Summary

- Dynamic programming algorithms exhibit
  - Optimal substructure property.
  - Overlapping subproblems property.
- Number of distinct subproblems are polynomial in number.
- So solutions to these can stored and used when required much caching.
- With explicit caching we have memoized version of dynamic programming algorithm.

Summary

- The examples studied are:
  - Matrix chain product.
  - LCS problem.
  - Polygon triangulation.
  - Optimal BST.
- Matrix chain product was mapped to parenthesization of symbols.
- Number of ways can be mapped to problem of finding path from one corner to other diagonally opposite corner of a square mesh. This number is a catalan number.
- Polygon triangulation was put in 1-1 correspondence with parenthesization problem.

