I had a little bit experience with recursion algorithm, but I completely forgot about what is exactly recursion going to do and what is the main differences between recursion and iteration. The introduced article does not include a comprehensive definition for recursion, and tried to explain it through an example. I searched on google to find a more complete definition of recursion. According to my understanding, recursion means solving a problem by solving the smaller example of the same problem [1].

Now I think I am less confused about recursion and iteration. In recursive implementation we try to call a function that calls itself inside the function, however, in iterative implementation we use a counter to do an operation n times iteratively.

What is still ambiguous for me and I am interested to know more about that is the difference of efficiency between recursive and iterative versions of an algorithm. Which one can be more efficient and less expensive operation?

As far as I can remember, I have often written the iterative functions and implementation of recursive version of that function was not easy for me.

[1] <https://www.khanacademy.org/computing/computer-science/algorithms/recursive-algorithms/a/recursion>