Report on Dynamic Programming

# What is Dynamic Programming

Dynamic programming approach is similar to divide and conquer in breaking down the problem into smaller and yet smaller possible sub-problems. But unlike, divide and conquer, these sub-problems are not solved independently. Rather, results of these smaller sub-problems are remembered and used for similar or overlapping sub-problems.

# The Challenges We Faced

Dynamic programming is rather difficult when compared to other techniques. We tried building the concepts on multiple instances but the support and concepts for Dynamic Programming are rare on the internet. Also, the support for JavaScript is yet minimal with context to dynamic programming. Tried implementing dynamic programming, it is convenient in a way that we don’t need to specify the data types and such instances can be decided on the runtime, initially we make the generic objects, but due to this it takes more processing power and memory. The concept of Dynamic Programming was to introduce optimization in code and algorithms, but cannot be utilized yet fully. Also, the support for dynamic programming is rather less hence we faced multiple challenges while implementing it.

# Conclusion

All in all, Dynamic programming is a great approach and an optimal way to write algorithms, yet the support for dynamic programming is not ideal but surely with time it will evolve and hopefully will get the maximum utilization out of it with online assistance.