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Class GameHelper

DECLARE an array to hold digit of dices. Call it dices.

DECLARE a getUserInput() method that print prompt , get and returns user input.

DECLARE a CreateDice() method that creates random dice digits and returns int array(which has three dice digits as ints) .

DECLARE a LeaveOrNot() method that checks leave the game or play again.

METHOD: String getUserInput(String prompt)

GET the prompt as a String parameter and **PRINT** prompt

GET the user input command

RETURN user input command

END METHOD

METHOD: int[] CreateDice()

REPEAT with an length of int array

 //**COMPARE** created amount of dice to array length

IF amount is not equal to array length

SET array[i] to random number(which is between 1 to 6)

PRINT digit in array[i]

INCREMENT the number of i

ELSE amount is equal to array length

RETURN array

END IF

END REPEAT

END METHOD

METHOD: boolean LeaveOrNot()

 // **COMPARE** "y" or "n" to user command

IF user command is "y", **RETURN** false

ELSE IF user command is "n", **RETURN** true

ELSE user command is not "y" or "n"

PRINT "error command", **RETURN** LeaveOrNot()

END IF

END METHOD

Class SimplediceCom

DECLARE a int to hold the number of same dice digit. Call it same and **SET** it to 0.

DECLARE a Boolean to check dice digits in int array is straight or not. Call it IsStraight and **SET** it to true.

DECLARE a checkYourself() method that checks three random number and returns a result representing a “three of a kind”, “pair”, “straight” or sum of dice digits.

DECLARE a setDiceCells() setter method that takes an int array(which has three dice digits as ints).

DECLARE a Sort() method that arrange three dice digits in the order of size.

METHOD: String checkYourself()

```
REPEAT with each of the dice digits in the int array
    // COMPARE dice digits one by one to each other
    IF dice digit is same with next dice digit in int array
        INCREMENT the number of same
    END IF
    // COMPARE dice digits one by one to each other
    IF the difference between a dice digit and next dice digit is one
        SET IsStraight to false
    END IF
END REPEAT
```

```
//FIND OUT what type is three of dice digits in int array
IF number of same is 2 and IsStraight is false, RETURN "three of a kind"
ELSE IF number of same is 0 and IsStraight is true, RETURN " straight "
ELSE IF number of same is 1 and IsStraight is false, RETURN " pair "
ELSE there is no type match
    RETURN sum of dice digits in int array
END IF
```

END METHOD

METHOD: void setDiceCells(int[] dices)
 GET the dice digits as an int array parameter
 ASSIGN the dice digits parameter to the dice digits instance variable
END METHOD

METHOD: void Sort()
 REPEAT with each of the dice digits in the int array
 //**COMPARE** dice digits one by one to each other
 IF dice digit is bigger than next dice digit in int array
 SWITH two of them
 END IF
 END REPEAT
END METHOD

Class Game

DECLARE an array to hold digit of dices. Call it dices.
DECLARE a SimplediceCom to use the method in class SimplediceCom. Call it theDiceCom.
DECLARE a GameHelper to use the method in class GameHelper. Call it helper.
DECLARE a Boolean to check play again or not. Call it leave and **SET** it to false.

DECLARE a main() method that start to play the game.

METHOD: void main(String[] args)
 SET dice digits to random number
 PRINT string that checkYourself() return as a result
 SET leave to LeaveOrNot() return as a result
 //**COMPARE** leave to user command
 IF leave is false
 main()
 END IF
END METHOD