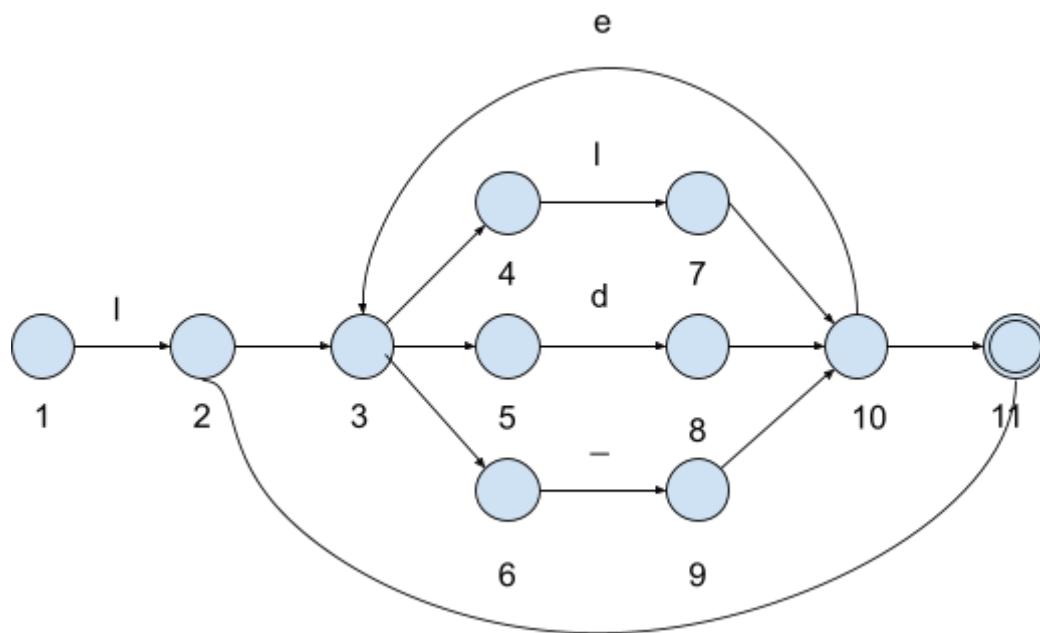


$\Sigma = \{A - B, a - b, 0 - 9, _ \}$

RE = $l(|d|_)*$



NFSM Table

	l	d	-	ϵ
1	{2}	{}	{}	{}
2	{}	{}	{}	{3, 11}
3	{}	{}	{}	{4, 5, 6}
4	{7}	{}	{}	{}
5	{}	{8}	{}	{}
6	{}	{}	{9}	{}
7	{}	{}	{}	{10}
8	{}	{}	{}	{10}
9	{}	{}	{}	{10}
10	{}	{}	{}	{3, 11}
11	{}	{}	{}	{}

Epsilon Closure:

- $1 \rightarrow \{1, 2\} \implies \{1\}$
- $2 \rightarrow \{2, 3, 11\} \implies \{2, 3, 4, 5, 6, 11\}$
- $3 \rightarrow \{3, 4, 5, 6\}$
- $4 \rightarrow \{4, 7\} \implies \{4\}$
- $5 \rightarrow \{5, 8\} \implies \{5\}$
- $6 \rightarrow \{6, 9\} \implies \{6\}$
- $7 \rightarrow \{7, 10\} \implies \{3, 4, 5, 6, 7, 10, 11\}$
- $8 \rightarrow \{8, 10\} \implies \{3, 4, 5, 6, 8, 10, 11\}$
- $9 \rightarrow \{9, 10\} \implies \{3, 4, 5, 6, 9, 10, 11\}$
- $10 \rightarrow \{3, 10, 11\} \implies \{3, 4, 5, 6, 10, 11\}$
- $11 \rightarrow \{11\}$

Updated Transition Table

	l	d	_
[1] = 0	[2] => [2, 3, 4, 5, 6, 11] = 1	[] = 5	[] = 5
[2345611] = 1	[7] => [3, 4, 5, 6, 7, 10, 11] = 2	[8] => [3, 4, 5, 6, 8, 10, 11] = 3	[9] => [3, 4, 5, 6, 9, 10, 11] = 4
[345671011] = 2	[7] => [3, 4, 5, 6, 7, 10, 11] = 2	[8] => [3, 4, 5, 6, 8, 10, 11] = 3	[9] => [3, 4, 5, 6, 9, 10, 11] = 4
[345681011] = 3	[7] => [3, 4, 5, 6, 7, 10, 11] = 2	[8] => [3, 4, 5, 6, 8, 10, 11] = 3	[9] => [3, 4, 5, 6, 9, 10, 11] = 4
[345691011] = 4	[7] => [3, 4, 5, 6, 7, 10, 11] = 2	[8] => [3, 4, 5, 6, 8, 10, 11] = 3	[9] => [3, 4, 5, 6, 9, 10, 11] = 4
[] = 5	[] = 5	[] = 5	[] = 5

Final DFSM:

	l	d	–
0	1	5	5
1	2	3	4
2	2	3	4
3	2	3	4
4	2	3	4
6	5	5	5