CMPE - 256 Assignment

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ADM > K-means cluster

shopper	Spending Index	Income Index
	2 (1)	6
2	3	4
2000	En. 8 1 3 3 3	MATERIA 5
5	4	5
3	1 hope 9 5	6
9	5	6
7	6	2
8		3
	6,3 1,0 6	7
6	6	8
	CHULLAT AND	2
14	813	2
(7	8	3
12	Marie 18 18 18 18 18 18 18 18 18 18 18 18 18	5
(3	(921)	
Married Street, Company of the Compa	9	
		04 11016
15		

> cluster = 2

taking Point (2,6) à (3,6) as tre Centroits of cluster 1 (c1) & Cluster e (c2). 1 5 July 210 152 Cluster (C1) (luster (C2) (2,6) (9,0) => Taking point Pe (3,4) Distance from DI= ((3-2) + (6-4) 2 cluster 1 2 2.23 Distance forom D2 = ((3-3) + (6-4) Christon 2 = 540 PI is less, Point (3,4) will be in anster a. Clustorial Chetore(CR) Centroid (9.5, 5) (9,6) Fon Point (3.5) DI= , (3-2)) (55) - 0.25 P22 ((9-3) 4 (6-5) = 537 PI is less, Px Will be in Cluster 1.

American Committee

Cluster (C1) Cluster 2 (CR) Centroid (2.75) 5) $(3.75) 5) \qquad (3,6)$ => Point (4,5) $D_{1} = (2.75 - 4)^{2} + (53)^{2} = 1.25$ D2= ((9-4)2+ (6-5)2 = (2x a) DI is less, (4,5) will bein cluster 1. (luster ((1) (lustor2 (12) Centroid (3.4,5) (9.6) Available that he as he as the 2) Point (5,6) 10-31 / (2-3) - xall DI = (5-3.4) + (6-5) = 1.88 D2 - (95)2+ (6-6) 2 4 Pr is less, (5,6) will be in cluster ! Cluster 1 Christier 2 (entroid (4,2, 5.5) (3,6)

Point (516) DI= (5-4.2)2+ (6-55) = 0.94 Dd = ((9-5) + (c-92 = 4 - (02) 1 (B= 25 0) 14 5, Q Di is less, (5,6) will bein charter 1. Cluster (Ce) (luster (Ce) (4.6, 5-8) (Point (6,2) P1= (6-4.6) 4 8-8-25 = 4.084 P2 ~ [(9-6) + (6-2) = 5 PI is less, (6,2) will be in Chater, H GOV Pas Cluster 1 Cluster 2 (5.3, 3.9) Point (6,3) PI= 1 (6-5.3) + (3.9.3) = 1.14 Par J (3-6) 7 (6-3) = 4,2

DI is less, (6,3) will bein duster (1) Cluster 1 Christer 2 (5.6, 3.4) (9, 4)Point (6, 2) DI2 (6-5-6) + (12-3.4) = Q-RA 3.6 D2- ((g-c) - (= 3-1) => D2 is less, (6, 2) will be i'n Cluster ? Cluster 1 Cluster 2 (5.6,3.5) 212 1 2 15-17 + (12-17) 1 - 19 Point (6, H) P1+ (6-5.6) + (8-3.4) = 4.62 D2 = 1 (7.5-6) 4 (8-8)2 = 1.5 Pa is less, (6,1) will be in closter 2 2 Cluster 1 Cluster 2 (5.6, 3.4) (6.8,8)

-) Point (7,2) DI= (A-56)+ (3.4-2) = (-97 Dar 1/9-6-83+(82) = 6-01 DIE less, (772) Will be in Chester ! (6.3, 2.7) (6.8, 8) - Point (P(2) P10 ((8-6.3) +(2.9-2) = 1.84 D4 = (8-6.8) + (8-2) = 6.12 DI is less, (FIR) will be in duston! (history) Christer 2 (7-2, 2.4) (6.4, K) Point (8,3) P1= 1 (8-22) + B-2.4) = 1 DL: 1/8-6.8)+ (8-3) = 5.14

Pi is less (873) will be in charter 1 Cluster 1 Cluster 2 $(7.6, 2.7) \qquad (6.8.8)$ PEF & (FB) I Through to was 3 Point (8,5) P1= ((8-7-4)2+ (5-2.3)2= 2.33 D2 = (8-6.8) + (8-5) = 3.23 a) Di is less, (8.5) will be in chaster ! (2,5), (2,6) (3,0) (4,0), (4,0) Chatar 1 Chester 2 (7.47 3.8) Point (g,1) DI= J (3-7-1)2= 3.04 PL: (9-6-1) 2 7.35 DI is less, (3,11) will sein chuston! Cluster 2 Christial (8.4, 2.4) (6.8,8)

2)	Point (9,1)	0 210	6	
	P1= J (9-8.4) + (2.4-	1)2 - 152		
	D22 1 (8-6.1)2 2 7.34			
		(B) 2) 60/09		
>	DIES Les, (9,1) will be in chater 1			
	(68.8 0 (68-2) +1			
3)	s Shopper Points	1221 / 180		
120	Cluster 1 (2)	Chuster 2		
	(2,6), (3,4), (3,5),		and the same of th	
	(4,5), (5,6), (5,6),)	
	((6,2), (6,3), (7,2), (/		
	(FIL), (FIS), (FIS),			
	(9,17, (9,1)	(1,10) mone?	Car	
	700 - 1000 1000			
-2)	Shopper Number	46 3 1	-	
	A Company of the Comp			
100	Cluster 1	Chester 2		
	1,2,3,4,5,7,	6, 10, 15		
43	813/11/2,	,	Annual Contract of the Contrac	
	13, 14, 16, 17			
	3 3620/3	1000000		
	6.285			