

Computational.

- For any $B \subseteq A$, encode B by a binary sequence

$$b_1 b_2 \dots b_n,$$

where

$$b_i = \begin{cases} 1, & a_i \in B, \\ 0, & a_i \notin B. \end{cases}$$

- For example,

$$\emptyset = 00 \dots 0, \quad \{a_2, a_5\} = 0100100 \dots 0, \quad A = 111 \dots 1.$$

- The map from subsets of A to binary sequences of length n is bijective.
- There are 2^n sequences of length n .

