R-MDS.R

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setwd("D:/BABI-C5-Res4")  
mydata=read.csv("mds-nm1.csv", header=TRUE)  
mydata

## AquaFresh Crest Colgate Aim Gleem Maclean Ultra CloseUp Pepsodent  
## 1 0 3 2 4 6 5 6 6 6  
## 2 3 0 1 2 5 5 6 6 6  
## 3 2 1 0 2 4 4 6 6 6  
## 4 4 2 2 0 3 4 5 6 6  
## 5 6 5 4 3 0 3 3 2 2  
## 6 5 5 4 4 3 0 3 3 2  
## 7 6 6 6 5 3 3 0 2 1  
## 8 6 6 6 6 2 3 2 0 2  
## 9 6 6 6 6 2 2 1 2 0  
## 10 7 6 4 6 4 5 5 4 5  
## Dentagard  
## 1 7  
## 2 6  
## 3 4  
## 4 6  
## 5 4  
## 6 5  
## 7 5  
## 8 4  
## 9 5  
## 10 0

row.names=c("AquaFresh", "Crest", "Colgate", "Aim", "Gleem", "Maclean", "Ultra", "CloseUp", "Pepsodent", "Dentagard")  
d=dist(mydata)  
fit=cmdscale(d,eig=TRUE, k=2) # k is the number of dim  
fit # view results

## $points  
## [,1] [,2]  
## [1,] -6.218780 -0.7241701  
## [2,] -6.963378 -0.4399301  
## [3,] -6.662035 0.4452944  
## [4,] -5.071871 -1.2363499  
## [5,] 3.212130 -0.4988236  
## [6,] 2.547240 -1.7399130  
## [7,] 5.631683 -1.2332948  
## [8,] 5.857990 0.4193303  
## [9,] 6.332708 -1.4063697  
## [10,] 1.334313 6.4142265  
##   
## $eig  
## [1] 2.819901e+02 5.053796e+01 3.189973e+01 1.097243e+01 7.672610e+00  
## [6] 5.281758e+00 3.280474e+00 1.817711e+00 1.471999e-01 -1.012854e-14  
##   
## $x  
## NULL  
##   
## $ac  
## [1] 0  
##   
## $GOF  
## [1] 0.8448376 0.8448376

# plot solution   
x =fit$points[,1]  
y =fit$points[,2]  
plot(x, y, xlab="Coordinate 1", ylab="Coordinate 2",   
main="Metric MDS",type="n")  
text(x, y, labels = row.names, cex=.7)

