$$d = 768$$

$$\mathbf{X} = \begin{cases} d_1 & 1 & 0 & 1 & 0 & 1 \\ d_2 & 0 & 1 & 1 & 0 & 0 \\ d_3 & 1 & 0 & 0 & 1 & 1 \\ d_4 & 0 & 1 & 1 & 1 & 0 \end{cases}$$

$$d = 768$$

$$A = \begin{cases}
d_1 & 1 & 0 & 1 & 0 & 1 \\
d_2 & 0 & 1 & 1 & 0 & 0 \\
d_3 & 1 & 0 & 0 & 1 & 1 \\
d_4 & 0 & 1 & 1 & 1 & 0
\end{cases}$$