

When $N = 4$, the two type errors are close but the error of m-pre is large than the same error when $N = 100$.

As same as (a), $G = \begin{bmatrix} 5 & 0 & 0 & 0 \\ 5 & 5 & 0 & 0 \\ 5 & 5 & 5 & 0 \\ 5 & 5 & 5 & 5 \end{bmatrix}$

The standard deviation of noise is 5×10^{-5} s.

5 is larger than 5×10^{-5} compared to 0.2. (When $N = 100$). i.e., when $N = 4$, the impact of noise is smaller than the condition when $N = 100$.