$$h_\theta(x) = \begin{bmatrix} P(y = 1|x; \theta) \\ ... \\ P(y = 10|x; \theta) \end{bmatrix} = \frac{1}{\sum_{j=1}^{K} \exp(\theta^{(j)T}x)} \begin{bmatrix} \exp(\theta^{(1)T}x) \\ ... \\ \exp(\theta^{(10)T}x) \end{bmatrix}$$