

R version 4.1.3 (2022-03-10) -- "One Push-Up"
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 Platform: x86_64-w64-mingw32/x64 (64-bit)

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Natural language support but running in an English locale

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Type 'demo()' for some demos, 'help()' for on-line help, or
 'help.start()' for an HTML browser interface to help.
 Type 'q()' to quit R.

[Previously saved workspace restored]

```
> data=iris
> data<-scale(iris[, -c(5)])
> pmatrix=scale(data)
> d=dist(pmatrix)
> c=hclust(d, method="ward.D2")
> library(NbClust)
> res.nb<-NbClust(pmatrix, min.nc=2, max.nc=10, method="complete")
*** : The Hubert index is a graphical method of determining the number of clusters.
      In the plot of Hubert index, we seek a significant knee that corresponds to a
      significant increase of the value of the measure i.e the significant peak in H
ubert
      index second differences plot.

*** : The D index is a graphical method of determining the number of clusters.
      In the plot of D index, we seek a significant knee (the significant peak in Di
ndex
      second differences plot) that corresponds to a significant increase of the val
ue of
      the measure.

*****
* Among all indices:
* 2 proposed 2 as the best number of clusters
* 18 proposed 3 as the best number of clusters
* 3 proposed 10 as the best number of clusters

      ***** Conclusion *****

* According to the majority rule, the best number of clusters is 3

*****
>
```