Introduction

Convert simple regular expressions to minimum deterministic finite automaton. (Regex => NFA => DFA => Min-DFA)

Supported grammars

- r = (s)
- r = st
- r = s|t
- r = s*
- r = s+
- r = s? • r = €

(Copy this character to input if needed)

Examples

- (a|b)* (a*|b*)*
- ((∈|a)b*)*
- (a|b)*abb(a|b)*

Input:

 $(A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Y|Z|a|b|c|d|e|f|g|h|i|j|k|1|m|n|o|p|q|r|s|t|u|v|w|x|y|z|_) + (0|1|2|3|4|5|6|7|8|9|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Z|A|B|C|E|F|G|H|I|J|K|C|A|B|C|E|F|G|H|I|J|K|C|A|B|C|E|F|G|H|I|J|K|C|A|B|C|E|F|G|H|I|J|K|C|A|B|C|E|F|G|H|I|J|K|C|A|B|C|E|F|G|H|I|J|K|C|A|B|C|E|F|G|H|I|J|K|C|A|B|C|E|F|G|H|I|J|K|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C|A|B|C$

CONVERT

DFA: https://cyberzhg.github.io/toolbox/nfa2dfa?

regex = KEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKygwfDF8MnwzfDR8NXw2fDd8OHw5fEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKygwfDF8MnwzfDR8NXw2fDd8OHw5fEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKygwfDF8MnwzfDR8NXw2fDd8OHw5fEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKygwfDF8MnwzfDR8NXw2fDd8OHw5fEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKygwfDF8WnwzfDR8NXw2fDd8OHw5fEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHy8c3xQfF8WnwzfDR8NXw2fDR8N(https://cyberzhg.github.io/toolbox/nfa2dfa?

regex = KEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKygwfDF8MnwzfDR8NXw2fDd8OHw5fEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKygwfDF8MnwzfDR8NXw2fDd8OHw5fEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKygwfDF8MnwzfDR8NXw2fDd8OHw5fEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKygwfDF8MnwzfDR8NXw2fDd8OHw5fEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKygwfDF8WnwzfDR8NXw2fDd8OHw5fEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eXx6fF8pKygwfDF8WnwzfDR8NXw2fDR8

DFA STATE



URL:

 $https://cyberzhg.github.io/toolbox/min_dfa?regex = KEF8QnxDfEV8RnxHfEh8SXxKfEt8THxNfE58T3xQfFF8UnxTfFR8VXxWfFd8WHxZfFp8YXxifGN8ZHxlfGZ8Z3xofGl8anxrfGx8bXxufG98cHxxfHJ8c3x0fHV8dnx3fHh8eX\\$