

Power of Two

- Given an unsigned integer
- Check if it is a power of two
 - No loops, no recursion, no floating-point functions

Bitcount

- Given an unsigned integer
- Count the number of bits set
 - No loops, no recursion, no floating-point functions

A Single

- Given a long sequence of N integers
- Every value occurs twice, except for one, which occurs once
- Find the single value
 - $O(1)$ memory, $O(N)$ time

Two Singles

- Given a long sequence of N integers
- Every value occurs twice, except for two, which occur once each
- Find the two single values
 - $O(1)$ memory, $O(N)$ time

Three Singles

- Given a long sequence of N integers
- Every value occurs twice, except for three, which occur once each
- Find the three single values
 - $O(1)$ memory, $O(N)$ time