

he process in which a function calls itself directly or indirectly is called recursion and the corresponding function is called a recursive function.

- A recursive algorithm takes one step toward solution and then recursively call itself to further move. The algorithm stops once we reach the solution.
- Since called function may further call itself, this process might continue forever. So it is essential to provide a base case to terminate this recursion process.

Need of Recursion

- Recursion helps in logic building. Recursive thinking helps in solving complex problems by breaking them into smaller subproblems.
- Recursive solutions work as a a basis for Dynamic Programming and Divide and Conquer algorithms.
- Certain problems can be solved quite easily using recursion like Tower of hanoi, Depth First Search etc.