Naiw Bayesian uxample	0							
EX Color Type Origin Stolen  1 R S D Y  2 R S D N.  3 R S D N.  4 Y S D N.  5 Y S T Y  6 Y X T N  7 Y X T Y  8 Y X D N  10 R S T Y  10 R S	to De	> Naine	Baye	sian u	example :-	Vestiler	Yay T	Tr. Strift
2 R S D N.  3 R S D Y.  4 Y S D N.  5 Y S T Y  8 Y X T N  7 Y X T N  10 R S T Y  10 R S T								
2 R S D N.  3 R S D Y.  4 Y S D N.  5 Y S T Y  8 Y X T N  7 Y X T N  10 R S T Y  10 R S T		Ex	6 0	olor	Type	Origin	S	Tolen
9 R S J Y  10 R S J Y  X = (Red, Suv, Dimestic) -> (Y/N)  p(Yes) = 5 - 0.5 p(No) = 5 = 0.5  10 Type Yes No  Red 3/5 2/5 Sports 4/5 2/5  Yellow 2/5 3/5  Origin Yo Ne  Dom 2/5 3/5		1		R	S	D		Y
9 R S J Y  10 R S J Y  X = (Red, Suv, Dimestic) -> (Y/N)  p(Yes) = 5 - 0.5 p(No) = 5 = 0.5  10 Type Yes No  Red 3/5 2/5 Sports 4/5 2/5  Yellow 2/5 3/5  Origin Yo Ne  Dom 2/5 3/5		e 2 site	Deme	Robin	0)95	D		N.
9 R S J Y  10 R S J Y  X = (Red, Suv, Dimestic) -> (Y/N)  p(Yes) = 5 - 0.5 p(No) = 5 = 0.5  10 Type Yes No  Red 3/5 2/5 Sports 4/5 2/5  Yellow 2/5 3/5  Origin Yo Ne  Dom 2/5 3/5	TAU N	3		R	S	D		Y.
9 R S J Y  10 R S J Y  X = (Red, Suv, Dimestic) -> (Y/N)  p(Yes) = 5 - 0.5 p(No) = 5 = 0.5  10 Type Yes No  Red 3/5 2/5 Sports 4/5 2/5  Yellow 2/5 3/5  Origin Yo Ne  Dom 2/5 3/5		4	100	Y	S	D		N.
9 R S J Y  10 R S J Y  X = (Red, Suv, Dimestic) -> (Y/N)  p(Yes) = 5 - 0.5 p(No) = 5 = 0.5  10 Type Yes No  Red 3/5 2/5 Sports 4/5 2/5  Yellow 2/5 3/5  Origin Yo Ne  Dom 2/5 3/5	26000	5	5	y × 1	× 58 +	OI		y.
9 R S J Y  10 R S J Y  X = (Red, Suv, Dimestic) -> (Y/N)  p(Yes) = 5 - 0.5 p(No) = 5 = 0.5  10 Type Yes No  Red 3/5 2/5 Sports 4/5 2/5  Yellow 2/5 3/5  Origin Yo Ne  Dom 2/5 3/5		188	- d	/	X	Ī		N
9 R S J Y  10 R S J Y  X = (Red, Suv, Dimestic) -> (Y/N)  p(Yes) = 5 - 0.5 p(No) = 5 = 0.5  10 Type Yes No  Red 3/5 2/5 Sports 4/5 2/5  Yellow 2/5 3/5  Origin Yo Ne  Dom 2/5 3/5		7		1	X	T		Y
10 R S T Y  X = (Red, Suy, Promestic) -> (Y/N)  p(Yes) = 5 = 0.5 p(No) = 5 = 0.5  10  Obor Yes No Tyge Yes No  Red 3/5 2/5 Sport 4/5 2/5  Yellow 3/5 3/5 syx 1/5 3/5  Origin Yes No  Dom 2/5 3/5		8		У	X	D		N
$\chi = (\text{Red}, \text{SWY}, \text{ Armestic}) \rightarrow (\text{Y/N})$ $p(\text{Yes}) = 5 - 0.5$ $p(\text{No}) = 5 = 0.5$ $p(\text{No}) = 5 =$	0	9	COM	R	ent Traxing	MIX )	7	N
p(Yes) = 5 -0.5 p(No) = 5 = 0.5  10  Blor Yes No Red 3/5 2/5 Sport 4/5 2/5  Yellow 2/5 3/5  Origin Yes No Dorn 2/5 3/5		10		R	S	I		X
p(Yes) = 5 -0.5 p(No) = 5 = 0.5  10  Blor Yes No Red 3/5 2/5 Sport 4/5 2/5  Yellow 2/5 3/5  Origin Yes No Dorn 2/5 3/5	(3)	1/405 =	(Pape	9 × (	Toly to 9 = rale	179	2	
Other Yes No Tyge Yes No Red 3/5 2/5 Sports 4/5 2/5 Yellow 2/5 3/5 SUX 1/5 3/5  Origin Yes No No 2/5 3/5		X=	(Red,	SUY,	Domestic) -	1)K) E	1)	
Other Yes No Tyge Yes No Red 3/5 2/5 Sports 4/5 2/5 Yellow 2/5 3/5 SUX 1/5 3/5  Origin Yes No No 2/5 3/5				Chritze	coign = don	9 *		
Oslor Yes No Tyge Yes No Red 3/5 2/5 Sports 4/5 2/5 1/5 Sports 4/5 2/5 1/5 2/5 2/5 2/5 2/5 2/5 2/5 2/5 2/5		p(Yes)	= 5	50.5	p(No)		) • 5	
Origin Yu Ne Dom 2/5 3/5		La CATI	10	8	2 × 3 +			
Origin Yu Ne Dom 2/5 3/5		10000				91		
Origin Yu Ne Dom 2/5 3/5		Color	Yes	NE	Tyge	Yes	No	
Origin Yu Ne Dom 2/5 3/5		Red	3/5	2/5	Sports	415	2/5	
Origin Yu Ne Dom 2/5 3/5	<b>177.17</b>	Yellow	2/5	3/5	SVX	1/5	3/5	Z reiks l
Dom 2/5 3/5	West 1			No.	SIA			
	B	Origin	Yes	No		Section 1	1 -1	
	U	Dom	2/5	3/5		Mis. 0	To delicate	
	1477	Emp		2/5				

