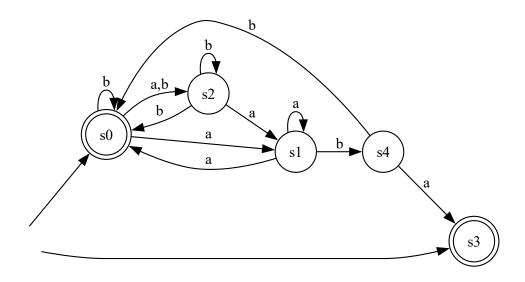
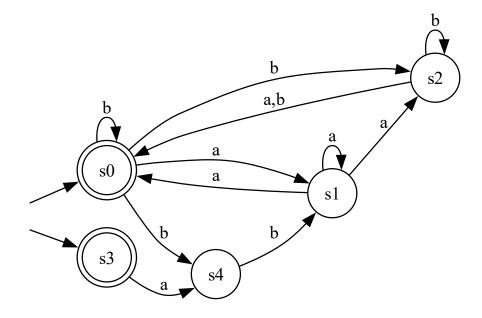
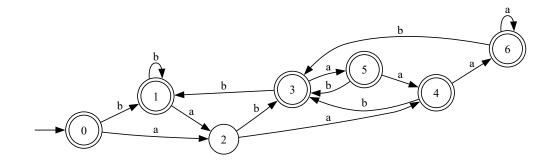
1 Original NFA



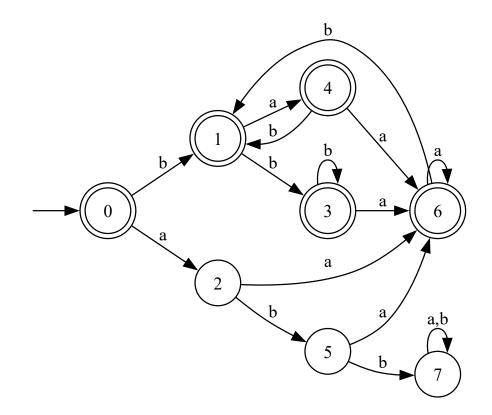
2 Reverse NFA



3 DFA



4 Dual of DFA



5 States Map Reduction

5.1 States Map 1

	{0}	{1}	{2}	{3}	{4}	{5}	{6}	{7}
{0}	$\{s0, s3\}$	{s0}	Ø	{s0}	{s0}	Ø	{s0}	Ø
{1}	$\{s0\}$	$\{s0, s2\}$	Ø	$\{s0, s2\}$	$\{s0\}$	Ø	$\{s0, s2\}$	Ø
{2}	Ø	$\{s2\}$	$\{s1\}$	$\{s1, s2\}$	$\{s1\}$	{s1}	$\{s1, s2\}$	Ø
{3}	$\{s0\}$	$\{s0, s2, s4\}$	$\{s4\}$	$\{s0, s2, s4\}$	$\{s0\}$	Ø	$\{s0, s2\}$	Ø
{4}	$\{s0\}$	$\{s0\}$	$\{s1\}$	$\{s0, s1\}$	$\{s0, s1\}$	{s1}	$\{s0, s1\}$	Ø
{5}	$\{s3\}$	$\{s2\}$	$\{s1\}$	$\{s1, s2\}$	$\{s1\}$	{s1}	$\{s1, s2\}$	Ø
{6}	${s0}$	$\{ { m s}0, { m s}2 \}$	{s1}	$\{s0, s1, s2\}$	$\{s0, s1\}$	{s1}	$\{s0, s1, s2\}$	Ø

5.2 States Map 2

	{0}	{1}	{2}	{3}	{4}	{5}	{6}	{7}
{0}	$\{s0, s3\}$	{s0}	Ø	{s0}	{s0}	Ø	{s0}	Ø
{1}	$\{s0\}$	$\{s0, s2\}$	Ø	$\{s0, s2\}$	$\{s0\}$	Ø	$\{s0, s2\}$	Ø
{2}	Ø	$\{s2\}$	{s1}	$\{s1, s2\}$	$\{s1\}$	{s1}	$\{s1, s2\}$	Ø
{3}	$\{s0\}$	$\{s0, s2, s4\}$	$\{s4\}$	$\{s0, s2, s4\}$	$\{s0\}$	Ø	$\{s0, s2\}$	Ø
{4}	$\{s0\}$	$\{s0\}$	{s1}	$\{s0, s1\}$	$\{s0, s1\}$	{s1}	$\{s0, s1\}$	Ø
{5}	$\{s3\}$	$\{s2\}$	{s1}	$\{s1, s2\}$	$\{s1\}$	{s1}	$\{s1, s2\}$	Ø
{6 }	$\{s0\}$	$\{s0, s2\}$	{s1}	$\{s0, s1, s2\}$	$\{s0, s1\}$	{s1}	$\{s0, s1, s2\}$	Ø

