**Recursive Function**

Recursion is a programming technique where a method calls itself to solve a problem by breaking it into smaller modules. Each recursive call reduces the size of the problem and a base case stop the recursion.

**For eg:**

In our code the line

**Yrs==0** is the base case

Where as the **return fValue(intialAmt,grwRate, yrs-1)\*(1+grwRate)** is a recursive

This simplifies the complex logic into an easier module.

**Time Complexity of the Code**

Since the recursion is occurring in linear format the time complexity will be O(n) where n=size of the element(s).

**Space complexity of the code**

Each recursive case uses the stack, and with no optimization, it stacks up to n frames before reaching the base case; therefore, the space complexity is O(n).