

$$\mathcal{S}_{jk}(A) := \sum_{\ell = p_1 + p_2 + \ldots + p_{k-1} + 1}^{p_1 + p_2 + \ldots + p_k} a_{p_1 + p_2 + \ldots + p_j, \ell}, \quad j, k = 1, \ldots, m.$$