Class Craps

java.lang.Object
    Craps

```
public class Craps
extends java.lang.Object
```

Constructor Summary

Constructors	
Constructor	**Description**
Craps()	

Method Summary

All Methods	**Static Methods**	**Concrete Methods**

Modifier and Type	Method	Description
static int	**comeOut**(boolean verbose)	Phase I of the game of craps: The "come out." Roll until the "point" is established.
static double	**computeOdds**(int numGames)	Compute the odds: how likely it is to win the game of craps.
static void	**main** (java.lang.String[] args)	Test the game of craps.
static boolean	**playToReplay** (boolean verbose)	Play a game of craps: the "come out" (phase I) and the "point" (phase II).
static boolean	**playToWin** (boolean verbose)	Play a game of craps: the "come out" (phase I) and the "point" (phase II).
static boolean	**point**(int target, boolean verbose)	Phase II of the game of craps: "The point." Roll until the "point" is repeated, or the user craps out.
static int	**roll2**(boolean verbose)	Roll a pair of 6-sided dice.
static void	**test**()	Test the game of craps by replaying until the player sevens out.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructor Detail

Method Detail

roll2

```
public static int roll2(boolean verbose)
```

Roll a pair of 6-sided dice.

Parameters:

verbose - (boolean) true if the throw should be printed to the terminal

Returns:

sum (int) the sum of 2 rolled dice.

comeOut

```
public static int comeOut(boolean verbose)
```

Phase I of the game of craps: The "come out." Roll until the "point" is established.

Parameters:

verbose - (boolean) true if the result of the come out should be printed.

Returns:

point (int) the value of the die that must be rolled again before a 7.

point

```
public static boolean point(int target, boolean verbose)
```

Phase II of the game of craps: "The point." Roll until the "point" is repeated, or the user craps out.

Parameters:

target - (int) the dice total established during the comeout.

verbose - (boolean) true if the play-by-play should be printed.

Returns:

win (boolean) true if the player wins the game ("passes"), false if they seven out.

playToReplay

```
public static boolean playToReplay(boolean verbose)
```

Play a game of craps: the "come out" (phase I) and the "point" (phase II).

Returns:

replay (boolean) true if the player is allowed to play again, false if they must give up the dice.

Play a game of craps: the "come out" (phase I) and the "point" (phase II).

Returns:

win (boolean) true if the player won, false if they lost.

test

```
public static void test()
```

Test the game of craps by replaying until the player sevens out.

computeOdds

```
public static double computeOdds(int numGames)
```

Compute the odds: how likely it is to win the game of craps.

Parameters:

numGames - (int) the number of craps games over which the odds will be calculated

Returns:

odds (double) the percent of games won: naturals + passes out of all numGames games

main

```
public static void main(java.lang.String[] args)
```

Test the game of craps.

Parameters:

args - (String[]) commandline parameters