

# Manual Técnico

# Patrón

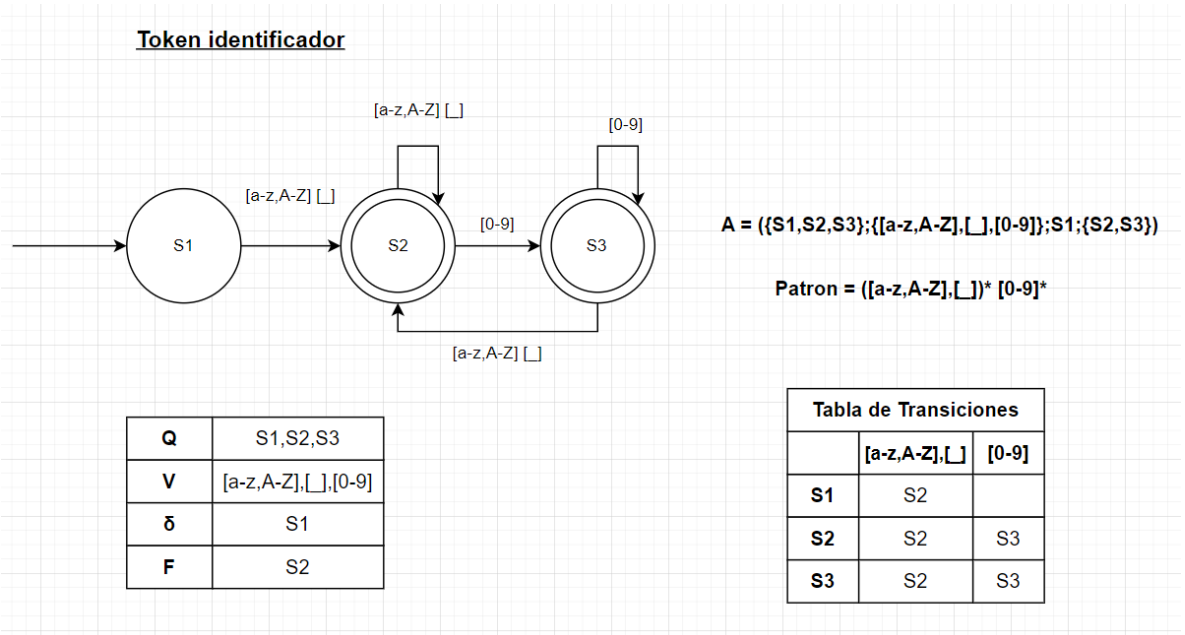
Una tabla que contiene todo tipo de token respecto a su lexema, y para identificarlo se usa expresiones regulares.

<b>Token(Componente Léxico)</b>	<b>Lexema</b>	<b>Patrón</b>
identificador	a,valor,b	[a-z,A-Z],[_] (0-9)
Constante número	5,3,25,56	[0-9]+(\.[0-9]+)?
Aritmeticos	a+9,5+1	[a-z,A-Z]*[0-9]+[+,-,* ,** ,/,//,%]
Comparacion	a = 2	[a-z,A-Z]*[0-9]+[==,!=,>,<,>=,<=]
Logicos	b and 9	[a-z,A-Z]*[0-9]+[and,or,not]
Asignacion	C=5	[a-z,A-Z]*[0-9]+[=]
Palabras clave	class a19	[a-z,A-Z]*[Palabras reservadas]+
Constantes	(1.0), true, (" " )	[a-z,A-Z]*[0-9]+[,.(,),boolean," ","]
Comentario	#comentario	[#comentario]+[a-z,A-Z]*[0-9]
Otros	ab;	[a-z,A-Z]*[0-9]+[( ),{ },[ ], , ; :: ]

## Diagramas de estados

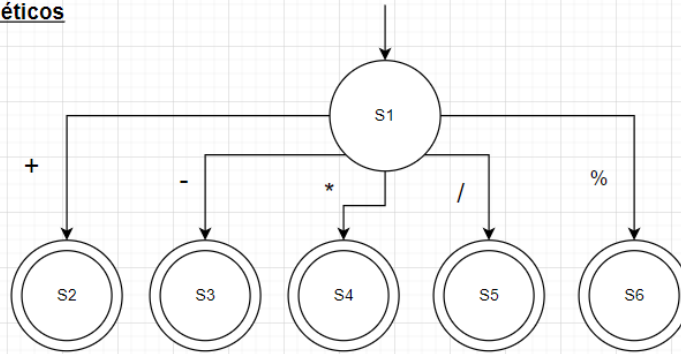
En esta parte se los estados de transición de cada token.

