

Naive Bayes

Naive Baye's methods are a Set of Supervised Learning algorithm based on Applying Baye's theorem with the naive assumptions of Conditional Independence between every Pais of Features given the value of Class variables.

Bayes theorem state the following relationship Given class variables y and dependent Feature vector X. Horash Xn

p(y.1x,--,xn) = P(y). (p(x,--xn)y)
p(x1,--,xn)

= P(y) fi (xily)

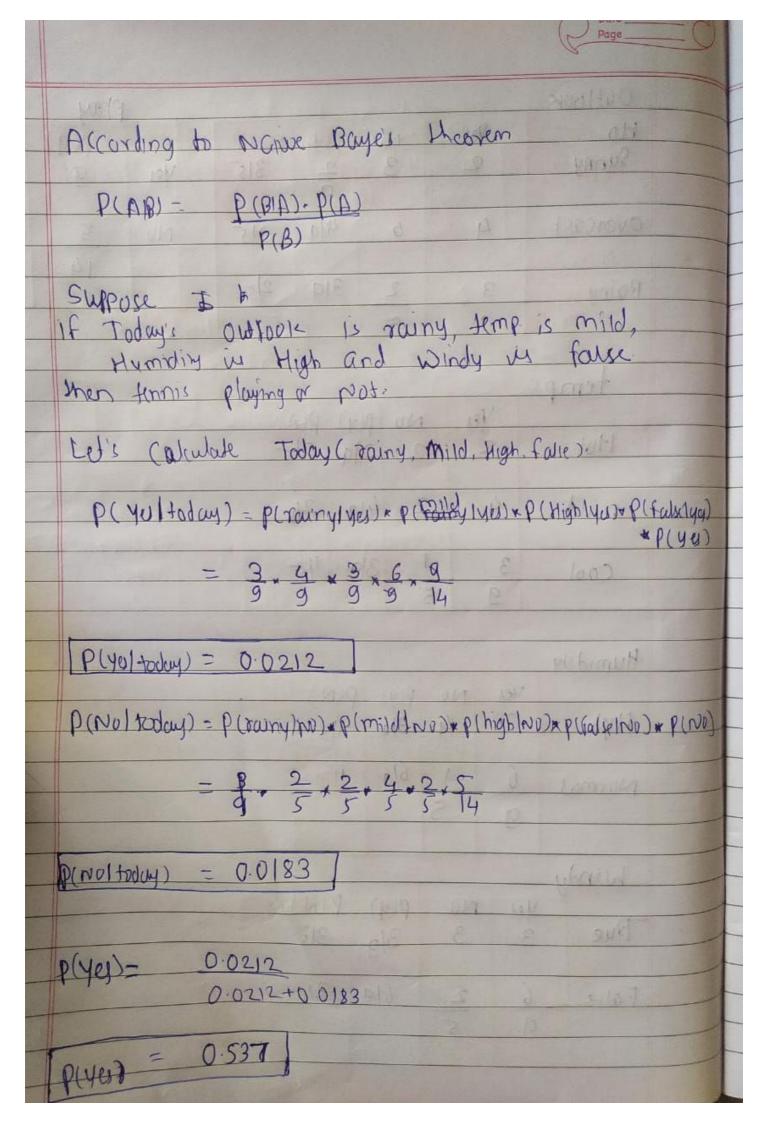
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P(NO)) =	1-	Plu	(4)
			100000	-

= 1-0.537

P(NO) = 0.463

In this scengrio the probability of Byes
us greater than No.

p(40)> p(No)

0.537> p.463

In this perficular Scenario, Outlook is rainy temp. M mild Humidity is high and windy is fall

the operfut is yes: (means All conditions are satisfied so we can played a tennis)