

Lucia Contract		-
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Q.	Agglomerative Clustering using single link.	
1	q = (5,2)	
1	B = (3,7) $H = (7,3)$	
4	C = (5,8) $I = (8,4)$	
-	D = (6,6) $J = (10,6)$	
4	E = (5,5) $K = (12,8)$ $F = (2,2)$	
+	00 00 00 00 00 00	
4	Eyeballing gives approximately & chusters.	
4	Distance matrix: (Using Eudidean distance)	
1	1 K 25 146 100 128 1139 188 100 185 18	
	A B C D E F 4 H I J K	
	Taking vain distance : To between pts 3 and OL A	
	B (\sqrt{2}) 0	
	C VI3 6,5 = OH D 7 36 D 8A	
	D 116 110 15 0	
	E 110 18 19 12 0	
	F 16 526 545 532 518 00 20 8 8 30	
	4 \\(\overline{125}\) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
	H 534 532 529 5TO 58 526 55 0	1
	I 540 534 525 58 550 540 553 52 0	1
	J 564 550 529 516 526 568 541 518 58 0	1
	K 104 582 549 540 558 536 585 550 532 58 t	
1	K G (99 199 199 199 199 199 199 199 199 199	
1	Taking min-dist z \( \siz \) between A and B and clustering to points to gether.	hose
1	laning roun-costs	
-	points to gether.	
1		-



K H 9 AB 0 AB 5 0 1 55 510 D 0 E V8 518 0 195 V32 F 59 59 0 V25 536 517 14 J29 JIO 58 J26 J5 O 532 H 525 18 VIO 140 VI3 1/2 10 Mill 19 534 I 126 168 JUI 18 18 0 550 J29 VI6 J 125 113° 182 120 V32 V8 J49 540 K 582 Taking min-distance = 52 between pts D and 4 HO I 3 J K DE F AB C AB 0 55 C 0 F6 58 55 00 DE V45 J18 0 516 F 59, 59, 0, V25 V36 4 V29 V8 V26 V5 0 V32 H VI3 V34 525 J8 140 (V2) 0 I VI6 168 1800 T41 118 V50 V29 ゴ 185 150 K 549 V136 V32 540 182 18 between Bound B and character Taking min-distance = 12 b/w pts H and I.

AB DE F 4 HI J C 0 AB 5 C 18 DE 0 116 518 E 0 J25 J36 4 V9 59 0 V32 HI V25 58 126 55 0 50 V29 J 116 168 41 8 0 182 549 K 140 J136 185 V32 58 Taking min-distance = 55 blw pt c and cluste DE AB CDE F 4 HI K J AB 0 15 CDE 0 116 118 0 V25 59 59 0 V32 HILLI 18 Or sint 526 J 168 500 116 18 182 K JI36 185 132 18 0 540 Taking min-distance = 55 b/w pt 4 and cluster HI AB CDE F 9HI J AB CDE 0 16 18 0 GHI V25 18 19 0 J 50 516 √68 18 K 140 V82 V136 √32 58 0



