

Kerry Ojakian's CSI 33 Class

Class Assignment #2

Choose one person in the group, and put the group's final work in a folder Class02. Someone in the group should send an email to me (at ojakianteaching@gmail.com) indicating two things: 1) The first and last names of each group member, and 2) Whose CoLab to look in.

The Assignment

First, create a class called "Nim" which models the game of Nim (as discussed in class). Use the Die class and the BagOfDice class as a model for programming this.

1. Create a class called NimPile which models the simple functioning of one Nim pile. Make sure it only allows operations that are legal on a Nim pile.
2. Create a class Nim which models some number of Nim piles. So this class should include a number of NimPile objects (like the BagOfDice included a number of Dice objects). It should control general operations on Nim, but involve no user interface.
3. Create a NimGame class which allows two players to play Nim against one another. This class simply acts as a referee making sure the moves are legal, and ending the game with a declared winner when it is over. This is like in class when we used BagOfDice to create a simplified version of the dice game Craps.