

SC4000 Machine Learning Tutorial

Clustering

Question 1: Given the distance matrix shown in Table 1, use a dendrogram to show how to perform agglomerative hierarchical clustering algorithm with Single Link on the distance matrix.

Table 1: Distance matrix.

	P1	P2	P3	P4	P5
P1	0	0.9	0.1	0.65	0.2
P2	0.9	0	0.7	0.6	0.5
P3	0.1	0.7	0	0.4	0.3
P4	0.65	0.6	0.4	0	0.8
P5	0.2	0.5	0.3	0.8	0

Question 2: Refer to the clustering problem on Slide 59 of Lecture 10. Use a dendrogram to show how to perform hierarchical clustering with Complete Link on the similarity matrix.