answer $\mathrm{p}(\mathrm{t}^i = 1 \mid x^i) = frac1\alpha * p(y = 1 \mid x)p(y = 1 \mid x) = p(y = 1 \mid x)p(x)p(t = 1 \mid y = 1, x) = p(y = 1 \mid t = 1, x) * p(t = 1, xp(y = 1, xp(y = 1, x) = p(y = 1 \mid t = 1, x) * p(t = 1, xp(t = 1 \mid y = 1, xp(y = 1, x) = \alpha p(t = 1, x)1p(x) * p(t = 1, x) = 1\alpha * p(y = 1, x) * 1p(x)p(t = 1 \mid x) = 1\alpha * p(y = 1 \mid x)$