

This is an example

values \mathbf{v}_1 \mathbf{v}_2 \mathbf{v}_3 \mathbf{v}_4 $\mathbf{v}_i \in \mathbb{R}^{d_v}, \mathbf{V} = \begin{bmatrix} \mathbf{v}_1^T \\ \vdots \\ \mathbf{v}_4^T \end{bmatrix} \in \mathbb{R}^{N_v \times d_v}$

keys \mathbf{k}_1 \mathbf{k}_2 \mathbf{k}_3 \mathbf{k}_4 $\mathbf{k}_i \in \mathbb{R}^{d_k}, \mathbf{K} = \begin{bmatrix} \mathbf{k}_1^T \\ \vdots \\ \mathbf{k}_4^T \end{bmatrix} \in \mathbb{R}^{N_v \times d_k}$

queries \mathbf{q}_1 \mathbf{q}_2 \mathbf{q}_3 \mathbf{q}_4 $\mathbf{q}_i \in \mathbb{R}^{d_k}, \mathbf{Q} = \begin{bmatrix} \mathbf{q}_1^T \\ \vdots \\ \mathbf{q}_4^T \end{bmatrix} \in \mathbb{R}^{N_v \times d_k}$