#input library function for SOM

library(kohonen)

# load the data set

data(iris)

head(iris)

str(iris)

#standardize the data (preprocessing of the data)

iris\_scale<-scale(iris[-5])

iris\_scale

#data classification and mapping

grid =somgrid(xdim=5, ydim=5, topo=c("hexagonal"))

grid

som.iris<-som(iris\_scale, grid=somgrid(5,5,"hexagonal"))

som.iris

plot(som.iris)

som.iris$grid$pts

#clustering : grouping based on value of the nodes

hclust(dist(som.iris$codes[[1]]))

peta<-cutree(hclust(dist(som.iris$codes[[1]])), 3)

plot(som.iris, type="codes", bgcol=rainbow(3) [peta])

add.cluster.boundaries(som.iris, peta)

OUTPUT











