

DP algorithm for a two-person game

Suppose we have a two-person game, as follows.

- ▶ There are two piles of rocks.
- ▶ Each player picks a pile and then takes 1 or 2 two rocks off that pile.
- ▶ The person who takes the last rock off wins.

Use DP to determine which player has a winning strategy when the starting condition has x rocks on pile 1 and y rocks on pile 2.