Operations of Finite Automata

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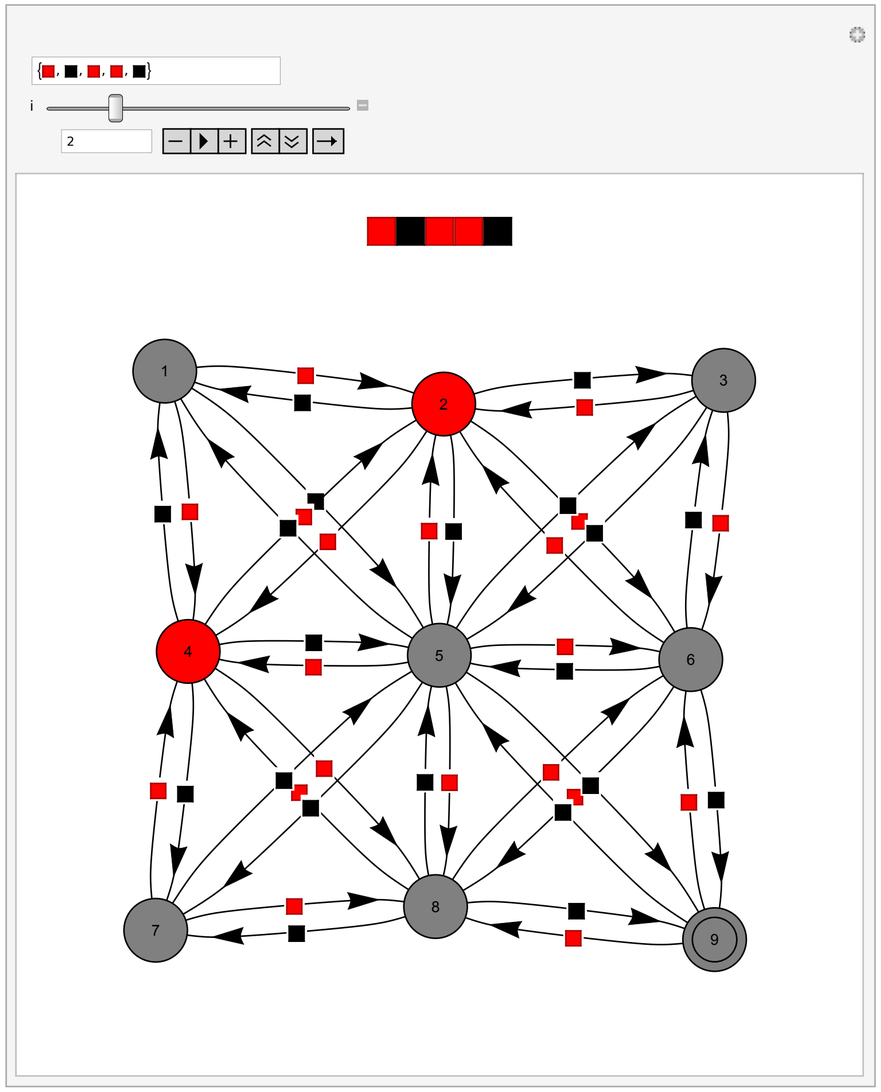
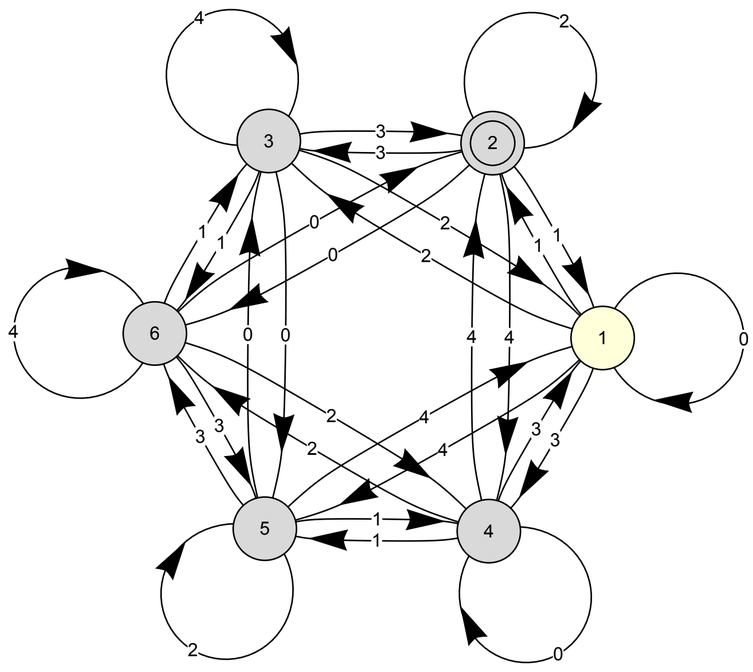
Automaton in action



