Lists Challenge 7: Different Types of Lists Program

Description:
You are responsible for writing a program that will highlight the similarities and differences between four different types of lists: a list of strings, a list of integers, a list of floats, and a list of lists. For each list, your program will describe the data type of the list, the elements of the list, and the data type of the first element in the list. Your program will then highlight the similarities and differences between sorting a list numerically and alphabetically.

Step By Step Guide:

- Define a list using a variable num_strings and "hard code" the following four numerical strings: "15", "100", "55", "42".
- Define a list using a variable num_ints and hard code the following four numerical integers: 15, 100, 55, 42.
- Define a list using a variable num_floats and hard code any four floats you want.
- Define a list using a variable num_lists. This is going to be a lists of lists or a nested list! Use the following syntax: num_lists = [[1,2,3], [4,5,6], [7,8,9]]

- Print a summary of each variable (or list). The summary should contain:
    - A statement about the variable's type.
    - A statement about the elements of the variable.
    - A statement about the first element and its type.
    - Use formatting below.

- Permanently sort num_strings and num_ints.
- Print each list.
- Print a statement about what you discover when sorting these two lists.

- Use at least 2 comments to describe sections of your code.
- “Chunk” your code so that is readable.
- Use appropriate and informative variable names.
- Format your output as below.

Example Output:

Summary Table

The variable num_strings is a <class 'list'>.
It contains the elements: ['15', '100', '55', '42']
The element 15 is a <class 'str'>.

The variable num_ints is a <class 'list'>.
It contains the elements: [15, 100, 55, 42]
The element 15 is a <class 'int'>.

The variable num_floats is a <class 'list'>.
It contains the elements: [2.2, 5.0, 1.245, 0.142857]
The element 2.2 is a <class 'float'>.

The variable num_lists is a <class 'list'>.
It contains the elements: [[1, 2, 3], [4, 5, 6], [7, 8, 9]]
The element [1, 2, 3] is a <class 'list'>.

Now sorting num_strings and num_ints...
Sorted num_strings: ['100', '15', '42', '55']
Sorted num_ints: [15, 42, 55, 100]

Strings are sorted alphabetically while integers are sorted numerically!