

The matrix M

Recall that $M[i, j] = 1$ if and only if $j \in A_i$.

Example: let's suppose that the first four sets are $A_0 = \{0, 3, 5\}$,
 $A_1 = \{2, 3\}$, $A_2 = \emptyset$, $A_3 = \{x \in \mathbb{N} : x \geq 3\}$

What do the first four rows of the matrix M look like?