Tabular Parsing

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The use of tabular parsing allows us to deal with problems that may arise from having a large amount of parses for the same input. The solution that tabular parsing offers is to divide these parses into separate fragments and keeping them in a parsing table. Since a lot of fragments are common between different parses, storing them in a special table keeps the computer from having to compute and store the same fragment twice.

Since push-down automata can easily derive tabular parsers, we will use them as a simple way of introducing concepts and techniques used in context-free parsing and in tabulation.

We will present algorithms with top-down or bottom-up approaches. The parsing tables can be represented with different structures, such as matrices, graphs, or trees.

We hope to tackle a decent variety of tabular parsing algorithms and offer practical examples of the applicability of this tabular parsing in general.