

$$H = \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 1 & 1 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 1 & 1 \\ ab & ac & ba & bc & ca1 & ca2 & cb1 & cb2 \\ ac & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ ac & 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ bc & ca & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ ca & cb & 0 & 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 \\ \end{pmatrix}$$