Generation of acceptible words

m 5 x 1 n 6



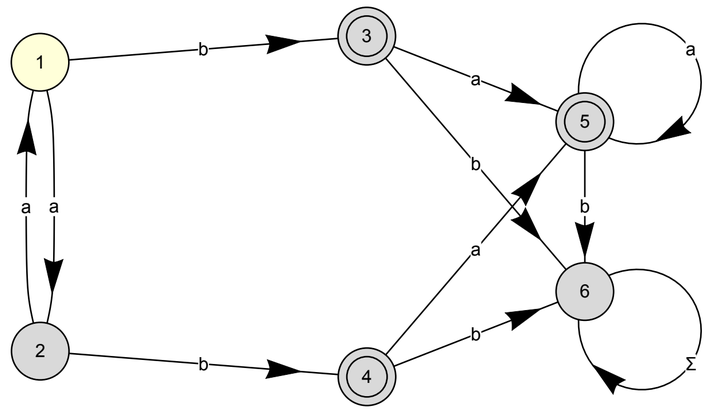
Accepted words

Length: 0 1 2 3 4 5

{1, 01, 12, 23, 34, 001,
012, 023, 034, 100, 111,
122, 133, 144, 210, 221,
232, 243, 304, 320, 331,
342, 403, 414, 430, 441}