## Token Identificador



## Token Aritméticos

### Token Aritméticos



$A = (\{S1, S2, S3, S4, S5, S6\}; \{+, -, *, /, \%\}; S1; \{S2, S3, S4, S5, S6\})$

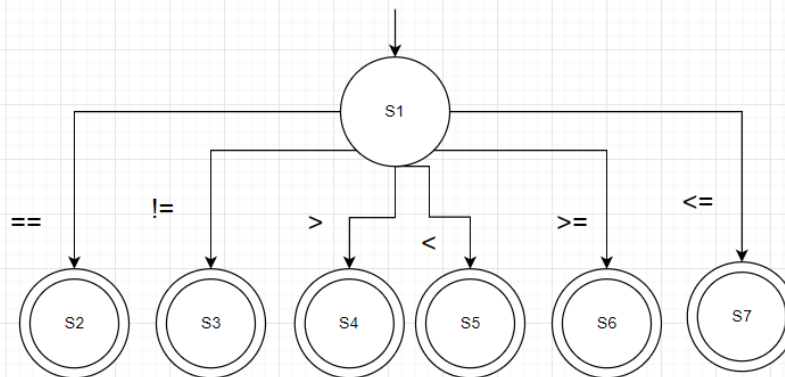
Patron =  $(+|-|*|/|\%)$

Q	S1,S2,S3,S4,S5,S6
V	[+, -, *, /, %]
$\delta$	S1
F	S2,S3,S4,S5,S6

Tabla de Transiciones					
	+	-	*	/	%
S1	S2	S3	S4	S5	S6

## Token Comparación

### Token Comparación



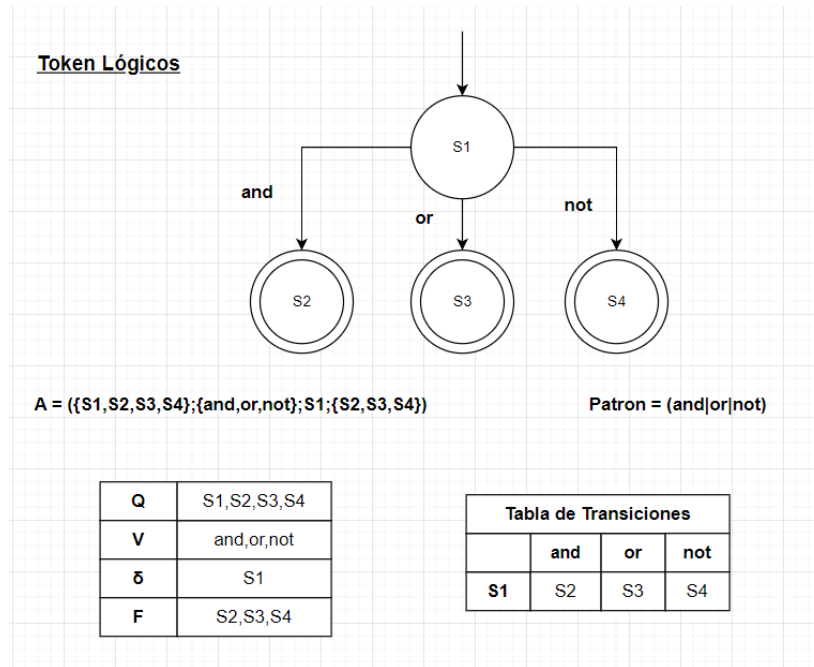
$A = (\{S1, S2, S3, S4, S5\}; \{=, !, >, <\}; S1; \{S2, S3, S4, S5\})$

