

Single link

	A	B	C	D
A	0	1	5	6
B	1	0	3	8
C	5	3	0	4
D	6	8	4	0

(A,B) has minimum distance

→

	(A,B)	C	D
(A,B)	0	3	6
C	3	0	4
D	6	4	0

(A,B,C) has the minimum distance

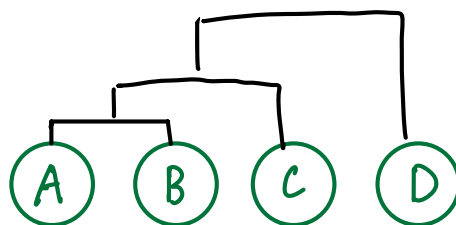
$$d_{(A,B),C} = \min\{d_{A,C}, d_{B,C}\} = \min\{5, 3\} = 3$$

$$d_{(A,B),D} = \min\{d_{A,D}, d_{B,D}\} = \min\{6, 8\} = 6$$

→

	(A,B,C)	D
(A,B,C)	0	4
D	4	0

$$d_{(A,B,C),D} = \min\{d_{A,D}, d_{B,D}, d_{C,D}\} = \min\{6, 8, 4\} = 4$$



complete link

	A	B	C	D
A	0	1	5	6
B	1	0	3	8
C	5	3	0	4
D	6	8	4	0

(A,B) has minimum distance

→

	(A,B)	C	D
(A,B)	0	5	8
C	5	0	4
D	8	4	0

(C,D) has minimum distance

$$d_{(A,B),C} = \max\{d_{A,C}, d_{B,C}\} = \max\{5, 3\} = 5$$

$$d_{(A,B),D} = \max\{d_{A,D}, d_{B,D}\} = \max\{6, 8\} = 8$$

→

	(A,B)	(C,D)
(A,B)	0	8
(C,D)	8	0

$$d_{(A,B),(C,D)} = \max\{d_{(A,B),C}, d_{(A,B),D}\} = \max\{5, 8\} = 8$$

