

* Hierarchical clustering Example *

< Proximity Matrix >

	P1	P2	P3	P4	P5
P1	0.0	0.10	0.41	0.55	0.35
P2	0.10	0.0	0.64	0.47	0.98
P3	0.41	0.64	0.0	0.44	0.85
P4	0.55	0.47	0.44	0.0	0.76
P5	0.35	0.98	0.85	0.76	0.0

FIND A CLOSEST ONE

↓
CLUSTER TOGETHER

- MIN (SINGLE LINK) Hierarchical Clustering

- DENDROGRAM

① CREATE C1 (P1 and P2)

	C1	P3	P4	P5
C1	0.0	0.41	0.47	0.35
P3	0.41	0.0	0.44	0.85
P4	0.47	0.44	0.0	0.76
P5	0.35	0.85	0.76	0.0

② CREATE C2 (C1 and P5)

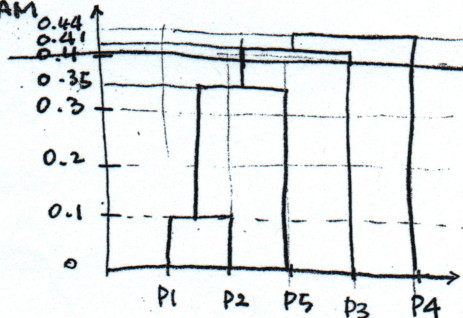
	C2	P3	P4
C2	0	0.41	0.47
P3	0.41	0	0.44
P4	0.47	0.44	0

③ CREATE C3 (C2 and P3)

	C3	P4
C3	0	0.44
P4	0.44	0

④ CREATE C4 (C3 and P4) → ALL

⑤ DENDROGRAM



If threshold = 0.4

→ 3 clusters (P1, P2, P5), P3, P4

* Proximity matrix # similarity matrix
(distance)

↓
70% 70% 70%

↓
3/5 2/5 4/5