1) Take a look at the following Function.

    a) What makes this a recursive function?

       ```python
       def downup(s):
           if len(s) <= 1:
               print(s)
           else:
               print(s)
               downup(s[:-1])
               print(s)
       ```

    b) What is the base case?

    c) What is the recursive case?
d) With a partner trace through the code. What does the code do?

2) We want to write a recursive function to compute the factorial of \( n \).
   a) What would the base case look like?
   
   b) What does the recursive case look like?
   
   c) Write the function.