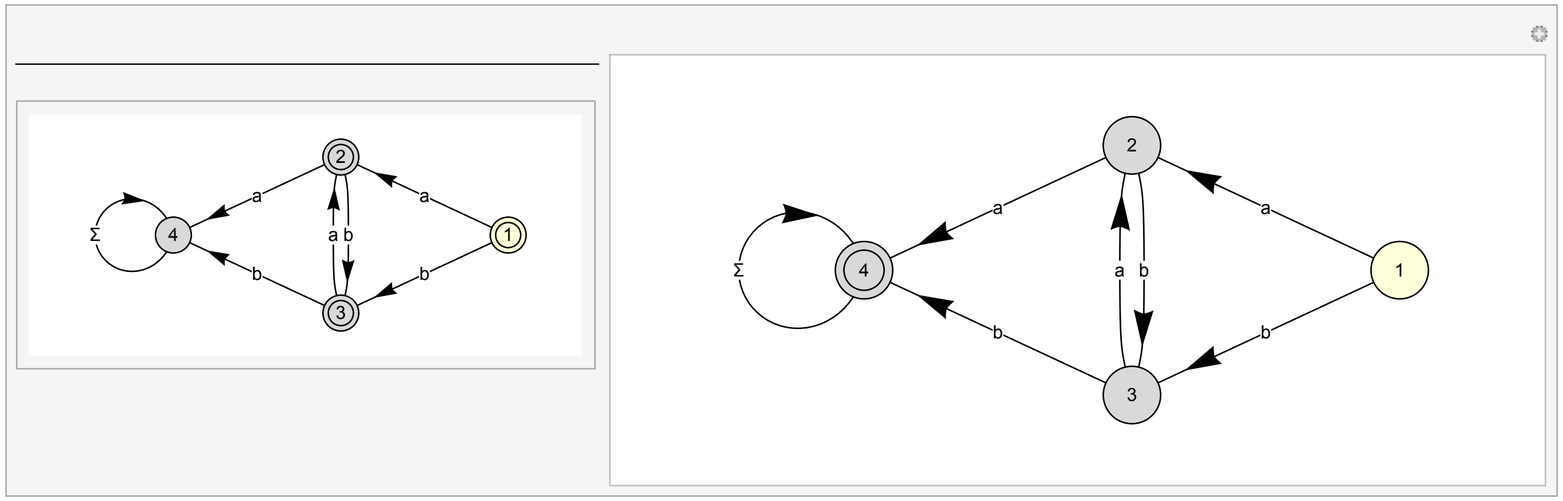
Minimization

Output Diagram Table DFA 1 b Minimize

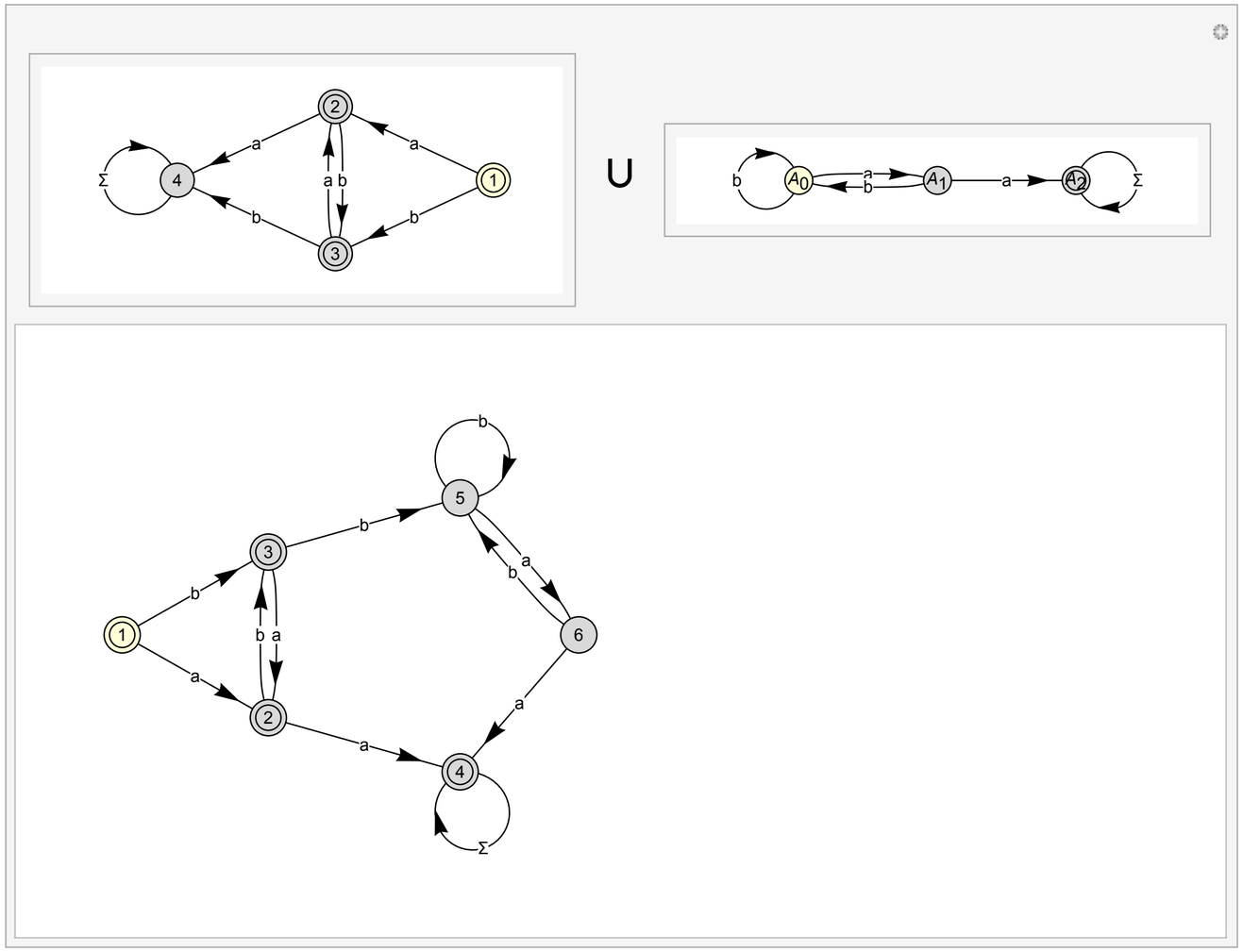


		a	b
→	1	2	3
	2	1	4
*	3	5	6
*	4	5	6
*	5	5	6
	6	6	6

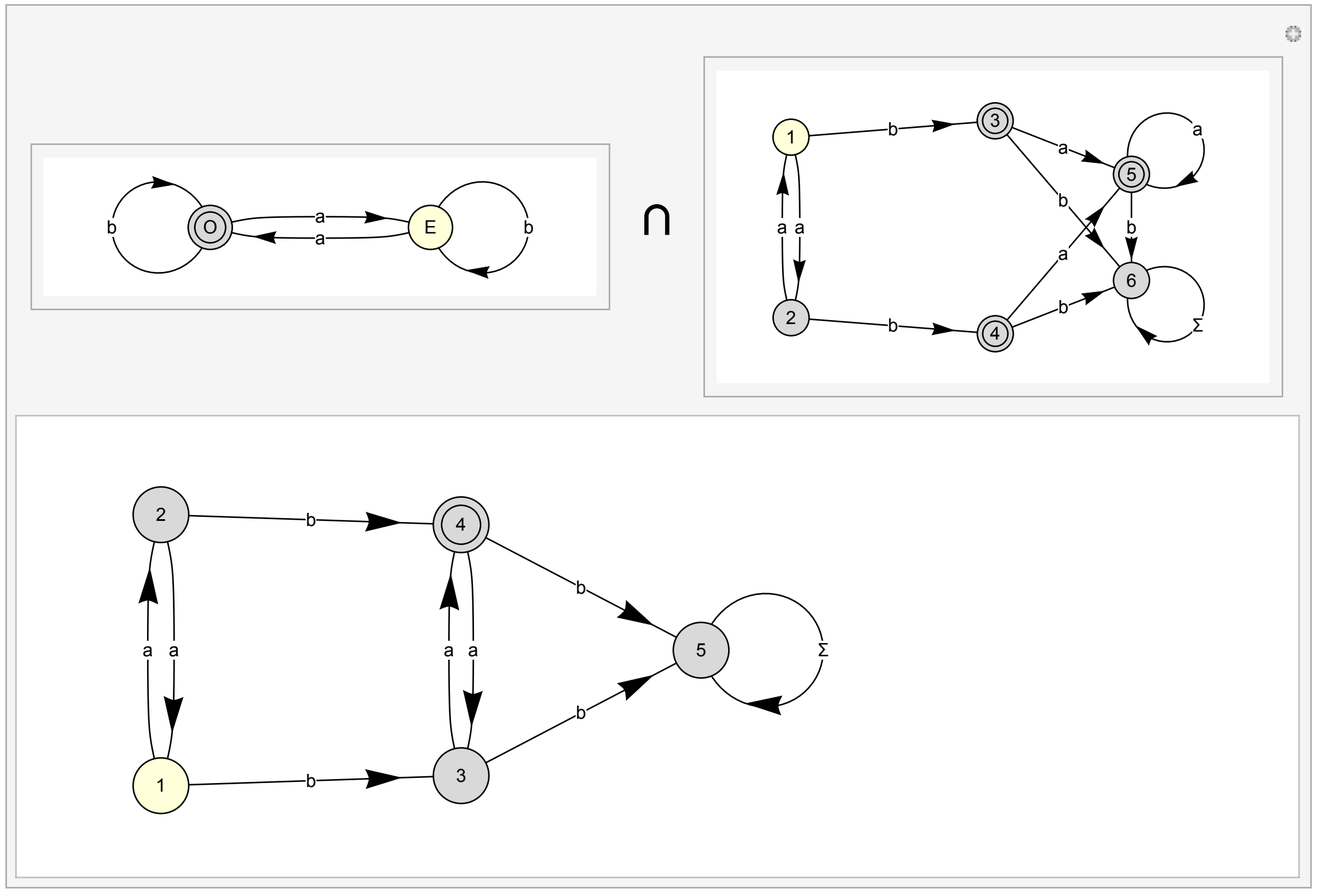
Negation



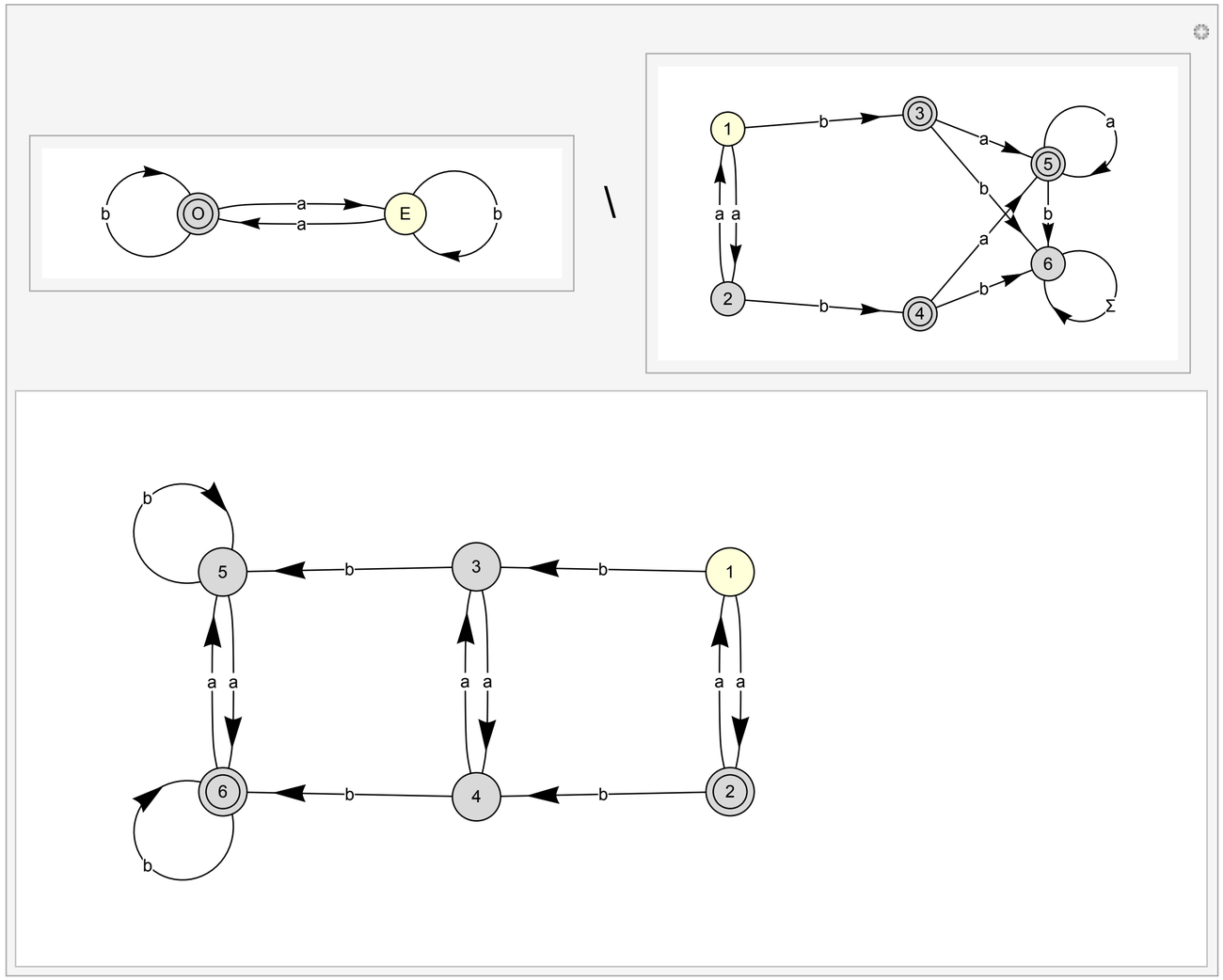
