

UNCC ACM

Fibonacci (Easy)

Fibonacci (Hard)

Lab Assistant (Easy)

Lab Assistant (Hard)

Lab Assistant  
(Medium)Do The Pyramid Slide  
(Easy)Do The Pyramid Slide  
(Hard)Unique Remainders  
(Easy)Unique Remainders  
(Hard)

Wire Crossings (Easy)

Wire Crossings (Hard)

# Fibonacci (Easy)

## Generic Fibonacci Sums

**Easy** ★☆☆☆☆

In the standard Fibonacci Sequence, each term is the sum of the last two terms given two seed terms. It is also possible to define a similar sequence, but with three terms and three seeds. In general, an N-Fibonacci sequence requires N seeds.

The first line of input will be the number S of seed lists. The next S lines will each contain a space-separated list of N seeds. These N seeds are the seed values for that N-Fibonacci sequence.

The output file should contain S lines, each with the sum of the first T terms of the corresponding sequence, mod  $2^{30}$ .

For example, we have provided `fibonacci_sample.in` and `fibonacci_sample.out`, for the sum of the first 7 terms. The values in `fibonacci_sample.out` correspond to sums of these sequences, mod  $2^{30}$ :

- **0, 1**, 1, 2, 3, 5, 8
- **3, 2, 5, 4**, 14, 25, 48

**Find the sum of the first 20 terms for the sequences in `fibonacci_easy.in`.**

Challenge Input

Contestant Name

Submission

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