**Methods**

* **Def pileSize ():** This method generates a random number between 10 and 100, this number determines the size of the pile.
* **Def firstPlayer ():** This method generates a random integer between 0 and 1 to decide whether the computer or the user takes the first turn.
* **Def difficulty ():** This method generates a random integer between 0 and 1 to whether the computer plays smart or stupid. 1 is for the smart mode and 0 is for the dumb mode.
* **Def computer\_take (pileSize):** This method determines the number of cards taken by the computer depending on the level of difficulty generated by the difficulty function. If the game is in smart mode and the pile size is greater than 63 and less than or equal to 100 it will take away at most 63. If the pile size is between 31 and 62 the computer can take 31 at most. If the pile size is between 14 and 7 the computer can take 7 at most. If the pile size is between 7 and 3 you can take 3 at most. If the pile size is between 1 and 2, computer can take only 1 from the pile and the it will be the last else statement where the computer will determine randomly since there will be only one card left, and the program will decide the winner. If the game is played in dumb mode, the computer takes a random number between 1 and the pile size divided by 2. It follows the same strategy throughout the code.