Union



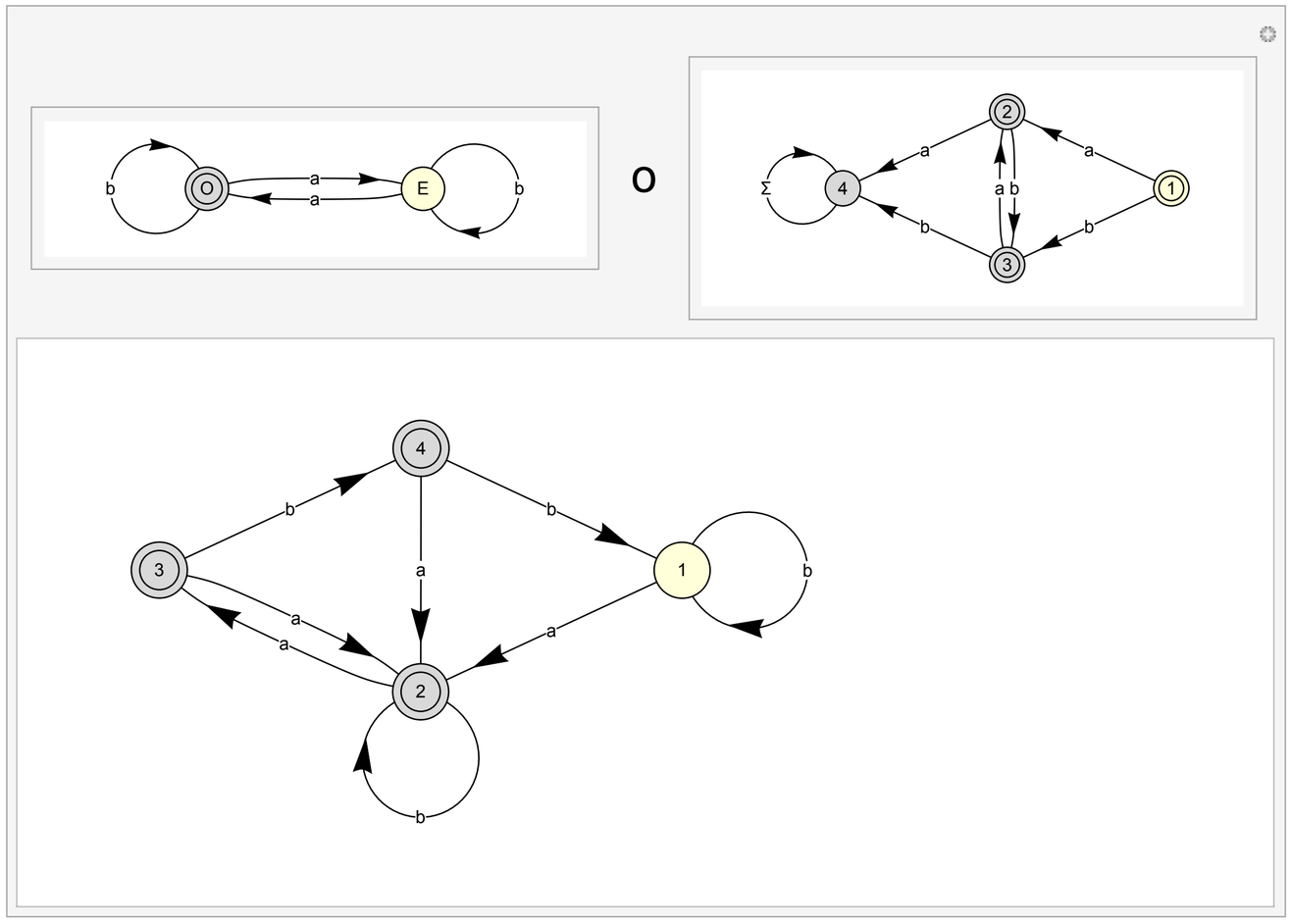
Intersection



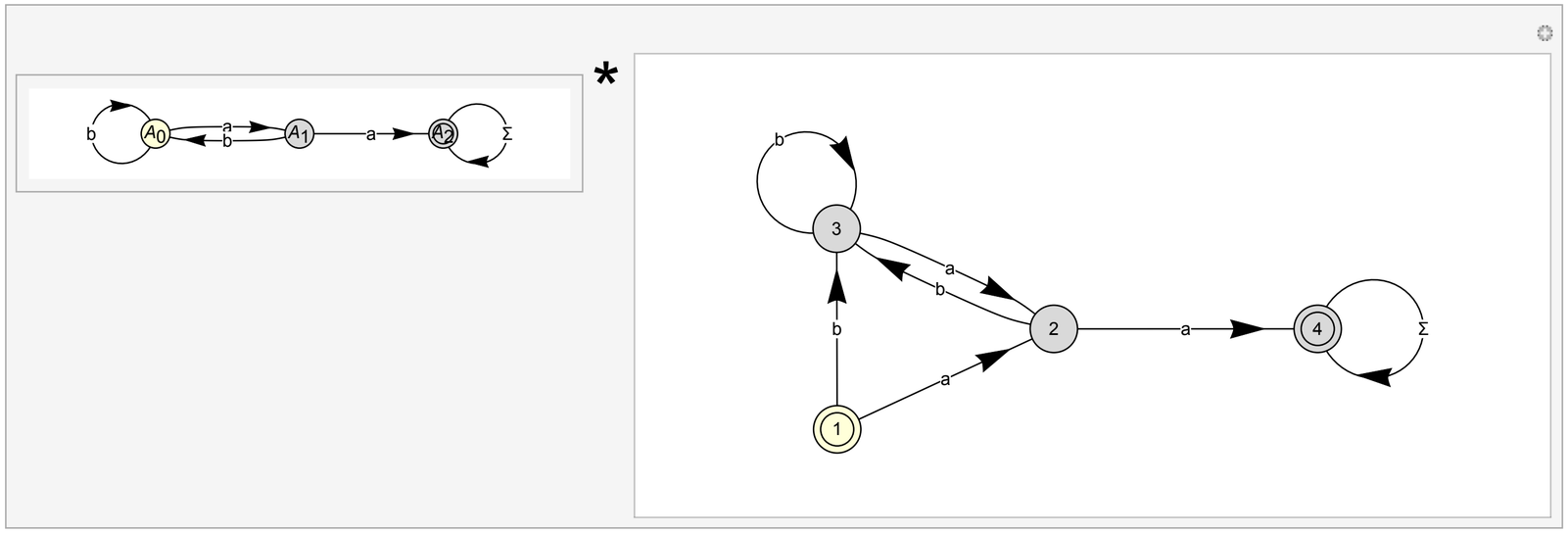
Difference



Concatenation



Closure



Automata builder

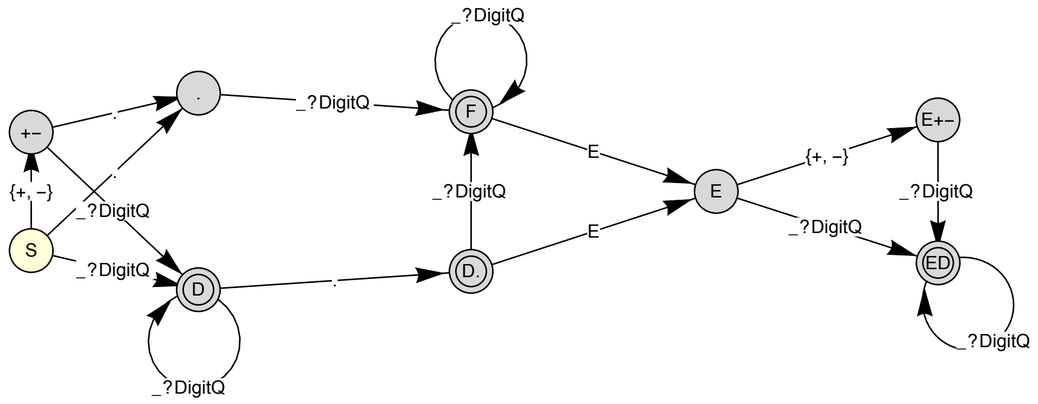
▼ Визначення

			Σ	ε	"+"	"−"	_?DigitQ	"."	"E"	+
s	F	Q	δ		−	−	−	−	−	
