Tarea Lezer

Alumno: Jeanmarco Alarcon, C.I: 27.117.926
Valencia, Marzo 2025

```
                                    json.grammar

@top JSON { s } //JSON = Element

s { Object | Array | String | Number | True | False | Null } //variable inicial y sus
producciones

String { string }                    //Regla terminal
Object { "{" list<Member>? "}" }     //Regla no terminal, recursiva
Member { MemberName ":" s }          //Regla no terminal
MemberName { string }                //Regla terminal
Array  { "[" list<s>? "]" }          //Regla no terminal, recursiva
list<T> { T ("," T)* }               //Regla con plantilla

@tokens {

  //numericos
  Number { '-'? integer fraction? exponent?  }    //Regla no terminal
  integer  { '0' | $[1-9] @digit* }               //terminal
  fraction { '.' @digit+ }                         //terminal
  exponent  { $[eE] $[+\-]? @digit+ }             //terminal

  //caracteres
  string { '"' char* '"' }  //                             //terminal
  char { $[\u{20}\u{21}\u{23}-\u{5b}\u{5d}-\u{24f}] | '\\"' }  //terminal (caracteres validos)

  //logicos
  True  { "true" }                                //terminal
  False { "false" }                               //terminal
  Null  { "null" }                                //terminal

  whitespace { @whitespace+ }
}

@skip { whitespace }
```

[	!	"	#	$		&	'	(	)	*	+	,	-	.	/
0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	002A	002B	002C	002D	002E	002F
0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
0030	0031	0032	0033	0034	0035	0036	0037	0038	0039	003A	003B	003C	003D	003E	003F
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	004A	004B	004C	004D	004E	004F
P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
0050	0051	0052	0053	0054	0055	0056	0057	0058	0059	005A	005B	005C	005D	005E	005F
`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
0060	0061	0062	0063	0064	0065	0066	0067	0068	0069	006A	006B	006C	006D	006E	006F
p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	DEL
0070	0071	0072	0073	0074	0075	0076	0077	0078	0079	007A	007B	007C	007D	007E	007F
PAD	HOP	BPH	NBH	IND	NEL	SSA	ESA	HTS	HTJ	LTS	PLD	PLU	RI	SS2	SS3
0080	0081	0082	0083	0084	0085	0086	0087	0088	0089	008A	008B	008C	008D	008E	008F
DCS	PU1	PU2	STS	CCH	MW	SPA	EPA	SOS	SG CI	SCI	CSI	ST	OSC	PM	APC
0090	0091	0092	0093	0094	0095	0096	0097	0098	0099	009A	009B	009C	009D	009E	009F

Caracteres definidos para Basic Latin, Latin-1, Latin Extended-A y B

Basic Latin 0000–007F

Latin-1 Supplement 0080–00FF

Latin Extended-A 0100–017F

Latin Extended-B 0180–024F

Gramática en texto plano (json.grammar)

```
@top JSON { s } //JSON = Element

s { Object | Array | String | Number | True | False | Null } //variable inicial
y sus producciones

String { string }                //Regla terminal
Object { "{" list<Member>? "}" }    //Regla no terminal, recursiva
Member { MemberName ":" s }       //Regla no terminal
MemberName { string }             //Regla terminal
Array  { "[" list<s>? "]" }       //Regla no terminal, recursiva
list<T> { T ("," T)* }            //Regla con plantilla

@tokens {

  //numericos
  Number { '-'? integer fraction? exponent?  }    //Regla no terminal
  integer  { '0' | $[1-9] @digit* }            //terminal
  fraction { '.' @digit+ }                     //terminal
  exponent  { $[eE] $[+\-]? @digit+ }          //terminal

  //caracteres
  string { '"' char* '"' }
  char { $[\u{20}\u{21}\u{23}-\u{5b}\u{5d}-\u{24f}] | '\\"' }

  //logicos
  True  { "true" }
  False { "false" }
  Null  { "null" }

  whitespace { @whitespace+ }
}

@skip { whitespace }
```
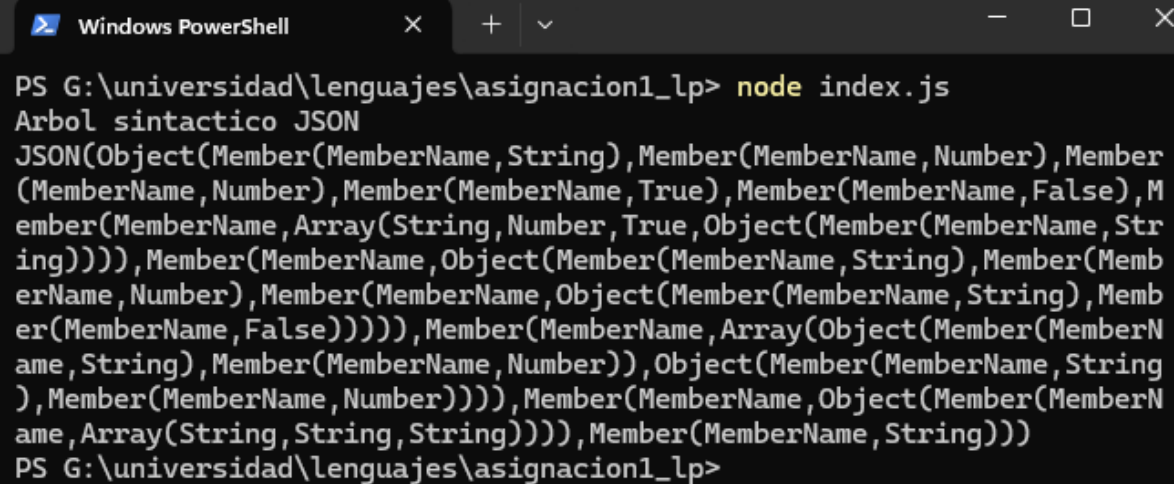
Salida por consola

```
Arbol sintactico JSON
JSON(Object(Member(MemberName,String),Member(MemberName,Number),Member(M
emberName,Number),Member(MemberName,True),Member(MemberName,False),Membe
r(MemberName,Array(String,Number,True,Object(Member(MemberName,String)))
),Member(MemberName,Object(Member(MemberName,String),Member(MemberName,N
umber),Member(MemberName,Object(Member(MemberName,String),Member(MemberN
ame,False))))),Member(MemberName,Array(Object(Member(MemberName,String),
Member(MemberName,Number)),Object(Member(MemberName,String),Member(Membe
rName,Number)))),Member(MemberName,Object(Member(MemberName,Array(String
,String,String)))),Member(MemberName,String)))
```