

Vocabulary method Naïve Bayes		
1	Awesome product but camera quality not good	neg
2	good buy	pos
3	A great mobile from Samsung. The mobile is good	pos
4	Product is good	pos
5	worst product and bad camera	neg
6	Awesome mobile but bad camera	neg
7	not good a product	neg

	awesome	product	but	camera	quality	not	good	buy	a	great	mobile	from	samsung	the	is	and	cheap	worst	bad	Class
1	1	1	1	1	1	1	1													Neg
2							1	2												Pos
3							1		1	1	2	1	1	1						Pos
4		1					1								1					Pos
5		1		1														1	1	Neg
6	1		1	1							1					1	1		1	Neg
7		1				1	1		1											Neg

$$p(w_k | \text{Pos}) = \frac{n_k + 1}{n + |\text{vocabulary}|}$$

Good	product	but	bad	camera	P(Pos)
(3+1)/(14+10)	(1+1)/(14+10)	(0+1)/(14+10)	(0+1)/(14+10)	(0+1)/(14+10)	(3/7)
0.16	0.08	0.04	0.04	0.04	0.27

All multiplied 0.000000221184

$$p(w_k | \text{Neg}) = \frac{n_k + 1}{n + |\text{vocabulary}|}$$

Good	product	but	bad	camera	P(Neg)
(2+1)/(22+18)	(3+1)/(22+18)	(2+1)/(22+18)	(2+1)/(22+18)	(3+1)/(22+18)	(4/7)
0.075	0.1	0.075	0.075	0.1	0.36

0.0000015188

Answer	key	Good product but bad camera	Neg
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