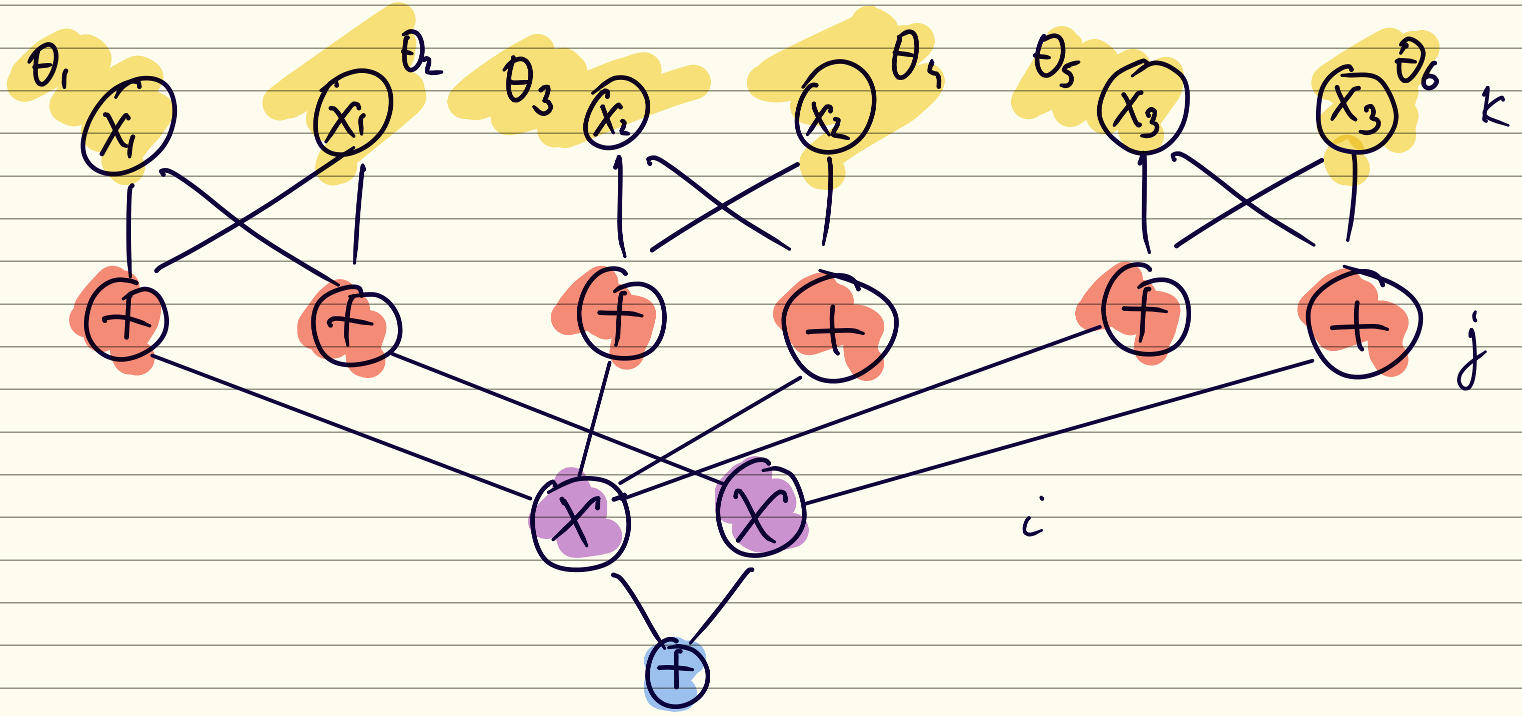

$$\log p(X_1, X_2, X_3 \mid w, \theta) =$$

$$\log \sum_{i=1}^{2} w_i \prod_{j=1}^{3} \sum_{k=1}^{2} w_{ik} \, p(X_j \mid \theta_{ijk})$$

(X_1, X_2) (X_3)
(X_1, X_3) (X_2)
(X_2, X_3) (X_1)

- How much speedup do we get?
- How much quality do we lose?

- What structures allow for speedup.