Armstrong's Number?

In this exercise, you will use concepts and skills learnt to determine the count of Armstrong's numbers in a given list.

The Armstrong number is a number whose sum of each digit powered with the total number of digits is the same as the given number. i.e. for a given number say 153, $1^3+5^3+3^3$ is equal to 153. Take another example, $1634 = 1^4+6^4+3^4+4^4$ is an armstrong number.

Task 1

Write a step by step approach on how you are going to solve this problem in Python. Ensure your steps are detailed and are not less than 8.

Task 2

Write a python function, count_armstrong_numbers, that takes a list as a parameter and returns the count of armstrong numbers present in the list. Your function should support only lists. So, ensure you sanitize your input appropriately such that your function fails gracefully if anything other than a list is passed as argument.

Test

After writing your function, test your function with the following input

Input	**Expected return value**
[]	0
[123, 1153, 153]	1
[153, 834, 1634, 92331, 111, 0]	2
[0, 1]	0
[153]	1

153	Print ‘List expected, but found Integer’
hello	Print ‘List expected, but found String

Submit

- Step by step approach to solving the problem
- A function that solves the problem