Patron =  $(==|!=|>|<|>=|<=)$

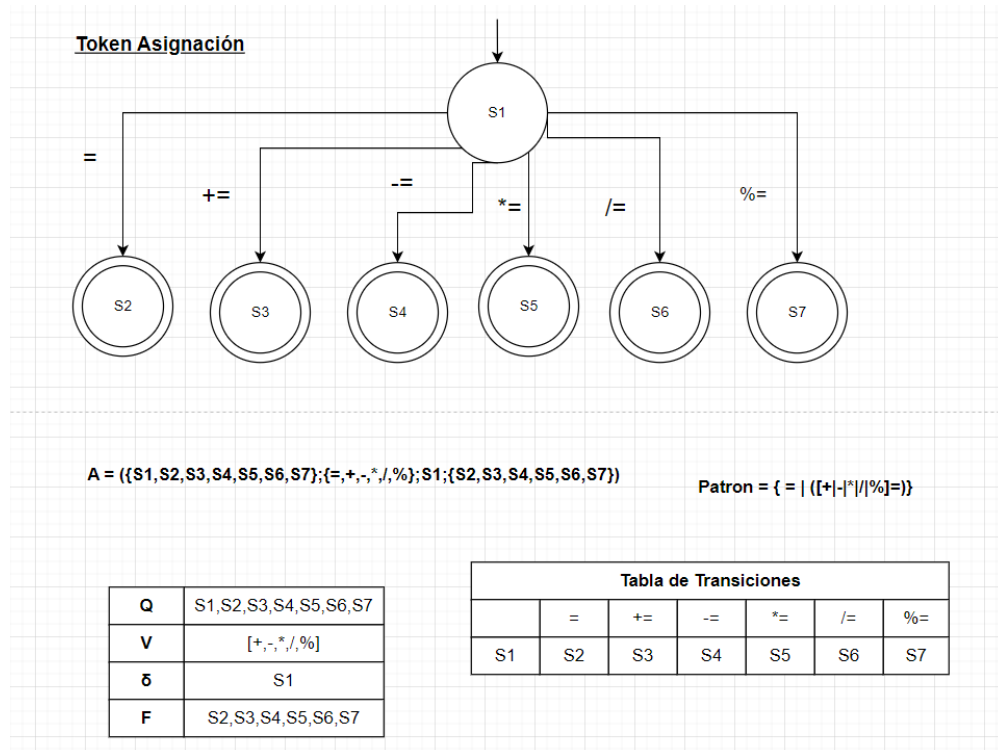
Q	S1,S2,S3,S4,S5,S6,S7,S8
V	[=, !=, >, <, >=, <=]
$\delta$	S1
F	S2,S3,S4,S5,S6,S7,S8

Tabla de Transiciones						
	==	!=	>	<	>=	<=
S1	S2	S3	S4	S5	S6	S7

## Token Lógicos

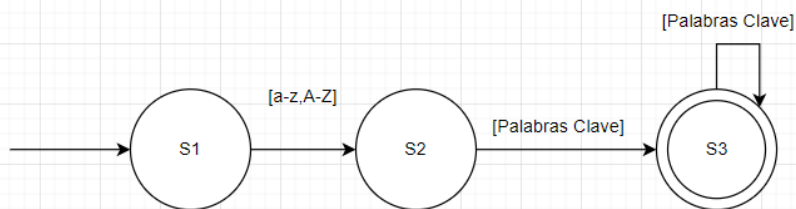


## Token Asignación



## Token Palabras Clave

### Token palabras clave



### Palabras Clave

as, assert, break, class, continue, def, del, elif, else, except, False, finally, for, from, global, if, import, in, is, lambda, None, nonlocal, pass, raise, return, True, try, while, with, yield

$A = (\{S1, S2, S3\}; \{[a-z, A-Z], [Palabras Clave]\}; S1; S3)$

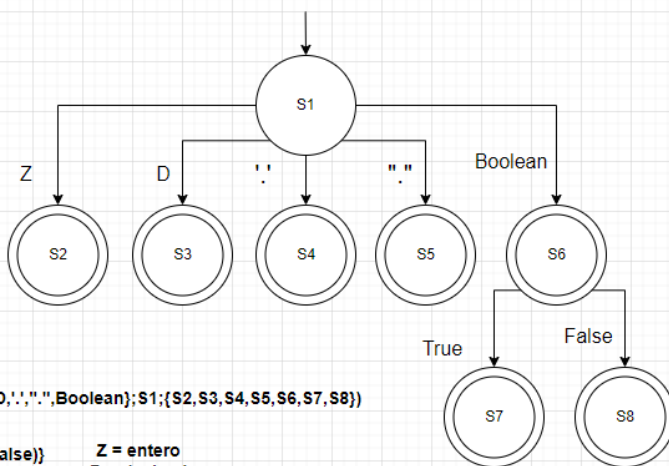
Patron =  $([a-z, A-Z], [Palabras Clave])$

Q	S1, S2, S3
V	[a-z, A-Z], [Palabras Clave]
$\delta$	S1
F	S3

Tabla de Transiciones		
	[a-z, A-Z], [ ]	Palabras Clave
S1	S2	
S2		S3
S3		S3

## Token Constantes

### Token Constante



$A = (\{S1, S2, S3, S4, S5, S6, S7, S8\}; \{Z, D, '.', '"', Boolean\}; S1; \{S2, S3, S4, S5, S6, S7, S8\})$