an

p(Yes/New Instance) = p(Yes) + P(color = Res/Yes) \* P(Type = Sports /Yes) \* P(Drigin = Domustic / Yes)  $= 0.5 \times 3 \times 1 \times 2 = 3 = 0.024$ 0 p(Yes/New Instance) = p(No) \* P(color = Red/NE) \* P(Type = SUV/NE) \* Plorigin = domestights g--8 9  $= \frac{5 \times 2 \times 3 \times 3}{5} = 0.072.$ 2-1 P(Nb) > P(Yes) .; 'NE'

(	
$\rightarrow$	Silhoute Coefficient
	The same of the sa
	Cluster dabel:-
	point cluster label
1	distance from thister I is I quem P
Exide	1 P2 1 040 = 189 1
1	P3 2
	10 P4 10 - (1230+20) = d
TELL	Dissimilarity matrix:-  Point P1 P2 P3 P4
	point P1 P2 P3 P4
9	91 0 0.10 0.65 0.55
	P2 0.10 0 0.70 0.60
	P3 0.65 0.70 0 0.30
	P4 0.55 0.60 0.30
	ar alo harroned million de article
	calculate sithouelle coeff for each point
	calculate sethouette coeff for each point; for each of & cluster; oxerall clustering.
	56.0+01.0
	Silhouette coefficient = 1 - a
	the other
	when: - a = arg distance of a pour to offer
	pointe in ils cuisie.
0	when: a = arg distance of a point to other  points in its cluster.  b = min arg of a distance of a point  to points in another cluster.
	No pouls un another crusis

point PI:a = (0.1) = 0.1 I was tring distance from cluster 1 is from P1 to Pa = 0.10 ( in the matrix) b= 0.65+0.55 = 0.6 min avg distance from P1 to P3 and PI To P4. SC = 1 - 9 = 1 - 0.1 = 0.833.point P2: - b 0.6 a = 0.1 = 0.1 b = 0.70 + 0.60 solvedor withouth copy of sail po SC= 1- 0.1 -0.846. 0.70+0.60 Silhounte conficiis = 1- a point P3: SC= 1 - 0.30 = 0.55b. 0.66+0.70 be much as of the delicer of

point P4:-Sc= 1- 0.30 = 0.478 0.554060 2 P1; Sc = 0.833 Pa; Sc = 0.846 P3: Sc = 0.556 P4: Sc = 0.478. arg SC for cluster | = 0.833 + 0.846 = 0.84. clustes 2 = 0.556+0.478 = 0.517 SC for centire? = 0.84+0.517 = 0.68.