

CSE 2320 Lab Assignment 0

Goals:

Problem solving experience.

Finding some smart friends.

Requirements:

Develop a C or Java program to play the two-person game described below. Input will be two positive integers, neither larger than 10. The output will be one of four options:

Take from first pile

Take from second pile

Take from both piles

Doesn't matter . . . opponent should win

Getting Started:

1. In this simple game, there are two piles of stones. After agreeing on who-goes-first, each player in alternating turns may choose one of the following options:

Take a stone from one of the piles.

Take two stones, one from each of the two piles.

The loser is the player left with two empty piles and no option for taking stones.

(Game-theoretic disclaimer: To have “perfect information”, the number of stones in each pile is known . . .)

2. Some things to consider in working towards your program:
 - a. Solving small instances can lead to great insight. (Pei Wei fortune #123)
 - b. Recursion is a powerful programming tool. (Panda Express fortune #456)
 - c. A simple table of solved instances will allow you to hustle lunch money. (Jerry Jones?)