### **Manual Técnico**

### Patrón

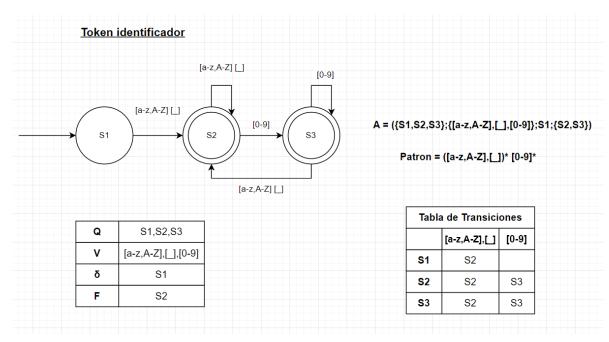
Una tabla que contiene todo tipo de token respecto a su lexema, y para identificarlo se usa expresiones regulares.

| Token(Componente Léxico) | Lexema             | Patrón                              |
|--------------------------|--------------------|-------------------------------------|
| 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]+[(),{},[], , ,:,;]  |

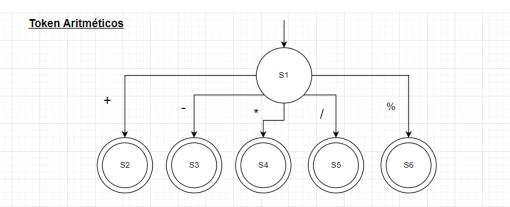
# Diagramas de estados

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

#### **Token Identificador**



### **Token Aritméticos**



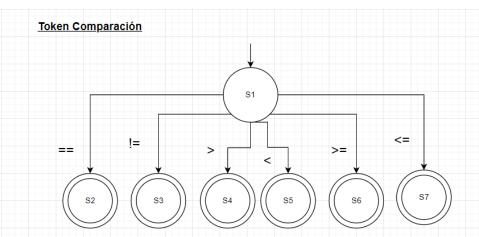
 $\mathsf{A} = (\{\$1,\$2,\$3,\$4,\$5,\$6\}; \{+,-,^*,/,\%\};\$1; \{\$2,\$3,\$4,\$5,\$6\})$ 

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

| Q | S1,S2,S3,S4,S5,S6   |  |  |  |
|---|---------------------|--|--|--|
| V | [+,-,*,/,%]         |  |  |  |
| δ | S1                  |  |  |  |
| F | \$2,\$3,\$4,\$5,\$6 |  |  |  |

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

### Token Comparación



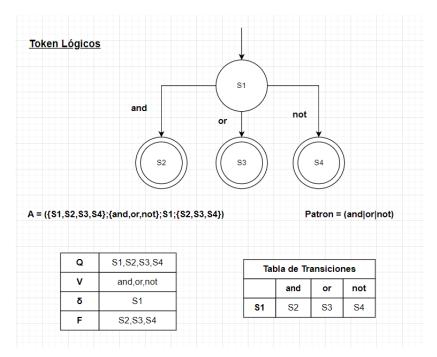
 $A = (\{\$1,\$2,\$3,\$4,\$5\}; \{=,!,>,<\}; \$1; \{\$2,\$3,\$4,\$5\})$ 

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

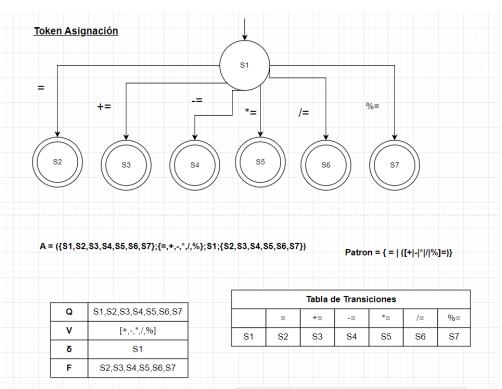
| Q | S1,S2,S3,S4,S5,S6,S7,S8 |  |  |  |
|---|-------------------------|--|--|--|
| V | [==,!=,>,<,>=,<=]       |  |  |  |
| δ | S1                      |  |  |  |
| F | S2,S3,S4,S5,S6,S7,S8    |  |  |  |

| Tabla de Transiciones |    |    |    |    |    |    |
|-----------------------|----|----|----|----|----|----|
|                       | == | I= | >  | <  | >= | <= |
| S1                    | S2 | S3 | S4 | S5 | S6 | S7 |

