

Dice programming assignment

General information

You are to make a dice roll simulator. The program is given number of dice, number of sides each die has and the number of rolls. You should simulate the rolls, saving the results of each throw, so that you can analyze the data to show some statistics after the run.

Specification

Technical details

You should create the following functions:

roll

Parameters:

- number of dice (int)
- how many sides each die has (int)

Return:

- the total points for this roll (int)

test

Parameters:

- number of dice (int)
- how many sides each die has (int)
- how many times make rolls (int)

Return:

- results of all rolls (list)

get_stats

Parameters:

- results of all rolls (list)

Return:

- statistics dictionary (dict), structured like:

```

{
  'count':{
    1 : 150, # key - the result of the roll
    2 : 156, # value - the count of rolls
    3 : 149 #           with this result
  },
  'sequence':{
    1 : 6,   # key - the result of the roll
    2 : 10,  # value - the longest streak of this result
    3 : 4    #           you can find in a row
  },
  'average': 2 # value - average points per one roll
}

```