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School of Computing Science and Engineering

Lab exercise-7

Code/Course	**:**	**CSE3020 – Data Visualisation**	**Date**	**:**	**09/03/2022**
Lab Experiments		**Visualizing the Kmeans clustering result using R**	**Slot**	**:**	**L15+L16**

Pre-requisite: Moderately familiar with basic concepts in R, including variables and functions, and with RStudio, the integrated development environment for programming in R

Practical Exercise

EUROPEAN PROTEIN CONSUMPTION

Consider 25 European countries (n = 25 units) and their protein intakes (in percent) from nine major food sources (p = 9). The data are listed below.

url = 'http://www.biz.uiowa.edu/faculty/jledolter/DataMining/protein.csv'

K-Means Clusters

1. Choose number of the cluster centre and no. of clusters
2. Choose the plotting methods for visualizing results
    a. To display Cluster : use plot( )
    b. To display cluster centre : library(factoextra) , function : fviz_cluster()
    c. To display cluster : use Clustergram(),autoplot()
    d. Analyze all the resulting parameters of Kmeans clustering
    e. Determining Optimal Clusters
        1. Elbow method
        2. Silhouette method
        3. Gap statistic