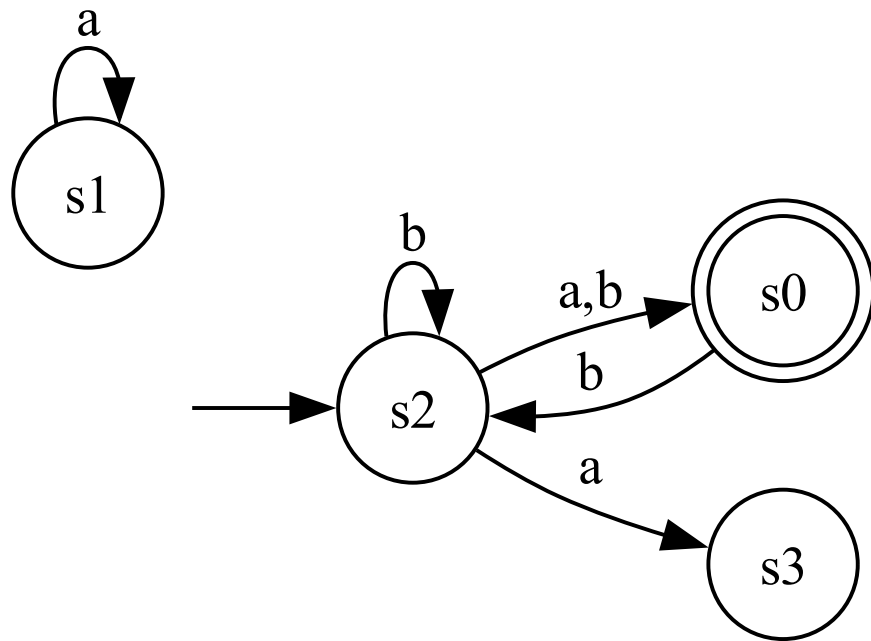# 1 Original NFA

2 Reverse NFA
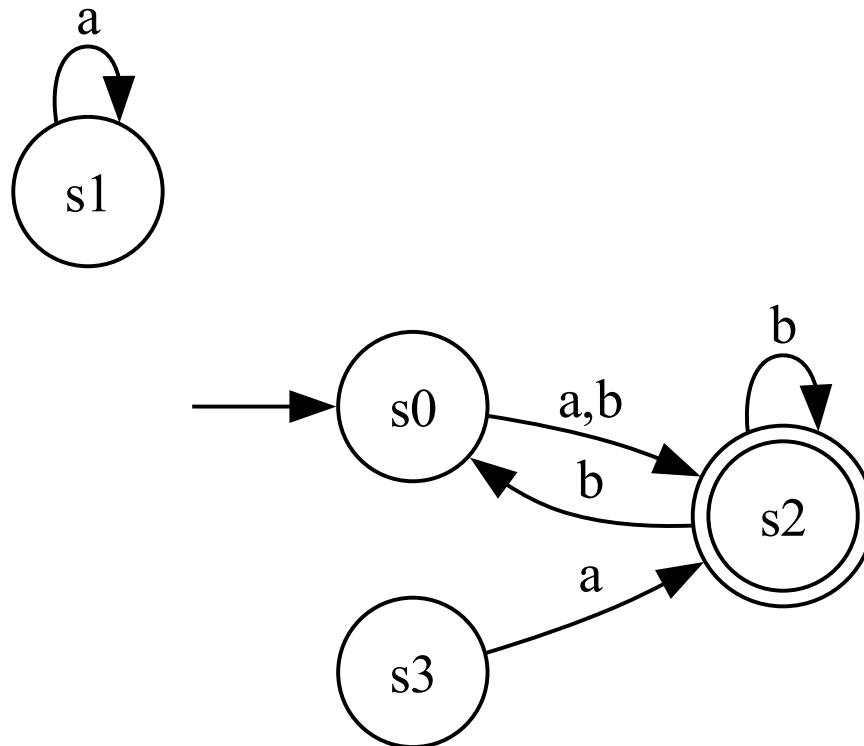
3 DFA
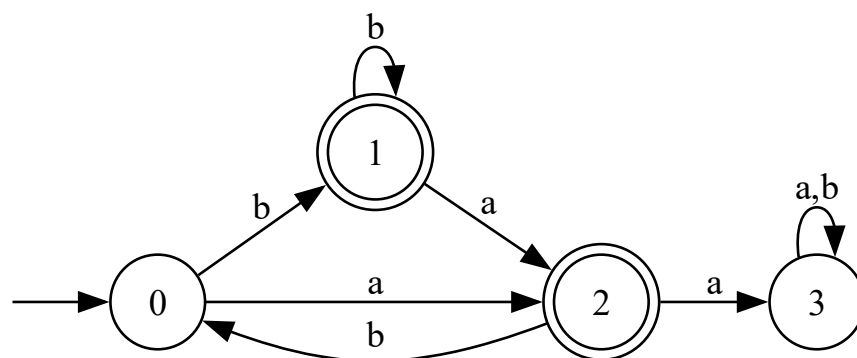
4 Dual of DFA
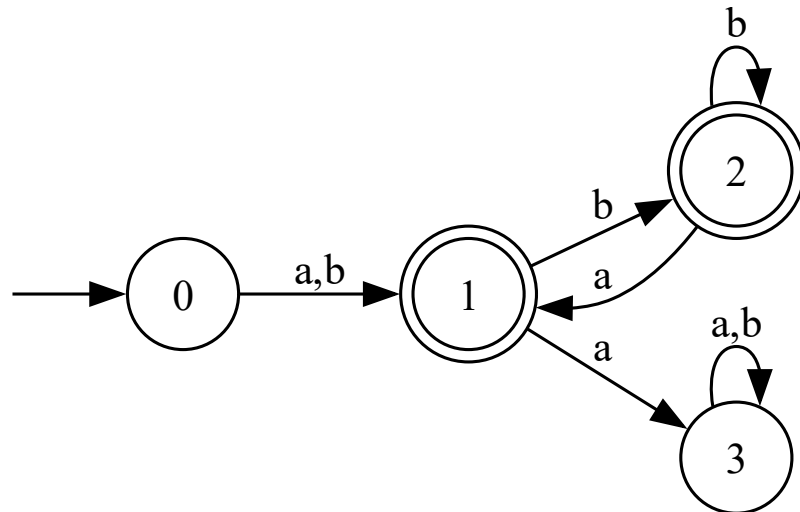
5 States Map Reduction

