Homework 5

Due: Monday, November 1

Consider the following set of points in $\mathbb{R}^2$

$$\{(1,2),(-4,-2),(3,3),(5,6),(-3,-1),(-5,-3),(5,4),(6,8),(-5,-2),(-1,-2)\}$$

a Cluster these points using single linkage (nearest neighbor) clustering using the ℓ^2 norm. Draw a dendrogram tree and interpret your results.

b Repeat (a) using the cityblock option for distance in the `pdist` command. What norm is this? Why do you think it is called this?

c Repeat (a) using complete linkage (farthest neighbor) clustering.

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