1. The game of Kayles. Kayles is an old English name for skittles or (bowling) pins. Two players are confronted with a row of pins. Their skill is such that they can knock down any one pin or any two adjacent ones. As usual the player who knocks down the last pin is the winner. Denoting pins by \$, a game might go as follows: \$\$\$\$\$\$ → \$\$_\$\$\$ → \$__\$\$\$ → ___\$\$\$ → ___\$_\$ → _____\$ so that the second player wins this game. Who should win the game which starts \$\$_\$\$\$\$\$\$?

2. Find the sequence $G(K(n)), n = 1, \ldots 40$ of Grundy values of strings of n pins in Kayles. In other words complete the table you say Andrew Gleason start in *Nim and Other Oriented Graph Games*.

n	0	1	2	3	4	5	6	...	40
$G(K(n))$	0	1	2	3	1	4	3	...	