Dynamic Programming Syllabus (DP)

# Session #1

* **Recursion**
* **Tips and Tricks to debug Recursive Code**
* **Introduction To Dynamic Programming**
* **Why Dynamic Programming ?**
* Basic Recursive Practice Problems
* Q&A

# Session #2

* **Coin change Problem**
* Bottom up and Top Down Approach
* Practice problems as homework :p
* Q&A

# Session #3

* **Rod cutting Problem**
* **Trying to understand DP by more problems**
* Bottom up and Top Down Approach
* Practice problems as homework :p
* Q&A

# Session #4

* **Longest Increasing Subsequence (LIS)**
* **Maximum Sum Subarray Problem**
* Bottom up and Top Down Approach
* Practice problems as homework :p
* Q&A

# Session #5

* **0/1 Knapsack P**
* **Some variation problems**
* Bottom up and Top Down Approach
* Practice problems as homework :p
* Q&A

# Session #6

* **Longest Palindromic Substring and Subsequence**
* **Longest Common Subsequence**
* Bottom up and Top Down Approach
* Practice problems as homework :p
* Q&A

# Session #7

* **Matrix Chain Multiplication Problem**
* **Some variation problems**
* Bottom up and Top Down Approach
* Practice problems as homework :p
* Q&A