NAME:

Consider any list of objects. Do not assume all objects in the list are numbers (but
they could be) or of any particular type. All permutations of the list ['a', '+', 1] are
['a', '+', 1], ['a', 1, '+'], ['+', 'a', 1], ['+', 1, 'a'], [1, 'a', '+'], and
[1, '+', 'a']. Develop Python code to write all permutations of a given list.

1. Describe the algorithm to enumerate all permutations.
   What are the parameters of the recursive function you will use?

2. Write the recursive Python function and main program below.