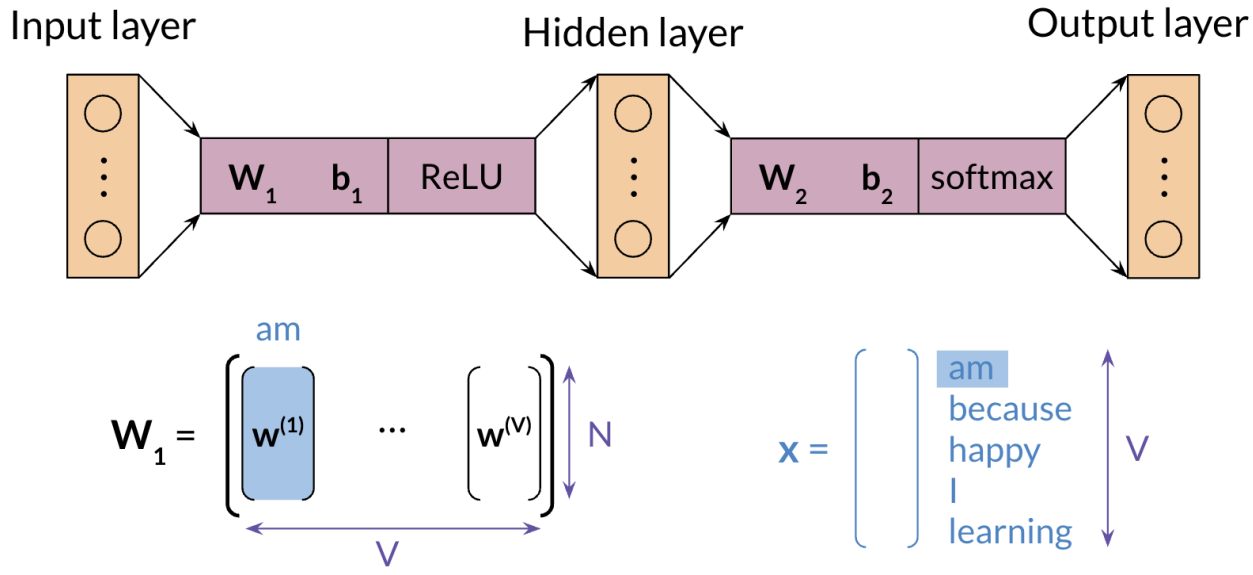
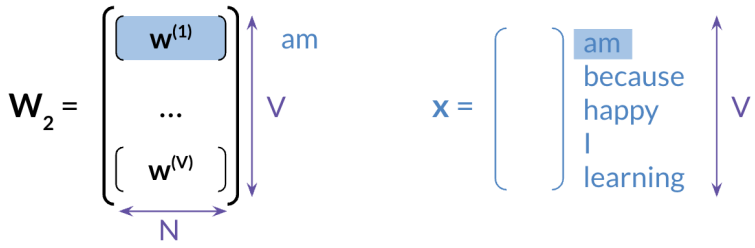
Extracting Word Embedding Vectors

There are two options to extract word embeddings after training the continuous bag of words model. You can use w_1 as follows:



If you were to use w_1, each column will correspond to the embeddings of a specific word. You can also use w_2 as follows:



The final option is to take an average of both matrices as follows:

$$\mathbf{W}_3 = 0.5\,(\mathbf{W}_1 + \mathbf{W}_2^T) = \begin{bmatrix} \mathbf{w}_3^{(1)} & \cdots & \mathbf{w}_3^{(V)} \end{bmatrix}$$