

B11901040 項達均 PA2 report

Data structures used:

- vector: dynamic array that can automatically resize, used to store solutions to dp subproblems.
- pair: couples together a pair of values, used to store maximum planar subset.
- map: A sorted container that stores key-value pairs with unique key, efficient in cases where not all entries are stored, used for the memoization of the function `maximum_planar_subset`.

Implementation:

The number of chords in the mps is computed in a bottom-up manner, in which the location of the endpoint of j is stored in the 2D vector endpoint. The mps is then reconstructed using a top down approach, where `maximum_planar_subset` is ran recursively and memoized.