

This is a review assignment to prepare you for the final exam. Please name it "day45_review" and turn in a share link on the Google Classroom when you are done.

In the final exam I will have you write a program on the computer. Doing all of the things in this review assignment will help you do well on the final.

Today's task has 4 parts:

Part 1:

Print your name, then a blank line, then "Part 1:", then write a program that asks the user for a positive integer greater than 5 using a try/except structure. Print two different error messages, one if they don't enter an integer and a different one if they enter an integer less than your age. Once the user enters a number larger than 5, print a series of stars, going from 1 star up to the number of stars the user entered, where you print the current number, then print that number of stars on the same row.

Here is a sample output:

Mr. Hays

Part 1:

```
Please enter a number larger than 5: howdy
It has to be an integer. Please try again.
Please enter a number larger than 5: 5
It needs to be larger than 5. Please try again.
Please enter a number larger than 5: 16
```

```
1 *
2 **
3 ***
4 ****
5 *****
6 *****
7 *****
8 *****
9 *****
10 *****
11 *****
12 *****
13 *****
14 *****
15 *****
16 *****
```

Part 2:

Print a blank line, then print "Part 2:", then add to your program as follows:

Create a list variable named "myList" that has the following contents: [3, 14, 6, 7, 12]

Print the list as given, print it sorted, print out the maximum value, the minimum value, the average, and the sum of the even numbers in the list.

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Do this programmatically, that is, don't add a print line that says "print(3)" to print the minimum value. Write code to do these things that don't depend upon the exact numbers in this exact list. In other words, write code that will do this no matter what values are actually in the list.

Make it all print out nice like this:

Part 2:

```
The list:    [3, 14, 6, 7, 12]
Sorted:     [3, 6, 7, 12, 14]
Max value:  14
Min value:  3
Average:    8.4
```

Tips: To find the average of a list, you can use the `sum(myList)` call to get the sum, then divide that number by `len(myList)` which is the number of items in the list. To find the maximum value of a list, use the `max(myList)` call. The minimum value can be found using `min(myList)`. Remember to sort a list you use the `.sort()` method. To find the average of all of the numbers you can divide the sum of them all `sum(myList)` by the length of the list `len(myList)`.

Part 3:

Print a blank line, then "Part 3:" then create a new, empty list. Using code, fill the list with 20 random integers from 5 to 15 (use `random.randint(5,15)` and the list append call to do this. You have to put "import random" up near the top of your program to make the random call work.) Print the list.

Part 4:

Print a blank line, then print "Part 4:". Then, print the numbers 6 through 30 in 5 columns with tabs between the numbers. See sample output here:

```
6      7      8      9      10
11     12     13     14     15
16     17     18     19     20
21     22     23     24     25
26     27     28     29     30
```

If you get stuck, watch the video where I show you how to do everything. This is on the Google Classroom attached to this review assignment, plus here is a link: <https://youtu.be/ERMwqkn3yzI>