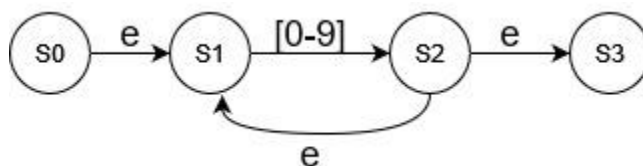


## Expresión Regular – Número Entero

- $[0-9]^+$



Método de Thompson

FT	S	[0 -9]
S0	{S1} = <b>A</b>	(A, [0-9]) = S2 = B
S2	{S3, S1} = <b>B</b>	(B, [0 - 9]) = S2 = B

Tabla de Transiciones  $\delta$ 

	B = [0-9]
A	B
B	B

$S0([0-9]) = S1$	$S0(\epsilon) = \{\}$
$S1([0-9]) = S1$	$S1(\epsilon) = \{\}$

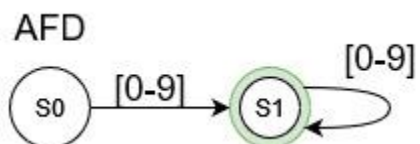
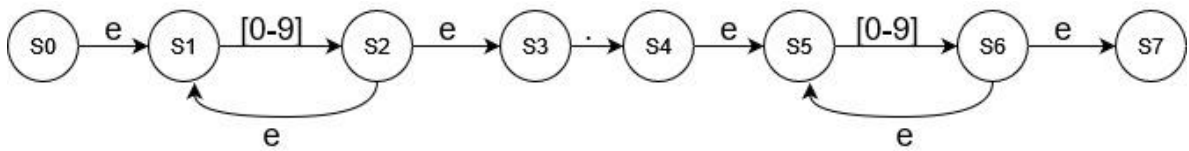


Diagrama del AFD

## Expresión Regular – Números Decimales

- ( [0-9]+ . [0-9]+ )



### Método de Thompson

FT	S	[0-9]	.
S0	{S1} = <b>A</b>	(A, [0-9]) = S2 = B	(A, .) = {}
S2	{S3, S1} = <b>B</b>	(B, [0-9]) = S2 = B	(B, .) = S4 = C
S4	{S5} = <b>C</b>	(C, [0-9]) = S6 = D	(C, .) = {}
S6	{S7, S5} = <b>D</b>	(D, [0-9]) = S6 = D	(D, .) = {}

Tabla de Transiciones  $\delta$

	B	C	D
A	B		
B	B	C	
C			D
D			D

S0([0-9]) = S1	S0(.) = {}
S1([0-9]) = S1	S1(.) = S2
S2([0-9]) = S3	S2(.) = {}
S3([0-9]) = S3	S3(.) = {}

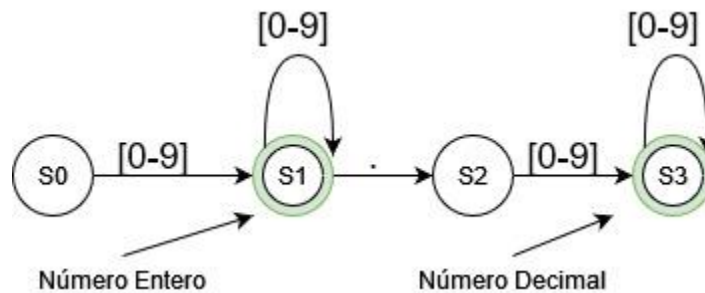
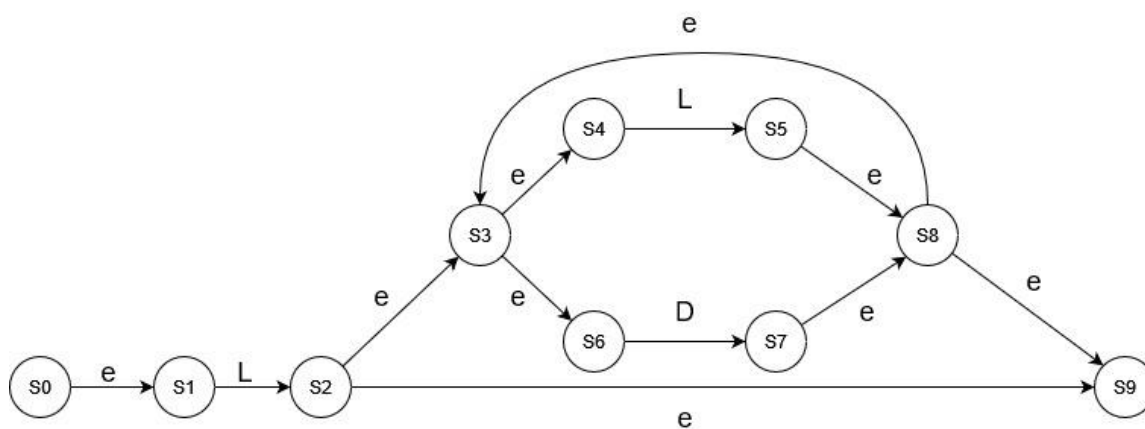


