

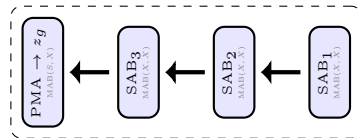
$$H = \text{LayerNorm}\left(X + \text{Multihead}(X, Y, Y)\right)$$

$$\text{MAB}(X, Y) = \text{LayerNorm}\left(H + \text{rFF}(H)\right)$$

$$\text{SAB}(X) = \text{MAB}(X, X), \quad \text{PMA}_k(X) = \text{MAB}(S, X)$$

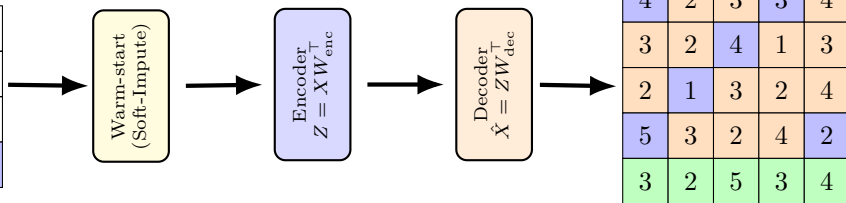
$$S \in R^{k \times d}: \text{learnable seed vectors}$$

Set Transformer



4			3	
		4		
	1			
5				2

Partially observed matrix



Completed + Group Recommendations