$l_{21}l_{31} + l_{22}l_{32} = 1/4 = 1/4 \cdot 1/2 + 1 \cdot l_{32} = 1/4$, $l_{32} = 1/4 - 1/8 \Rightarrow \boxed{l_{32} = 1/8}$

$l_{31}^2 + l_{32}^2 + l_{33}^2 = 33/64 = l_{33}^2 + (1/2)^2 + (1/8)^2$, $l_{33}^2 = 33/64 - 1/4 - 1/64 = 1/4$

$\Rightarrow \boxed{l_{33} = 1/2}$

$$L = \begin{bmatrix} 2 & 0 & 0 \\ 1/4 & 1 & 0 \\ 1/2 & 1/8 & 1/2 \end{bmatrix}$$

Total FLOPS

For $k = 1:n$ ← n times → $\sum_1^n (n-k-1) + \sum_1^n (n-k-1) + \sum_1^n (n-k-1)$

$L(k,k) = \sqrt{A(k,k)}$ // None

$L(k+1:n, k) = \ldots$ //

$A(\ldots) = \ldots$ //

$$3\sum_1^n (n-k-1)$$

$$3\left[\sum_1^n n - \sum_1^n k - \sum_1^n 1\right]$$

$$= 3\left[n^2 - \frac{n(n+1)}{2} - n\right]$$

$$= 3\left[n^2 - \frac{n^2+n}{2} - n\right] =$$

$3n^2 - 3n$

$$3n^2 - \left(\frac{3(n^2+n)}{2}\right) - 3n$$

$$2\left[3n^2 - \left(\frac{3n^2+3n}{2}\right) - 3n\right]$$

$$= 6n^2 - 3n^2 + 3n - 6n$$