

input(hidden.dim)



vocab size.

- $W_2 = [100, 27] \rightarrow$ of p. 27 possible characters.

- $b_2 = [27] \rightarrow$ vocab size.

- $\text{logits} = h @ W_2 + b_2$

hidden layer $\leftarrow [32 \times 100]$

$\rightarrow [32 \times 27]$

- $\text{counts} = \text{logits} \cdot \exp()$

- $\text{Prob.} = \text{counts} / \text{counts} \cdot \text{sum}(1, \text{keepDims} = \text{True})$

- $\text{prob}[\text{torch.arange}(32), Y]$ - probability of each
of the 32 characters.

- Negative Log likelihood loss

loss = $-\text{prob}[\text{torch.arange}(32), Y] \cdot \log() \cdot \text{mean}()$

F. cross-entropy (logits, Y)