PAGE No.

	DATE / /	
P. 1	mied - otale LA cui	
50	Prior probabilities:	-
	op(on time) = 141	1
	5 10 201 01 10 Live	
! '	iP(late) = 2 200 0000	-
	2,0	(
	P(Very lote) = 3	-T-
	11/20/20/2017 x 1 2011 10 11 = (2017 m) 19	1
• • •	P(concelled) = 1	
	1,20 m V) 1 x	-
	Posterior probabilities:	-
	1) Attibute - Day	1
	Day On Time Late Very late cancelled	
	Weekday 9/14 1/2 3/3 0/1	-
У.	5 durday 2/14 0/2 0/3	
1 (sunder: 1/1.4 0/2 0/3	-
	Holadon 2/14 1/2 10/3 0/0	
		~
*	55050n On Time Late Very Late Concelled	~
	DEGSON 01/11/1	
	Spring 4/14 0/2 0/3 1/1 Symmer 8/14 0/21 0/3	
7	2/22/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2	~
1	Autumn 2/19 2/2 2/3 0/)	
	1031/102	~4
	iii) Attribute - Fog	~-
	Fog on Time late. Yery Lote Concelled	~
	None 5(14 0/2 0/3 0/1	
	High A/14 1/2 1/3 1/1	_
	Mormal 5/17 1/2 2/3 0/1	
	V	

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	iv) Attribute - Rain
and the second s	Kain on Time Late Very Lote Cincelled
	None 6/14 1/2 = 1/3:3
	51ight 6/14 1/2 0/3 0/1
	Heary 2/19 0/2 2/3 -10/1
	2.2
	Using Naive Bayes formulae = 101
	Pro (On Time) = P(on Time) x P(neckday on Time)
,	X P(Winter (On Time) X P(High (on Time)
	X P(None (on Time)
	= 14 × 9 × 1.2 × 4.0 × 6
	20 12001 19 2401 12 11
bel	10000 100 100 100 100 100 100 100 100 1
	1/6 5/5 5/1 1/17. 1/1/2003
	PMB(Late) = P(late) x P(Wedsdox/lote) x
	Kinstary Lote) X P(High (Late) X
	come (chote) en la land
	= 2 1 2 1 1
	$= \frac{2}{26} \times \frac{1}{2} \times \frac{2}{2} \times \frac{1}{2} \times \frac$
bollo	1 3+ml = 1/0.01251 mort we m 30.7
	Special standard of a
•	PEVery Late) = P(Very Late) x P(weekdor (Very Late)
i	x p(winter (very lote) x P(Hingh / Very Lote)
1	x P(None Verse Late)
	= 3 × 3 × 2 × 1 × 1
1	10 300 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
loolla.	Deed stelles 0.0441 Sent no 1 por
1	1 0/2 0/2 0/2 0/2
1	P(conce/red) = 1 310 1014
1	10 20 MI TING Timports
	= 0

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	Here P(Late) is highest The correct dassification is late
	= The correct dossification is late
2,	
	We have to had 1 0
	We have to test hypothesis that gender and
	preferred reading we independent that means there is no correlation between them
10 mm	
	Using Chi-square test
2.0	Contingency table -
	Male Female
	Faction 250 (30) 200 (360)
	Non-fiction 50(210) 1000(840)
	Degrees of Freedom = $(2-1)\times(2-1)$
	= 1
	2 2
	$\chi^{2} = \sum_{i=1}^{\infty} \sum_{j=1}^{\infty} (o_{ij} - e_{ij})^{2}$
	ę jj
	$=(250-90)^{2}+(50-210)^{2}+(200-350)^{2}$
	90 210 300
	$= (250 - 90)^{2} + (50 - 210)^{2} + (200 - 360)^{2}$ $= (250 - 90)^{2} + (200 - 360)^{2}$ $+ (1000 - 840)^{2}$
	240
	= 507.94
	For degree of freedom 1, significance - 0.01
	y's value needed to reject hypothesis is 6.635.
	The received value is above this value. Thus
	we reject the hypothesis that the gender or preferred reading are independent.
	preferred reading are independant.
-	