## # Enample of K-Medaids - Clustering

Senario: - A Small online clothing botique, "Thread Threads"
want to Segment it's Curtomer base to tailor monketing
compaigns more effectively. They believe that customores can be
gowned based on their Purchasing habits. Snevially, the
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11.19

Data:-	(,	D 118-581 1-118-	(1) (1) (1)
1100	austomen ID	Avg Squa Spend Pen oorden	Orders per Month
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103 -	1 C2003 C	(8-8 2000)031 - 000	(6.63) )
[00]	- 1°30001 (	(2-1000 (0031-003	(C) 3. (H) (2)
	Cy	2500	1
300		(8-1200 + (0031-	
	1 0	C- (1860) + (0031 -	
109 =	1 + 000 (	(c-1) + (0031-	(60 (63 (62)
nes4 - 0	Cogn ?	(5-2200 (003) - 00	(8) (8)

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Objective: using the K-Medoids clustering algorithm with

K= 2

## # Example of K-Madoids - Chartening

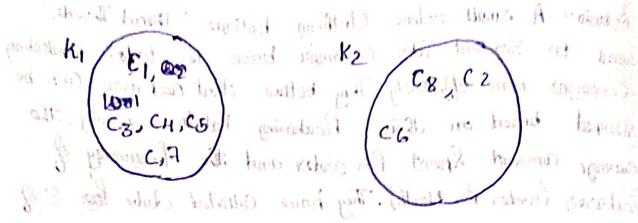
Senemio: A Small online Clothing botique, "Thead Thouse"
unord to Segment it's Curtomor base to tallor markeling
campaigns more effectively They believe that Customors can be
ground based on their Purchasing habits: Snecially, the
awage amound Sport Por order and the forequency of
luriage amound Sport Por order and the forequency of
luriases (ander Por Month). They have collected data for 8 of
their orecent customors.

<u>Data</u> :-	(1	V	114-18/ - 114	· ( )		March of Co. 50
	Customer ID	evA (	Squa Spend Per ander		ndons	por Month
ind	Ci	100	1500		2	
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loci	· Cood (	(3-	1000 (0001 -000		3.	(m)
	Cy		2500		1	
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£.\	1		1800) + (0031-			
loj.	1- ca	. (	100 + (4031	001	) e	(61,63)
and in	Cogn	(9.5	200 (1001 - 001	9	) &	(61,18)
	Section of the Party of the Par		محملها احتراب	1.	110	(3.10)

Objective: using the K-Hedvids clustowing algorithm with

K= 2

Churcion: Demonstate um K- Heddids Chustering Poiscens.



$$\frac{f_{overholor}|_{(C_1, C_1)}}{(C_1, C_2)} + |_{(V_2 - V_1)} + |_{(V_2 - V_1)} + |_{(V_1)}$$

$$(C_1, C_2) \Rightarrow 0$$

$$(2000 - 1500) + (3-2) \Rightarrow 500 + 1 = 501$$

$$(C_1, C_3) \Rightarrow (1000 - 1500) + (3-2) \Rightarrow 1000 + 1 = 1001$$

$$(C_1, C_4) \Rightarrow (2500 - 1500) + (2-2) \Rightarrow 300 + 0 = 300$$

$$(C_1, C_4) \Rightarrow (1800 - 1500) + (3-2) \Rightarrow 300 + 1 = 301$$

$$(C_1, C_4) \Rightarrow (900 - 1500) + (1-2) \Rightarrow (600 + 1 = 601)$$

$$(C_1, C_4) \Rightarrow (900 - 1500) + (1-2) \Rightarrow (600 + 1 = 601)$$

$$(C_1, C_4) \Rightarrow (1800 - 1500) + (1-2) \Rightarrow (1000 + 1 = 601)$$

((8)

$$(c_{8},(c_{1}) \Rightarrow (1500 - 2200) + (2-2) \Rightarrow 700 + 0 = 700$$

$$(c_{8},(c_{2}) \Rightarrow (2000 - 2200) + (1-2) \Rightarrow 200 + 1 = 201$$

$$(c_{8},(c_{3}) \Rightarrow (1000 - 2200) + (3-2) \Rightarrow 1200 + 1 = 1201$$

$$(c_{8},(c_{4}) \Rightarrow (2500 - 2200) + (1-2) \Rightarrow 300 + 1 = 301$$

$$(c_{8},(c_{4}) \Rightarrow (1200 - 2200) + (2-2) \Rightarrow 1000 + 0 \Rightarrow 1000$$

$$(c_{8},(c_{6}) \Rightarrow (1800 - 2200) + (3-2) \Rightarrow 1000 + 1 \Rightarrow 100$$

$$(c_{8},(c_{6}) \Rightarrow (1800 - 2200) + (3-2) \Rightarrow 1000 + 1 \Rightarrow 100$$

$$(c_{8},(c_{7}) \Rightarrow (900 - 2200) + (1-2) \Rightarrow 1300 + 1 \Rightarrow 1301$$

$$(c_{8},(c_{7}) \Rightarrow (900 - 2200) + (1-2) \Rightarrow 1300 + 1 \Rightarrow 1301$$

	0 (.)	68 (K2)	Total
	Ca (KI)	700	501
CI	501	201	201
Cz	501	1201	1001
C3	1001	The state of the s	300
CH	300	301	The state of the s
C5	301	1000	301
Ministration	601	401	401
C6	1-10	1301	700
CIF	3		6,115 5
- 11		Total =>	0,1.0