Name := Mitul Dudhat.   ID :- 20237160214

cat.

Document.

Training

-
-
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+
+
.

Just plain boring
entirely predi and lacks energy.
no surprises and very few laughs
very powerful
the most fun. film of the summer.

Test   ?

Predictable with no fun.

Step ① B.find Prior

$$P(-) = 3/5, \quad P(+) = .2/5$$

Step 2

$$P(Predictable/+) = \frac{0+1}{9+20} \quad\quad P(Pre/-) = \frac{1+1}{14+20}$$

$$P(no/+) = \frac{0+1}{9+20}$$

$$P(no/-) = \frac{1+1}{14+20}$$

$$P(fun/+) = \frac{1+1}{9+20}$$

$$P(fun/-) = \frac{0+1}{14+20}$$

$$\left[\left\{ P(w_i/c) = \frac{count(w_i,c)+1}{[\sum_{w \in v} count(w,c)] + |V|} \right\} \right]$$

How many type word (wi) occurs.

↑ all unique word in a class

↑ unique word all

<u>Step 4</u> Scoring the test set

$$P(-) \cdot P(s/\rightarrow) = \frac{3}{5} \times \frac{2 \times 2 \times 1}{34^3} = \boxed{6.1 \times 10^{-5}}$$

$$P(+) \cdot P(s/+) = \frac{2}{5} \times \frac{1 \times 1 \times 2}{29^3} = 3.2 \times 10^{-5}$$

So, we have assingned <u>negative (-)</u>

⎰ we have not count the Pro. of with because In
⎱ our Training Data word of with not occurs ⎰