Homework 4
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Code located in the /hw-4 folder at:
https://github.com/mrbluesky2/se-2.git

1. For the cube_volume code, I created two volumes of side length 3 and -1 to compare to the function. In math, I presume we are allowed to have negative volumes, but for the purpose of this assignment I assumed negative volumes would be clamped to 0. The third test I made for the cube volume function was a TypeError raise. A string should not be valid input into the function, and it indeed raises a TypeError exception.

2. For the average_list code, I had a few more tests. I made three chronological lists of different ranges (odd length so as the user can determine the average), one from 1 to 5, another from -1 to 1, and a third from -3 to -7. A fourth test tests for an empty list. The function should return an average of 0. The last test I made for the average list function was a TypeError raise. A string should not be valid input into the function, and it indeed raises a TypeError exception.

3. For the make_name code, I could not think of many tests. I offer two pairs of first and last names to see if the function returns the correct full name for each. If both first and last names are empty, the function should return an empty string. The last test I made for the make name function was a TypeError raise. A string should not be valid input into the function, and it indeed raises a TypeError exception.

4. Within the social-media app, testing the post component would be quite complex. The post component consists of the media, number of likes, a caption, and comment objects, each with a number of likes, the text of a comment, the user who posted the comment, and replies. One unit test would verify that posting a draft post would update the user's profile and be accessible. Does it show up on the feed object of everyone following the user? Another unit test could test the like button. Does the post update the number of likes it has? Do the correct number of likes display in all the locations the post shows up? Does un-liking a post produce the expected behavior? The third unit test for the post object could be loading the comments on a post. Does adding a comment increase the number of comments attached to the post? What about liking the comment? Replying to that comment? Deleting the reply? Deleting the comment?