TEALS Workshop
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Materials for today are available from http://homes.cs.washington.edu/~reges/teals/

Some materials require an id/password combination. Please don't give this to anyone other than a fellow instructor:

> ID: <ask Stuart>
> Password: <ask Stuart>

Questions to reges@uw.edu

Criteria for 2013 AP Free Response Question #2
> part A: 4 points
>> 1 Creates instance variable board as int array of size playerCount
>> 1 Computes a random number between 1 and 10, inclusive, and a random number between 0 and playerCount-1 inclusive
>> 1 Initializes all entries in board with computed random value (no bounds error)
>> 1 Initializes instance variable currentPlayer to computed random value
>
> part B: 5 points
>> 1 Uses initial value of board[currentPlayer] to control distribution of tokens
>> 1 Increases at least one board entry in the context of a loop
>> 1 Starts distribution of tokens at correct board entry
>> 1 Distributes next token (if any remain) at position 0 after distributing to highest position in board
>> 1 On exit: token count at each position in board is correct

Canonical Solution:
```
public TokenPass(int playerCount) {
    board = new int[playerCount];
    for (int i = 0; i < playerCount; i++) {
        board[i] = 1 + (int) (10 * Math.random());
    }
    currentPlayer = (int) (playerCount * Math.random());

}

public void distributeCurrentPlayerTokens() {
    int nextPlayer = currentPlayer;
    int numToDistribute = board[currentPlayer];
    board[currentPlayer] = 0;
    while (numToDistribute > 0) {
        nextPlayer = (nextPlayer + 1) % board.length;
        board[nextPlayer]++;
        numToDistribute--;
    }
}
```