The Treasure Hunt Game

Two players, Alice and Bob, discover a line of treasure chests, each containing some amount of gold coins.
The chests are arranged in a straight line, and each chest has a number written on it - the number of coins inside.

They decide to play a game:

- The players take turns.
- On each turn, a player can take one chest, either from the leftmost or rightmost end.
- The game ends when only two chests remain.
- The final reward (utility) is the sum of coins in the last two remaining chests.
- Alice always plays first, and both play optimally. Alice tries to maximize the final reward, while Bob tries to minimize it.

Your task is to determine the maximum final reward Alice can guarantee, no matter how Bob plays.

Input	Output
4 no of box 3 1 7 4 line of treasure chests	Alice can gain a maximum of 8 gold coins.
5 2 9 1 5 6	Alice can gain a maximum of 10 gold coins.
6 1 2 3 4 5 6	Alice can gain a maximum of 7 gold coins.

1. **Solve this task using the Minimax Algorithm.**