[Day-01-Lecture-06]

관련 논문

> **권기성, 최운호, 김동건 (2022), "문학 작품의 거리 측정을 활용한 야담의 이본 연구",「한국고전연구 57집」87~120쪽, 한국고전연구학회.**

- 이번 세션에서는 R, RStudio를 활용하도록 하겠습니다.

```r
#
# okss_work_006_01.R
#
#

# ####################################################
# install.packages("MASS", "graphics", "ape", "rgl")
# ####################################################

library(MASS)
library(graphics)
library(ape)
library(rgl)


# ############################
# Set working directory
# ############################
working_dir = "d:/current_work/kwonks_drill_okssw_04/"
setwd(working_dir)

data <- read.table("okss_004_007.txt", header=TRUE, encoding="utf-8")

#
# Classical MDS
#
data.matrix <- as.matrix(data)
data.mds2 <- cmdscale(data.matrix, k=2)
data.mds3 <- cmdscale(data.matrix, k=3)

x <- data.mds2[, 1]
y <- data.mds2[, 2]
plot(x, y, main="OKSS")
grid()

x <- data.mds3[, 1]
y <- data.mds3[, 2]
z <- data.mds3[, 3]

# ####################
# rgl 3d mapping
# ####################
```

```r
plot3d(x, y, z, type='p')

# ######################
# Hierarchical Clustering
# ######################

data.dist <- as.dist(data.matrix)
hc <- hclust(data.dist, 'ave')
plot(hc, cex=.85)


# ######################
# Unrooted Tree
# ######################

tr <- as.phylo(hc)
plot(tr, type="u", cex=.45)


# ######################
# HClust cutting
# ######################

plot(hc, hang=-1, cex=.8)
rect.hclust(hc, k=3)

plot(hc, hang=-1, cex=.8)
rect.hclust(hc, k=6)
```