

## CSCA08H Winter 2022 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_below_threshold(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_below_threshold([1, 2, 3, 4], 3)
```

[1, 2]

```
>>> collect_below_threshold([1, 2, 108, 3, 4], 50)  
[1, 2]
```

```
>>> collect_below_threshold([], 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
```

"""