**Unit 3 Algorithmics**

**Submit Task – Week 9**

**Recursive Functions**

Write recursive functions in Python for each of the following.

1. Calculate the factorial of a number.
2. Reverse a string letter by letter.
3. Find the *n*th term in the Fibonacci sequence.
4. (Harder) generate all possible permutations of a list of unique elements.

Make sure you include a base case. As always, include pseudocode-like comments.