5.3 States Map 3

	{0}	{1}	{2}	{3}	{4}	{5}	{6}	{7}
$\{0,1\}$	$\{s0, s3\}$	$\{s0, s2\}$	Ø	$\{s0, s2\}$	${s0}$	Ø	$\{s0, s2\}$	Ø
{2}	Ø	$\{s2\}$	$\{s1\}$	$\{s1, s2\}$	$\{s1\}$	{s1}	$\{s1, s2\}$	Ø
{3}	$\{s0\}$	$\{s0, s2, s4\}$	$\{s4\}$	$\{s0, s2, s4\}$	$\{s0\}$	Ø	$\{s0, s2\}$	Ø
{4}	$\{s0\}$	$\{s0\}$	{s1}	$\{s0, s1\}$	$\{s0, s1\}$	{s1}	$\{s0, s1\}$	Ø
{5}	$\{s3\}$	$\{s2\}$	$\{s1\}$	$\{s1, s2\}$	{s1}	{s1}	$\{s1, s2\}$	Ø
{6}	$\{s0\}$	$\{ s0, s2 \}$	{s1}	$\{s0, s1, s2\}$	$\{s0, s1\}$	{s1}	$\{s0, s1, s2\}$	Ø

5.4 States Map 4

	{0}	{1}	{2}	{3}	{4}	{5}	{6}	{7}
$\{0,1\}$	$\{s0, s3\}$	$\{s0, s2\}$	Ø	$\{s0, s2\}$	$\{s0\}$	Ø	$\{s0, s2\}$	Ø
{2}	Ø	$\{s2\}$	{s1}	$\{s1, s2\}$	{s1}	{s1}	$\{s1, s2\}$	Ø
{3}	$\{s0\}$	$\{s0, s2, s4\}$	$\{s4\}$	$\{s0, s2, s4\}$	$\{s0\}$	Ø	$\{s0, s2\}$	Ø
$\{4, 5, 6\}$	$\{s0, s3\}$	$\{ s0, s2 \}$	{s1}	$\{s0, s1, s2\}$	$\{s0, s1\}$	{s1}	$\{s0, s1, s2\}$	Ø

5.5 States Map 5

	{0}	$\{1, 3, 4, 6\}$	{2}	{5}	{7}
$\{0,1\}$	$\{s0, s3\}$	$\{ { m s0, s2} \}$	Ø	Ø	Ø
{2}	\emptyset	$\{s1, s2\}$	$\{s1\}$	$\{s1\}$	Ø
{3}	$\{s0\}$	$\{ s0, s2, s4 \}$	$\{s4\}$	Ø	Ø
$\{4, 5, 6\}$	$\{s0, s3\}$	$\{ { m s0, s1, s2} \}$	$\{s1\}$	$\{s1\}$	\emptyset

5.6 States Map 6

	{0}	$\{1, 3, 4, 6\}$	{2}	{5}	{7}
$\{0,1\}$	$\{s0, s3\}$	$\{ { m s0, s2} \}$	Ø	Ø	Ø
{2}	\emptyset	$\{s1, s2\}$	$\{s1\}$	$\{s1\}$	\emptyset
{3}	$\{s0\}$	$\{ s0, s2, s4 \}$	$\{s4\}$	Ø	Ø
$\{4, 5, 6\}$	$\{s0, s3\}$	$\{ { m s0, s1, s2} \}$	$\{s1\}$	$\{s1\}$	\emptyset

6 Maximal Prime Grids

• Rows: $\{1,3\}$, Cols: $\{1,2,3\}$

• Rows: $\{2,3\}$, Cols: $\{0,1,2\}$

• Rows: $\{0, 1, 2, 3\}$, Cols: $\{1\}$

• Rows: $\{0, 2, 3\}$, Cols: $\{0, 1\}$

• Rows: $\{1, 2, 3\}$, Cols: $\{1, 2\}$

• Rows: $\{3\}$, Cols: $\{0, 1, 2, 3\}$

7 Cover Enumeration

7.1 Cover 1

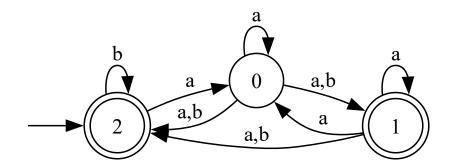
• Rows: $\{1,3\}$, Cols: $\{1,2,3\}$

• Rows: $\{2,3\}$, Cols: $\{0,1,2\}$

• Rows: $\{0, 2, 3\}$, Cols: $\{0, 1\}$

8 Intersection Rule Result

8.1 NFA 1



This NFA is legitimate.