5.1 States Map 1

	$\{0\}$	$\{1\}$	$\{2\}$	$\{3\}$
$\{0\}$	$\emptyset$	$\{s2\}$	$\{s2\}$	$\emptyset$
$\{1\}$	$\{s0\}$	$\{s2\}$	$\{s0, s2\}$	$\emptyset$
$\{2\}$	$\{s0\}$	$\emptyset$	$\{s0\}$	$\emptyset$
$\{3\}$	$\emptyset$	$\emptyset$	$\emptyset$	$\emptyset$

5.2 States Map 2

	{0}	{1}	{2}	{3}
{0}	∅	{s2}	{s2}	∅
{1}	{s0}	{s2}	{s0, s2}	∅
{2}	{s0}	∅	{s0}	∅
{3}	∅	∅	∅	∅

5.3 States Map 3

	{0}	{1}	{2}	{3}
{0}	∅	{s2}	{s2}	∅
{1}	{s0}	{s2}	{s0, s2}	∅
{2}	{s0}	∅	{s0}	∅
{3}	∅	∅	∅	∅

6 Maximal Prime Grids

- Rows: $\{0, 1, 2\}$, Cols: $\{2\}$
- Rows: $\{1\}$, Cols: $\{0, 1, 2\}$
- Rows: $\{1, 2\}$, Cols: $\{0, 2\}$
- Rows: $\{0, 1\}$, Cols: $\{1, 2\}$

