

MSMS 206 : Practical 07

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Question : For the following distance matrix, perform hierarchical clustering and plot a dendrogram.

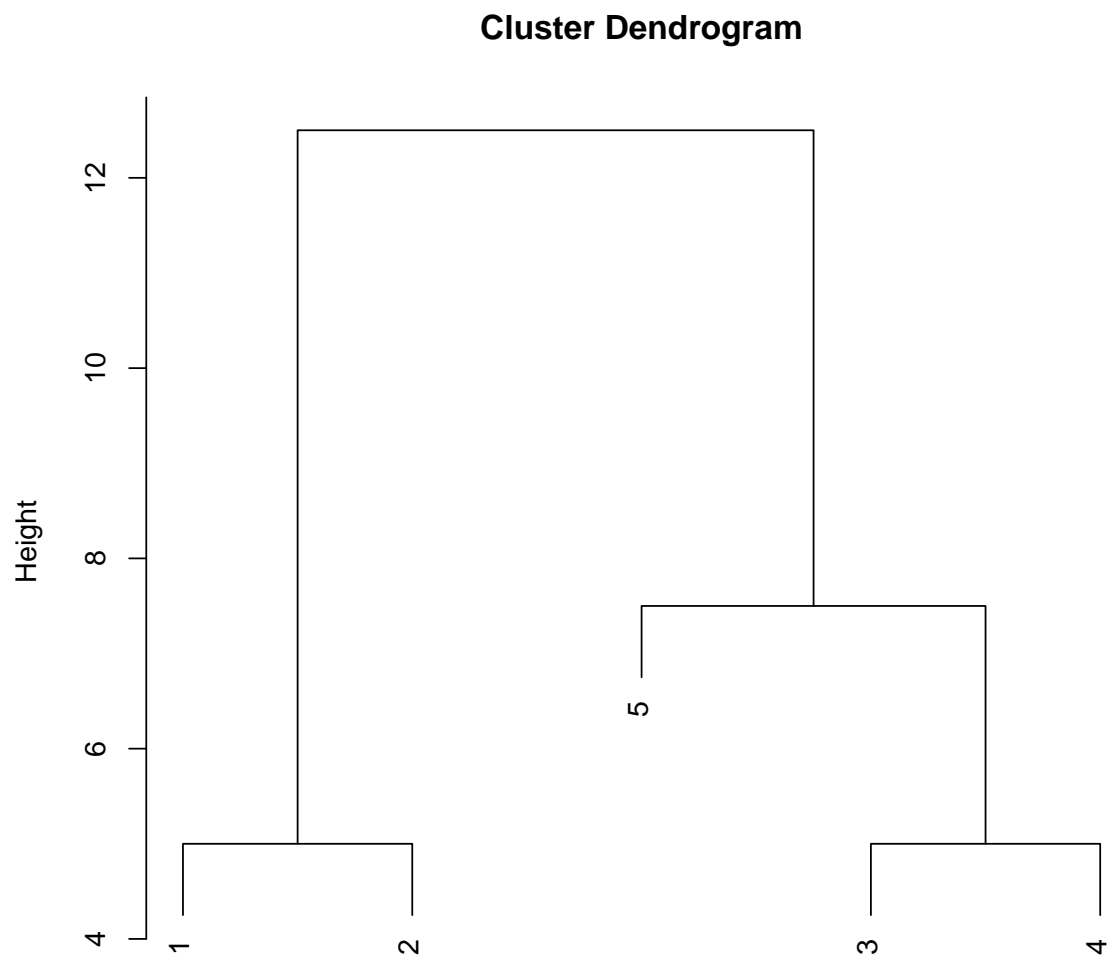
$$\begin{bmatrix} 0 & 5 & 10 & 15 & 20 \\ & 0 & 5 & 10 & 15 \\ & & 0 & 5 & 10 \\ & & & 0 & 5 \\ & & & & 0 \end{bmatrix}$$

➡ Agglomerative Hierarchical Clustering

```
d <- matrix(c(0, 5, 10, 15, 20,
              5, 0, 5, 10, 15,
              10, 5, 0, 5, 10,
              15, 10, 5, 0, 5,
              20, 15, 10, 5, 0), nrow = 5, ncol = 5, byrow = TRUE)
```

```
x <- hclust(as.dist(d), method = "average")
```

```
plot(x, xlab = "")
```



```
hclust (*, "average")
```