

How to implement automata constructions in Maple?

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The aim of this workshop is to present a Maple oriented introduction to the package called **aut** which offers tools to construct, investigate, and visualize finite automata. The attribute "Maple oriented" means we concentrate first of all on implementation instead of the exposition of automata theoretic notions and their properties. In this way automata theory is not our goal but the tool with which we demonstrate the usage of new types and construction tools offered by **aut** package.

We give examples for different automata constructions and show how these constructions are and new constructions can be implemented in Maple, which turns out as well as in the field of automata theory to be an extremely powerful tool in visualization and effectively helps us to understand the key features of abstract mathematical objects.