

Task. Define  $\text{Exp}_m[U: \mathbb{U}_{\{\_ \_ \} \rightarrow \{i\_ \}}[\_ \_ ]]$  to compute  $e^{O(U)}$  to order  $\epsilon^{\text{Length}@U-1}$  using the  $m_{i,j \rightarrow i}$  multiplication, where  $U$  is an  $\epsilon$ -dependent sub-balanced near-docile element, giving the answer in  $\mathbb{E}$ -form.

Example:  $\text{Exp}_{\text{dm},1}[\mathbb{U}_{\{\} \rightarrow \{2\}}[b_2 a_2 + y_2 x_2, 0]]$  is the exponential of the arrow on strand 2, computed to degree 1.