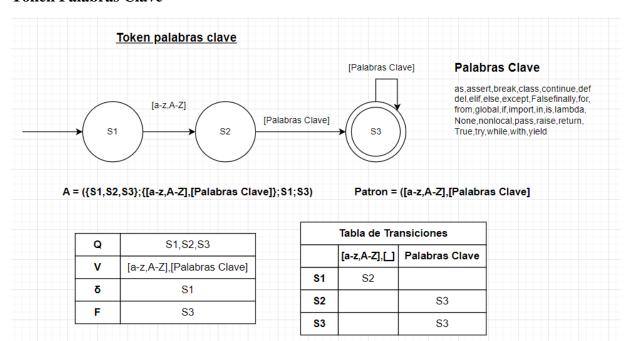
### Token Lógicos



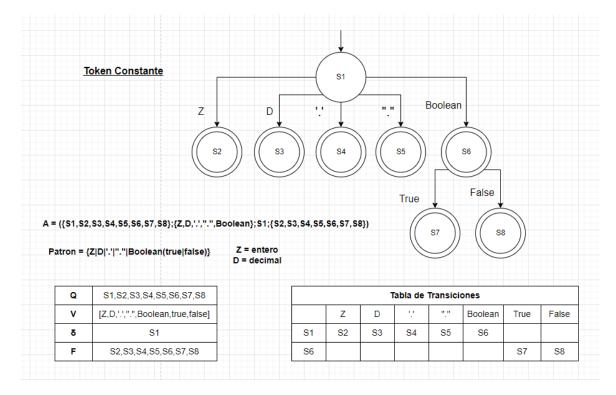
## Token Asignación



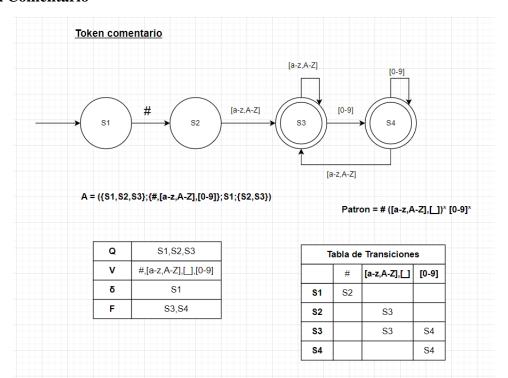
#### **Token Palabras Clave**



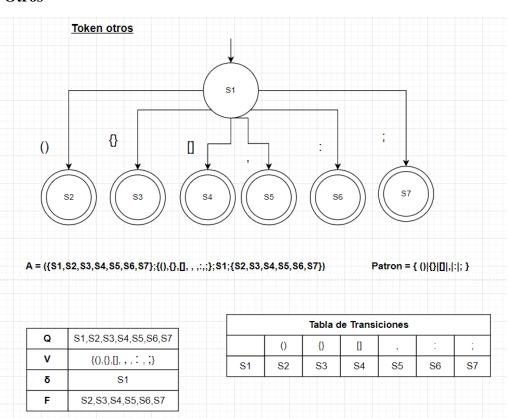
#### **Token Constantes**



#### **Token Comentario**

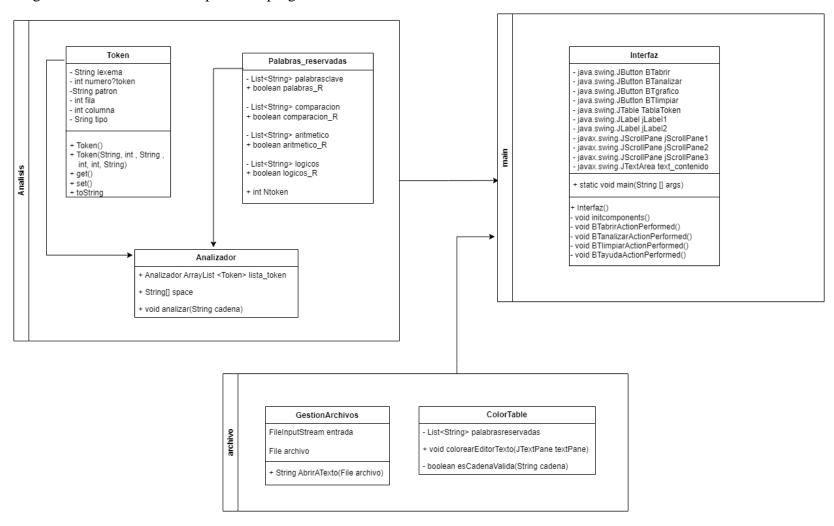


## **Token Otros**



## 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.

