

⚡ Current Skill Operating mechanism of recursion.

Solving a problem P in recursive form based on :

- Resolution of P in some special cases to find the pattern of recursion.
- Decomposition of P into sub-problems of the same nature as P.
- Deduction of the result of P from the intermediate results by a calculation rule.



If these principles are not applied, the algorithm may either fail to produce results, or run endlessly.

First rule:

Any recursive algorithm must distinguish between several cases, at least one of which must not include a recursive call. Often these are the simplest cases.

Otherwise, there is a risk of going around in circles and performing executions that never end.

Stop conditions.



These non-recursive cases are called base cases and the Conditions that the data must meet in these basic cases are called termination or termination conditions.

Second rule:

We must lead the program to the basic cases: any call recursive must be done with data closer to termination conditions!



This rule uses the following theorem:

“There is none strictly decreasing infinite sequence integers positive or null.”



So stopping the execution of a recursive program is guaranteed when both rules are applied!

Solve recursive problems: recursive exp



< Previous

next >