→		"S"		{}	{"+−"}	{"+−"}	{"D"}	{"."}	{}	
		"+−"	−	{}	{}	{}	{"D"}	{"."}	{}	
	*	"D"	−	{}	{}	{}	{"D"}	{"D."}	{}	
		"."	−	{}	{}	{}	{"F"}	{}	{}	
	*	"D."	−	{}	{}	{}	{"F"}	{}	{"E"}	
	*	"F"	−	{}	{}	{}	{"F"}	{}	{"E"}	
		"E"	−	{}	{"E+−"}	{"E+−"}	{"ED"}	{}	{}	
		"E+−"	−	{}	{}	{}	{"ED"}	{}	{}	
	*	"ED"	−	{}	{}	{}	{"ED"}	{}	{}	
			+							

Вивід ДСА Таблиця Діаграма

Формат Column Row InputForm

▶ Налаштування діаграми переходів



“Tree” automaton

Accepted words: one × two × three × four × five × +

	o	n	e	t	w	h	r	f	u	i	v
→ 1	2	3	3	4	3	3	3	5	3	3	3
2	3	6	3	3	3	3	3	3	3	3	3
3	3	3	3	3	3	3	3	3	3	3	3
4	3	3	3	3	7	8	3	3	3	3	3
5	9	3	3	3	3	3	3	3	3	10	3
6	3	3	11	3	3	3	3	3	3	3	3
7	11	3	3	3	3	3	3	3	3	3	3
8	3	3	3	3	3	3	12	3	3	3	3
9	3	3	3	3	3	3	3	3	13	3	3
10	3	3	3	3	3	3	3	3	3	3	6
* 11	3	3	3	3	3	3	3	3	3	3	3
12	3	3	6	3	3	3	3	3	3	3	3
13	3	3	3	3	3	3	11	3	3	3	3

Thank you