

PRACTICE 1

Complete the body of the function following the instructions in the provided docString.

- No list functions may be used except for len() and range().
- Your solution must contain a for-loop
- Your solution must be well-indented and include the main script after the function to demonstrate the call expressions.
- You do not have to include the docString in your response, but you should include the function header (the def-statement) so that your code actually runs.

```
def loop_function (names:list, length:int) -> list:
    """ Returns a list of booleans that indicate whether
        each individual name exceeds the given length.

        No list functions may be used except for len() and range().
        Assume that the list of names contains at least one name.

    """
    >>> loop_function(["Jo","Sue","Pierre"], 3)
    [False, False, True]

    >>> loop_function(["Jo","Sue","Pierre"], 2)
    [False, True, True]

    """
```

PRACTICE 2

A company has developed a product line of pig foods with different growth rates. The growth rate is the percentage rate at which a pig's weight will increase each week. For example, one food could give a 5.5% increase each week, while another could give 2.8%.

Using the Function Design Recipe taught in class, write a function that will allow consumers to find out how many weeks it will take for the total weight of two pigs to grow by a given percentage.

Note that the pigs could have different growth rates due to eating different food. For example, if the percentage was 33.3%, we would want to know how many weeks it takes for the two pigs' total weight to become 33.3% more than now.

The number of weeks should be rounded up. In addition to the number of weeks, the consumer also wants to know the total weight at the end of that number of weeks (as it will likely exceed the desired percentage increase). You must decide on the number of parameters and their order. You may return the two values as a list.

- Your code must work for all values, not just the examples given above.
- Your solution must use a while-loop.
- It may not use any Python list functions except for len() and range().
- The function must not use input() or print().
- Assume that all parameter values are valid. No error checking is required. (For example, assume all percentages are between 0.0 to 100.0)
- Include the main script showing the call expressions.