Patron =  $\{Z|D|'.'|'"'|Boolean(true|false)\}$

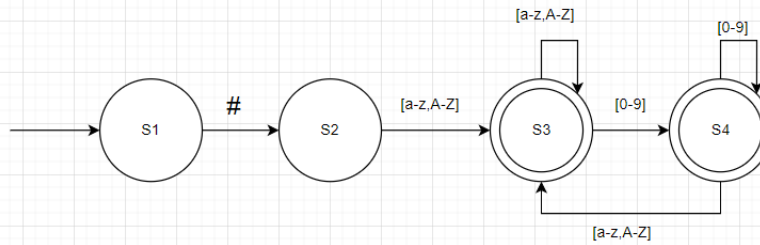
Z = entero  
D = decimal

Q	S1, S2, S3, S4, S5, S6, S7, S8
V	[Z, D, '.', '"', Boolean, true, false]
$\delta$	S1
F	S2, S3, S4, S5, S6, S7, S8

Tabla de Transiciones							
	Z	D	'.'	'\"'	Boolean	True	False
S1	S2	S3	S4	S5	S6		
S6						S7	S8

## Token Comentario

### Token comentario



$A = (\{S1, S2, S3\}; \{#, [a-zA-Z], [0-9]\}; S1; \{S2, S3\})$

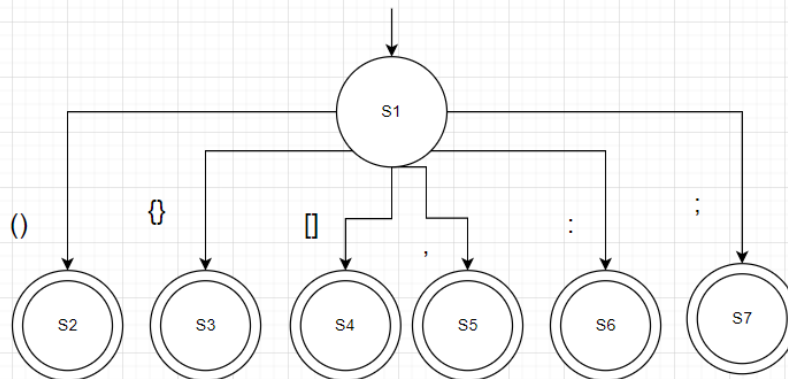
Patron =  $\# ([a-zA-Z], [0-9])^*$

Q	S1, S2, S3
V	#, [a-zA-Z], [0-9]
δ	S1
F	S3, S4

Tabla de Transiciones			
	#	[a-zA-Z], [0-9]	
S1	S2		
S2		S3	
S3		S3	S4
S4			S4

## Token Otros

### Token otros



$A = (\{S1, S2, S3, S4, S5, S6, S7\}; \{(), \{\}, [], ,, :, ;\}; S1; \{S2, S3, S4, S5, S6, S7\})$

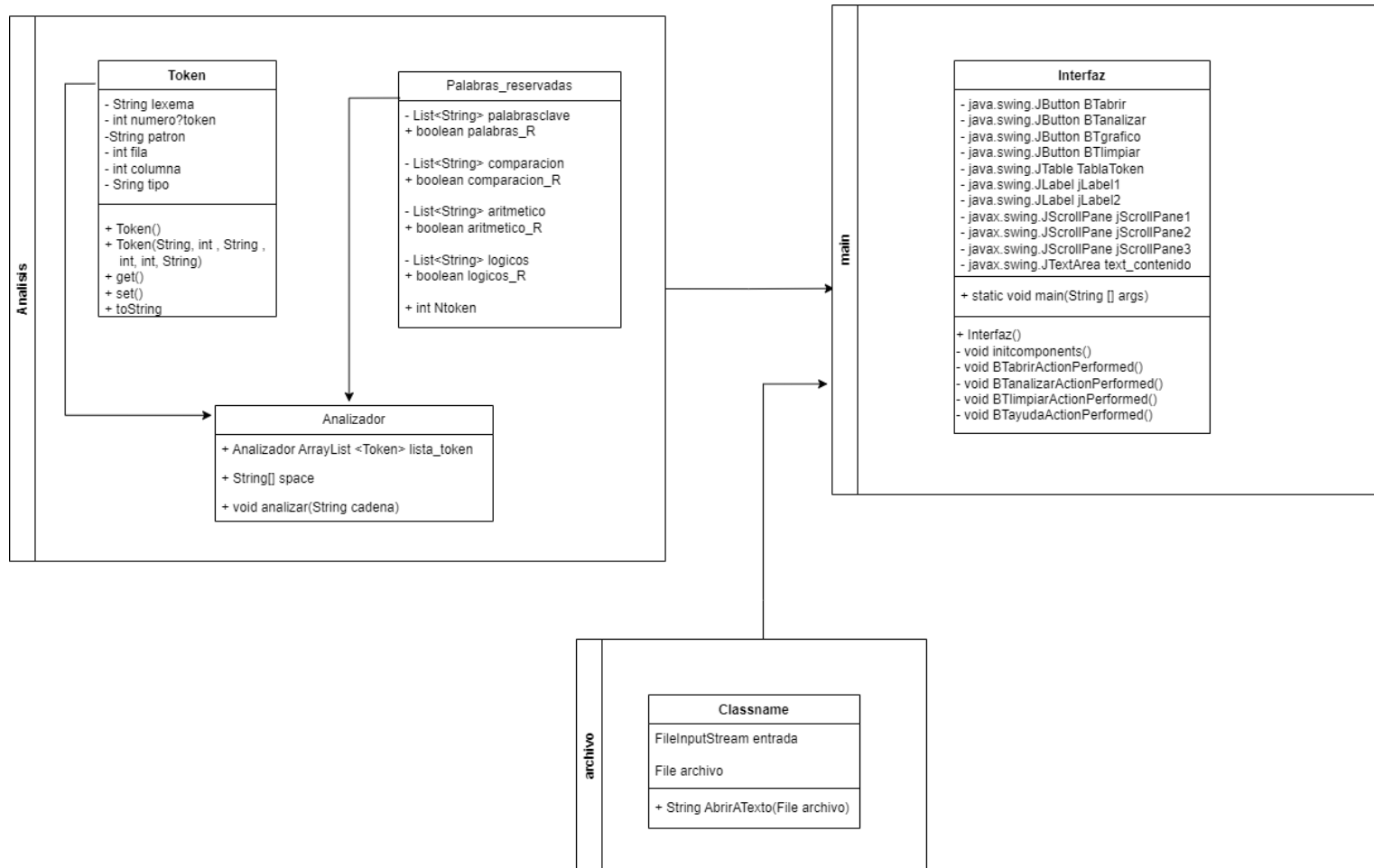
Patron =  $\{ () \{\} [] , : ; \}$

Q	S1, S2, S3, S4, S5, S6, S7
V	{(), {}, [], ,, :, ;}
δ	S1
F	S2, S3, S4, S5, S6, S7

Tabla de Transiciones						
	()	{}	[]	,	:	;
S1	S2	S3	S4	S5	S6	S7

## Diagrama de Clases

Los diagramas son como esta compuesto el programa Analizador Léxico



## Git Flow

Se utilizo Visual Code con la extensión Git Graph para ver el uso de ramas del proyecto utilizando lo comando de git y mandarlos al github.

