

07.3 - Roll Analysis

If you roll a pair of six-sided dice (2d6), the total of the roll can be anywhere between 2 and 12 (inclusive). To simulate the roll of a single die, write a function named `roll_d6` that takes no arguments, and returns a random integer between 1 and 6 (inclusive). Then write another function named `get_2d6_rolls` that uses your `roll_d6` function to simulate rolling two six sided dice multiple times. This function should take the number of times to roll 2d6 as its argument, and return a list of the results for each roll (each number in the list should be between 2 and 12).

Then, in your main function, call your `get_2d6_rolls` function to simulate 1,000,000 rolls of a pair of dice. (Hint: you can use a number less than 1,000,000 while debugging to save time.) Use the list returned from this function call to calculate and print the percentage of rolls that have each value between 2 and 12.

Finally, format your program to match the sample below. Your output percentages will be close to but may not exactly match the sample output because each roll is determined at random. However you should match the precision, white space and punctuation. In the sample, user input has been highlighted in **Pappy's Purple** to distinguish it from the program's output, but your user input does not need to be colored. Save your completed program as `roll_analysis_login.py`, where `login` is your Purdue login. Then submit it along with a screenshot showing a test run of your program.

Terminal

```
$ python roll_analysis_login.py
Roll  Frequency
  2      2.76%
  3      5.53%
  4      8.34%
  5     11.12%
  6     14.00%
  7     16.60%
  8     13.88%
  9     11.14%
 10      8.36%
 11      5.50%
 12      2.76%
```