

Problem Wk.5.3.5: The mean of a list of numbers

The *mean* (or average) of a list of n numbers is the sum of the numbers divided by n . For example, the mean of 2, 7, 3, 9, and 13 is $(2+7+3+9+13)/5$, or 6.8. Write a procedure `mean` that takes as input a list of numbers (of any length) and returns the mean. It should have type `list(num) -> float`.

One thing to watch out for is an empty list as input. It's not clear that any numeric answer makes sense here. You should just return `None`

You can implement this as an extremely short procedure if you use the Python built-in procedures `sum`, which returns the sum of the elements of a list, and `len`, which returns the length of a list.

If your procedure says that the mean of 1 and 2 is 1, rather than 1.5, then you've been tricked by Python's division (`/`) operation. Be careful.

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6.01SC Introduction to Electrical Engineering and Computer Science
Spring 2011

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