

Points Class constructor method

Gets called from theYatzy class and initiates a new PointsObject
SET bonus to 0

SET all point items in pointsArray to -1

Method getPointsArray

Gets called from the Yatzy class
RETURN pointsArray

Method calcTotalPoints

Gets called from the Yatzy class
SET total to 0

FOR every point in pointsArray
IF point is higher than -1
ADD point to total

ADD value of bonus to total

RETURN total

Method calcBonusPoints

Gets called from the Yatzy class
SET firstSix to 0
FOR counter i from 0 to 5
ADD point from pointsArray[i] to total sum in firstSix
INCREASE counter i by 1 and continue loop

IF firstSix > 62
SET bonus to 50
ELSE
SET bonus to 0

RETURN bonus

Method getRoundPoints takes diceArray and chosenRound as parameters

Gets called from the Yatzy class
SORT diceArray by decreasing value, highest first
SET pointsThisRound to 0

IF chosenRound equals 1,2,3,4,5 or 6
CALL calc16 method on diceArray and chosenRound
SET pointsThisRound to result of call
SET pointsArray[chosenRound] to pointsThisRound
RETURN pointsThisRound

IF chosenRound equals "one_pair"
CALL calcOnePair method on diceArray
SET pointsThisRound to result of call

ELSE IF chosenRound equals "two_pairs"
CALL calcTwoPairs method on diceArray
SET pointsThisRound to result of call

ELSE IF chosenRound equals "three"
CALL calcThree method on diceArray
SET pointsThisRound to result of call

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ELSE IF chosenRound equals "four"
    CALL calcFour method on diceArray
    SET pointsThisRound to result of call

ELSE IF chosenRound equals "small_straight"
    CALL calcSmallStraight method on diceArray
    SET pointsThisRound to result of call

ELSE IF chosenRound equals "large_straight"
    CALL calcLargeStraight method on diceArray
    SET pointsThisRound to result of call

ELSE IF chosenRound equals "full_house"
    CALL calcFullHouse method on diceArray
    SET pointsThisRound to result of call

ELSE IF chosenRound equals "chance"
    CALL calcChance method on diceArray
    SET pointsThisRound to result of call

ELSE
    CALL calcYatzy method on diceArray
    SET pointsThisRound to result of call

SET pointsArray[chosenRound] to pointsThisRound

RETURN pointsThisRound

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Method calcLargeStraight takes diceArray as parameter.

Gets called from getRoundPoints method.

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SET correctValue to 6

FOR counter i from 0 to 4
    IF diceArray[i] does not equal correctValue
        BREAK loop and RETURN 0
    ELSE
        DECREASE correctValue by 1 and continue loop

RETURN 20

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Method calcFour takes diceArray as parameter.

Gets called from getRoundPoints method.

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CALL built-in function on diceArray to return an array where values in
diceArrays are keys, and their frequencies are values

SET freq to result of above call

SORT freq based on highest frequency using built-in function

SET highestFreq to highest frequency value of freq

IF highestFreq is equal to or higher than 4
    RETURN key of freq * 4
ELSE
    RETURN 0

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