapsed time : 0.006sec
```