Diagrama del AFD

## Expresión Regular – Identificador

- $L(L \mid D)^*$



Método de Thompson

FT	S	L	D
S0	{S1} = A	(A, L) = S2 = B	(A, D) = {}
S2	{S3, S4, S6, S9} = B	(B, L) = S5 = C	(B, D) = S7 = D
S5	{S8, S9, S3, S4, S6} = C	(C, L) = S5 = C	(C, D) = S7 = D

Tabla de Transiciones  $\delta$

	B	C	D
A	B		
B		C	D
C		C	D

S0(L) = S1	S0(D) = {}
S1(L) = S2	S1(D) = S3
S2(L) = S2	S2(D) = {}
S3(L) = {}	S3(D) = S3

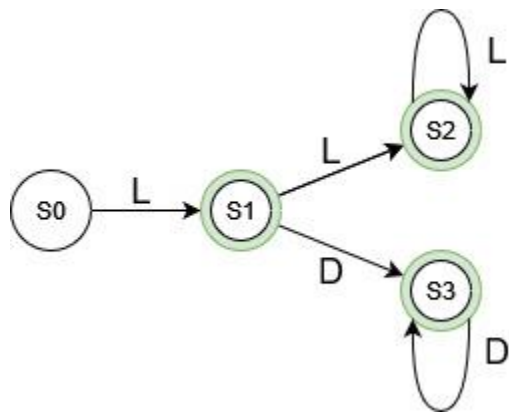


Diagrama del AFD

## Autómata Finito Determinista

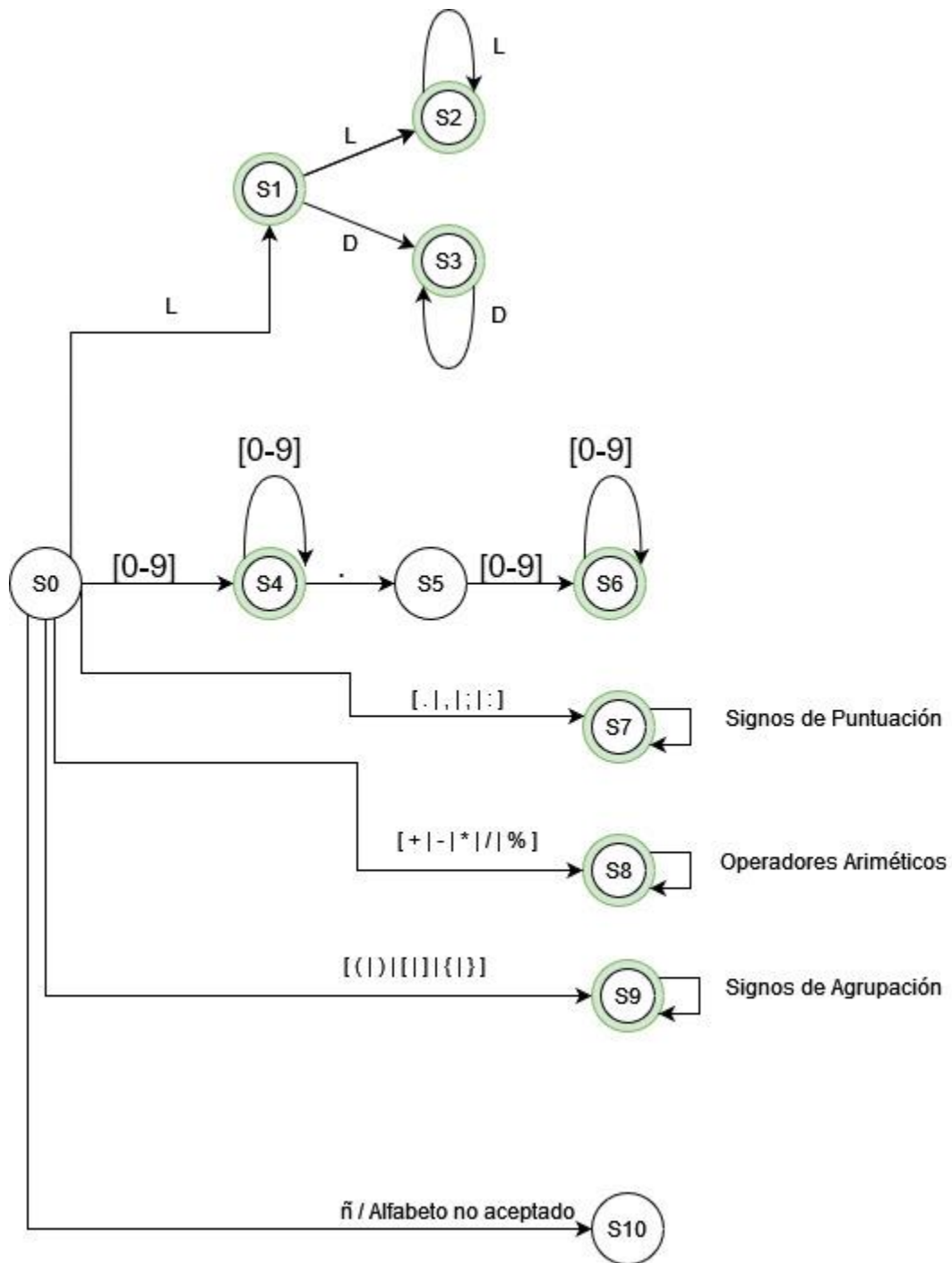


Tabla de Transiciones  $\delta$

$S0(L) = S1$	$S0(D) = S4$	$S0(SP) = S7$	$S0(OA) = S8$	$S0(SA) = S9$	$S0(ND) = S10 = \text{Error}$
