

Correction:- In 10:18  $P(w_1|y=1) = P(w_2|y=1) = \dots\dots\dots = P(w_n|y=1) \sim$  to  $1/2$  and  $\{ P(w_1|y=1) * P(w_2|y=1) \dots\dots\dots * P(w_n|y=1) \}$  will be equal to  $1/2 * 1/2 * \dots\dots\dots * 1/2$  in the both cases of positive and negative this value will be the same.

$$P(y=1|w_1, w_2, w_3, w_4 \dots w_d) = P(y=0|w_1, w_2, w_3, w_4 \dots w_d)$$