2D Inverse Discrete Fourier Transform Tutorial Exercise

Calculate the inverse 2D DFT of the sequence $X(k_1, k_2)$, of dimensions $N_1 \times N_2$ for which holds:

$$X(k_1, k_2) = \begin{cases} 1, & 0 \le k_1 < M_1,\, 0 \le k_2 < M_2 \\ 0, & \text{otherwise} \end{cases}$$