

$$\begin{array}{c}
 \begin{array}{ccccccc}
 \text{1st block} & \text{2nd block} & & \text{a}_1\text{-th block} & & (a_1+\cdots+a_{n-1}+1)\text{-th block} & (a_1+\cdots+a_{n-1}+a_n)\text{-th block} \\
 \underbrace{(1, 2, \dots, k_{1,1}, \textcolor{brown}{1}', \textcolor{brown}{2}', k_{1,2}, \dots, \textcolor{blue}{1}', \textcolor{blue}{2}', \dots, k_{1,a_1}, \dots, \textcolor{green}{1}, \textcolor{green}{2}, \dots, k_{n,1}, \textcolor{violet}{1}', \textcolor{violet}{2}', \dots, k_{n,2}, \dots, \textcolor{cyan}{1}', \textcolor{cyan}{2}', \dots, k_{i,a_i})}_{\text{1st } n\text{-block}} & & & & & & \\
 & & & & & \underbrace{\hspace{10em}}_{(a_1+\cdots+a_{n-1}+2)\text{-th block}} & \\
 & & & & & \underbrace{\hspace{10em}}_{n\text{-th } n\text{-block}} &
 \end{array}
 \end{array}$$