7 Cover Enumeration

7.1 Cover 1

- Rows: $\{1, 2\}$, Cols: $\{0, 2\}$
- Rows: $\{0, 1\}$, Cols: $\{1, 2\}$

7.2 Cover 2

- Rows: $\{0, 1, 2\}$, Cols: $\{2\}$
- Rows: $\{1, 2\}$, Cols: $\{0, 2\}$
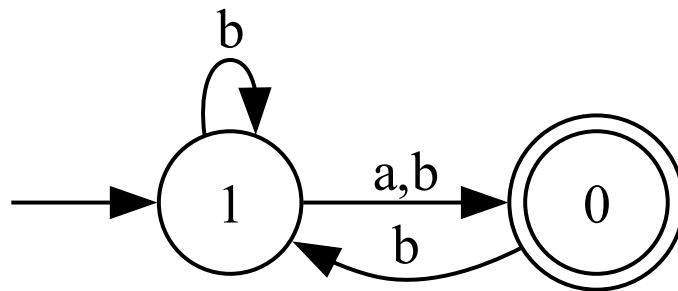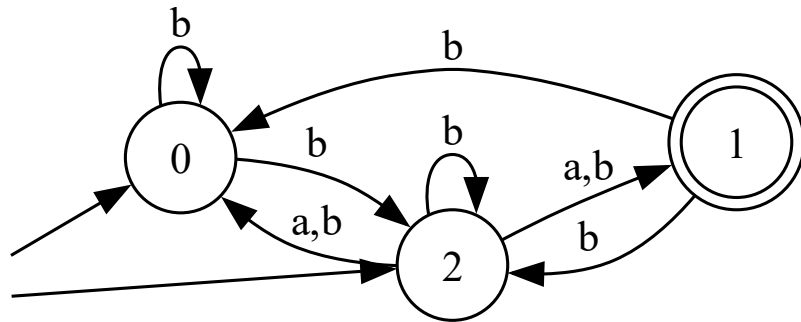- Rows: $\{0, 1\}$, Cols: $\{1, 2\}$

7.3 Cover 3

- Rows: {1}, Cols: {0, 1, 2}
- Rows: {1, 2}, Cols: {0, 2}
- Rows: {0, 1}, Cols: {1, 2}

7.4 Cover 4

- Rows: {0, 1, 2}, Cols: {2}
- Rows: {1}, Cols: {0, 1, 2}
- Rows: {1, 2}, Cols: {0, 2}
- Rows: {0, 1}, Cols: {1, 2}

8 Intersection Rule Result

8.1 NFA 1

This NFA is legitimate.

8.2   NFA 2

This
NFA is legitimate.
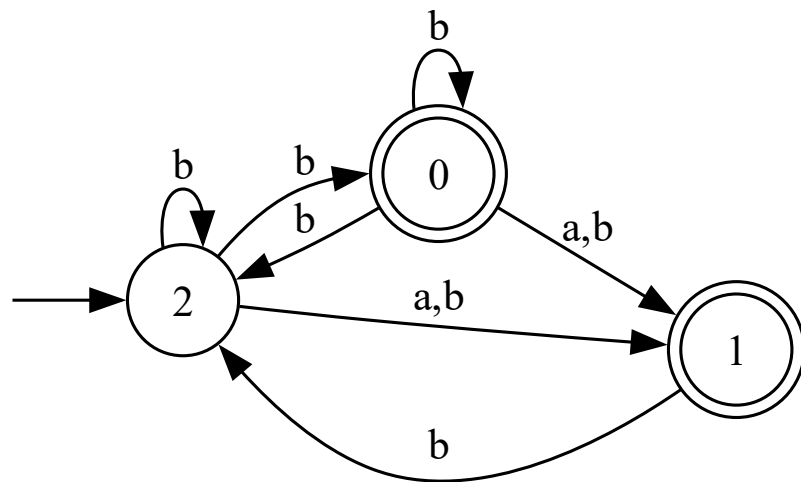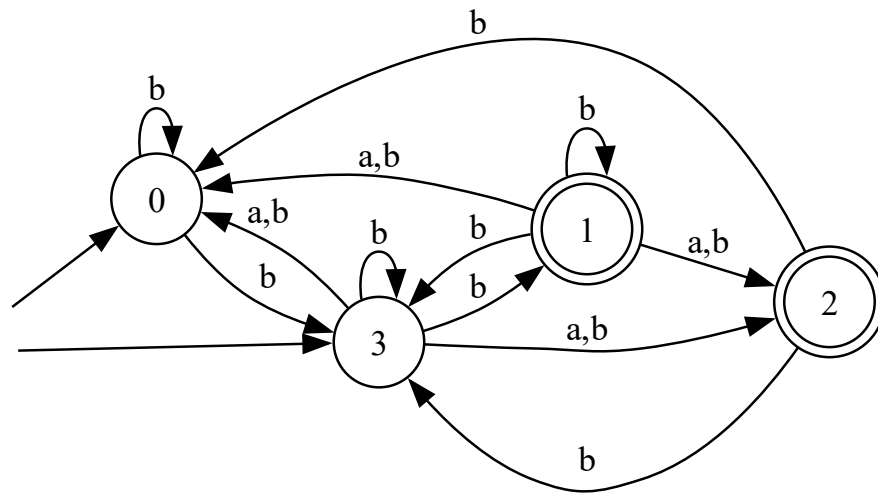
8.3   NFA 3

This NFA is legitimate.

8.4   NFA 4

This NFA is legitimate.