

$$TE = 1/8$$

performance of model =

$$\begin{aligned}
 \checkmark P &= \frac{1}{2} \times \log \left[ \frac{1-TE}{TE} \right] \\
 &= \frac{1}{2} \times \log \left[ \frac{1-\frac{1}{8}}{\frac{1}{8}} \right] \left[ \frac{\frac{7}{8}}{\frac{1}{8}} \right] \\
 &= \frac{1}{2} \times \log [7] \\
 &= \underline{\underline{0.9729}}
 \end{aligned}$$

New sample weight :-  $sw \times e^{\pm \text{performance}}$

$$\checkmark \underline{NSW_{correct}} = sw \times e^{-\text{performance}}$$

$$\checkmark \underline{NSW_{incorrect}} = sw \times e^{+\text{performance}}$$



