Upward Bound
Programming Foundations in Python Project 3

THIS PROJECT IS INTENDED TO TEST YOUR KNOWLEDGE OF CREATING LISTS, USING CONDITIONAL STATEMENTS IN LOOPS, AND LIST ITERATION

Instructions on the next few pages

Programming Foundations in Python
Project 3

Write a program that makes a request to the user of your program to enter an integer greater than 5.

If the user enters an integer that is NOT greater than 5, the program should display an error message and re-prompt the user to enter a value greater than 5, until the requirement (or condition) to enter a value greater than 5 is fulfilled.

Store the integer the user entered as input in a variable called 'max_list'.

Next, ask the user to enter a series of integer values for a list. The number of times it should ask the users for an integer should equal 'max_list'; so if the user initially enters a value of 6 for 'max_list', it should ask the user 6 times to enter integers for a list.

Create a Python list and insert each integer the user inputs into the list.

Iterate over the content of the list from the first item in the list to the last item and:
   For each odd index in the list, double the value it addresses
   For each even index in the list, square the value it addresses.

Instructions continued on the next page….

Project 3 continued

For example,

While iterating:

- At index: my_list[3], if the value '5' is stored there, it should display (using the print statement), double that value, which is '10' in this case.

- At index: my_list[4], if the value '7' is stored there, it should display (using the print statement), the square of the value, which is '49' in this case.

- Note: You can iterate over the odd indices first, followed by the even indices separately.

- You will get extra credit, if you can do the 'double' and 'square' operations in a singular iteration of the list, while displaying its contents.

- When testing your code with sample data, use a reasonable (integer) number for max_list: for example, the value 7 or 8, preferably an integer between 6 and 10, that way, you won't have a lot of values to input into your list.

Instructions continued on the next page….

Project 3 continued

Submission Instructions:

- Write the code on repl.it, you can create an account for free to store your assignments and practice exercises, then send me the repository URL for this project.
- If you don't have an account on repl.it, then go to: repl.it/languages/python3, it will auto-generate a URL for your project.
- Send me the URL for your project once you're done writing the code and testing it.
- The subject of your email should be: Upward_Bound_Project_3_FirstName_LastName where 'FirstName' is your first name and 'LastName' is your last name:
- For example, if there was a student whose name is John West who is submitting this project, the title of his email should look like this:

    Upward_Bound_Project_3_John_West

- Deadline is: Monday, July 16th at 11:59pm
- If you do not have access to a computer over the weekend, then write your code on paper.
- I would recommend you start as early as possible.
- A soft deadline is Sunday night, but I extended it to Monday, in case you run into any issues that you can not resolve on your own, we can talk about it on Monday in class.
- Advice: Please read the slides I uploaded on the github repo I posted for this course, it contains a lot of code that will help you easily do this project.
- Try to have something done by Sunday night!
- Make sure to follow the above stated instructions, failure to do so will result in penalties in your score for this project.