Project

Part 1.

Using the Die class defined in class, write a class called PairOfDice, composed of two Die objects. Include methods to set and get the individual die values, a method to roll the dice, and a method that returns the current sum of the two die values. Create a driver class called RollingDice2 to instantiate and use a PairOfDice object.

Part 2

Using the PairOfDice class you wrote, design and implement a class to play a game called **Pig**. In this game, the user competes against the computer. On each turn, the current player rolls a pair of dice and accumulates points. The goal is to reach 100 points before your opponent does. If, on any turn, the player rolls a 1, all points accumulated for that round are forfeited and control of the dice moves to the other player. If the player rolls two 1s in one turn, the player loses all the points accumulated thus far in the game and loses control of the dice. The player may voluntarily turn over the dice after each roll. Therefore, the player must decide to either roll again (**be a pig**) and risk losing points, or relinquish control of the dice, possibly allowing the other player to win. Implement the computer player such that it always relinquishes the dice after accumulating 20 or more points in any given round.