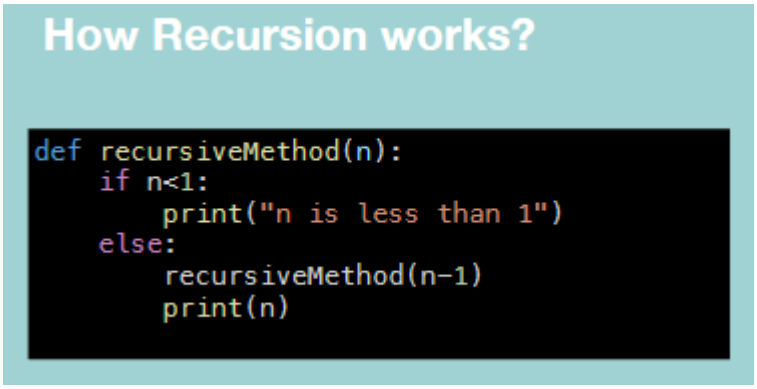
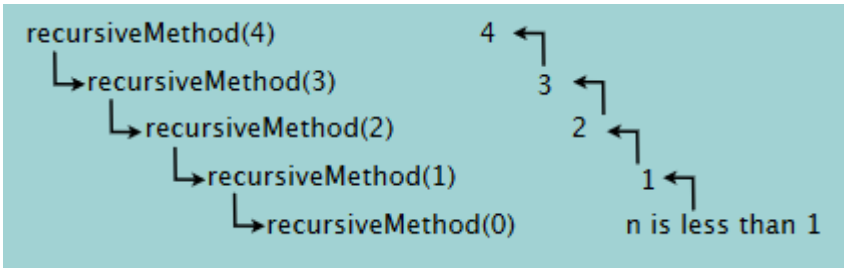
Data Structure

Now Will See the How Recursive method is Stored in Stack Memory.



1st



2nd

Note: See the above image where it states about how Recursion Works.

- one function is there ie; recursiveMethod() user is given input 4 so the flow of the recursive function is the same as in the above image.

```
def Loading... (n):
  if n < 1:
    print("n is less than 1")
  else:
    recursive(n-1)
    print(n)
recursive(4)
```

```
n is less than 1
1
2
3
4
```

3rd

- see the 2nd image based on the LIFO (Stack) as we can see the last method recursiveMethod(0) called. so lastmethod will pop out first. ie; n is less than 1 and so on.

Note: we understood that stack memory is used by the system for managing the recursive calls.

- So every time Recursive method calls itself, the system stores it in the stack for coming back because there are execution (print) statement left after calling itself.
- This means that system somehow remembers the point where it should stops, and call to function with different parameter. based on the condition.

Recursive vs Iterative Solutions