

As computer scientists and good algorithmists one of our main jobs is to come up with algorithms and ways to solve problems that are fast and efficient. One way to speed up the computation of the above algorithm is to cache the solution of a recursive call once it has been computed for the first time such that we can make use of it when we encounter it again.

"In essence the above approach to solving the problem is similar to learning something like using a screw driver to fix a screw, the first time you do it it takes some time for you to fix the screw but once you remember how you did it the next time driving a screw becomes child's play."

Because some recursive calls happen repetitively during a computation, we cache the solutions to those recursive calls in a table or a data structure where we can look up the solutions to them quickly and this helps us save a significant amount of time for a computation.

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Dynamic Programming
(Recursion + Caching).

"For someone to understand the concept of dynamic programming, they have to have a good grasp on