**Recursion** is a technique where a function calls itself to solve a smaller part of the problem.

### Example:

Calculating future value using compound interest is a good use case:

FV=PV×(1+r)^n

Where:

FV = Future Value

PV = Present Value

r = growth rate (e.g., 5% = 0.05)

n = number of years

Instead of looping, we can define: FV(n) = FV(n-1) \* (1 + r)