The screenshot shows the Visual Studio Code interface with the Git Graph extension. The left sidebar contains the Explorer, Search, and Source Control views. The main editor area displays the Git Graph view, which includes a commit history graph on the left and a table of commits on the right. The graph shows a sequence of commits with branches like 'main', 'origin', 'develop', and 'origin/HEAD'. The table lists the commit details, including the description, date, author, and commit hash.

	Description	Date	Author	Commit
	Merge pull request #5 from Marco131-xel/analysis	21 Aug 2023 01:03	Marco Chiché	436577e1
	creando mi jar	21 Aug 2023 01:01	M4RC0	1555d428
	Merge pull request #4 from Marco131-xel/analysis	20 Aug 2023 23:29	Marco Chiché	d393bc81
	commit final de analisis	20 Aug 2023 23:28	M4RC0	c41b4e56
	Merge pull request #3 from Marco131-xel/analysis	20 Aug 2023 00:43	Marco Chiché	6231b59f
	gestion de archivos	20 Aug 2023 00:41	M4RC0	e5448dc7
	Merge pull request #2 from Marco131-xel/analysis	20 Aug 2023 00:39	Marco Chiché	921d45b7
	clase interfaz	20 Aug 2023 00:37	M4RC0	e855786f
	Merge pull request #1 from Marco131-xel/analysis	20 Aug 2023 00:32	Marco Chiché	58332ee4
	agregnado analizador	19 Aug 2023 19:18	M4RC0	1d736b8f
	agregnado token	19 Aug 2023 19:16	M4RC0	a1275c34
	iniciando ramas	19 Aug 2023 19:13	M4RC0	bbd74ef8
	Initial commit	19 Aug 2023 18:32	Marco Chiché	950e1191

