CSC120H Fall 2018 Worksheet: For Loops Over Lists
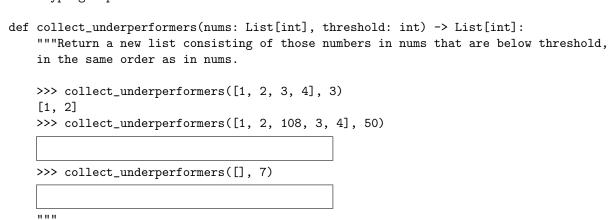
For each function, complete the examples in the docstring and then complete the function body.

1.
```
from typing import List

def collect_underperformers(nums: List[int], threshold: int) -> List[int]:
    """Return a new list consisting of those numbers in nums that are below threshold,
    in the same order as in nums.

    >>> collect_underperformers([1, 2, 3, 4], 3)
    [1, 2]
    >>> collect_underperformers([1, 2, 108, 3, 4], 50)
```
   ┌───┐
   │   │
   └───┘
```
    >>> collect_underperformers([], 7)
```
   ┌───┐
   │   │
   └───┘
```
    """
```

2.
```
def scale_midterm_grades(grades: List[int], multiplier: int, bonus: int) -> None:
    """Modify each grade in grades by multiplying it by multiplier and then
    adding bonus. Cap grades at 100.

    >>> grades = [45, 50, 55, 95]
    >>> scale_midterm_grades(grades, 1, 10)
    >>> grades
```
   ┌───┐
   │   │
   └───┘
```
    """
```