$S1(L) = S2$	$S1(D) = S3$	$S1(SP) = \text{Error}$	$S1(OA) = \text{Error}$	$S1(SA) = \text{Error}$	$S1(ND) = \text{Error}$
$S2(L) = S2$	$S2(D) = \text{Error}$	$S2(SP) = \text{Error}$	$S2(OA) = \text{Error}$	$S2(SA) = \text{Error}$	$S2(ND) = \text{Error}$
$S3(L) = \text{Error}$	$S3(D) = S3$	$S3(SP) = \text{Error}$	$S3(OA) = \text{Error}$	$S3(SA) = \text{Error}$	$S3(ND) = \text{Error}$
$S4(L) = \text{Error}$	$S4(D) = S4$	$S4(SP) = S5 [ . ]$	$S4(OA) = \text{Error}$	$S4(SA) = \text{Error}$	$S4(ND) = \text{Error}$
$S5(L) = \text{Error}$	$S5(D) = S6$	$S5(SP) = \text{Error}$	$S5(OA) = \text{Error}$	$S5(SA) = \text{Error}$	$S5(ND) = \text{Error}$
$S6(L) = \text{Error}$	$S6(D) = S6$	$S6(SP) = \text{Error}$	$S6(OA) = \text{Error}$	$S6(SA) = \text{Error}$	$S6(ND) = \text{Error}$