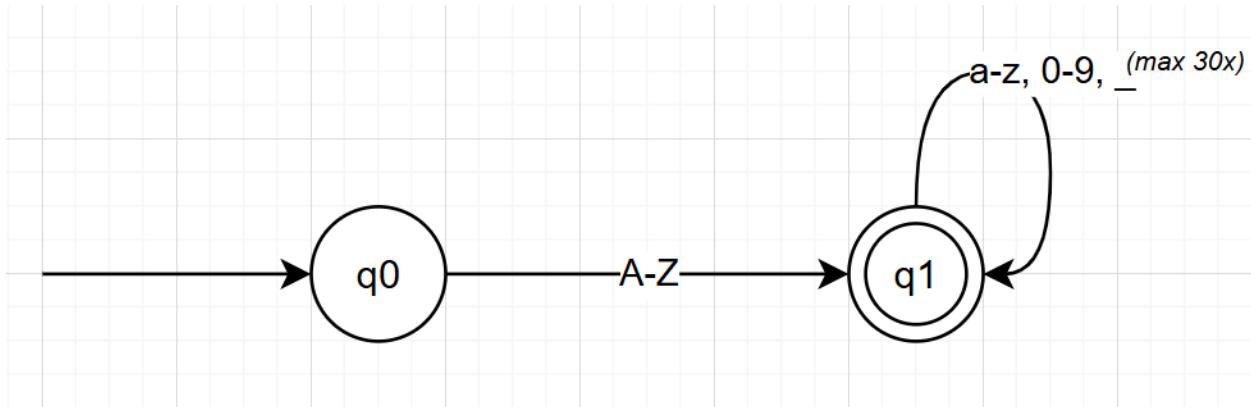


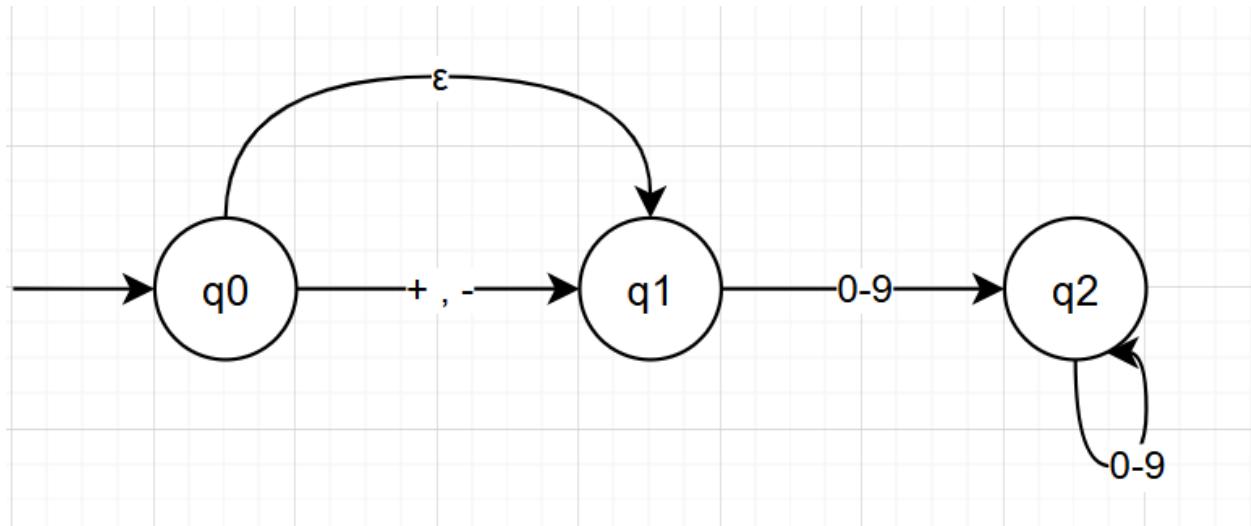
Assignment 1

Regular Expressions & NFAs:

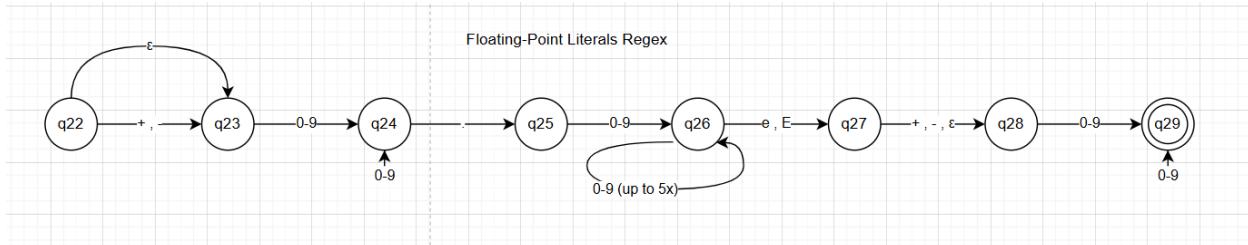
Identifiers regex: [A-Z][a-zA-Z0-9]{0,30}



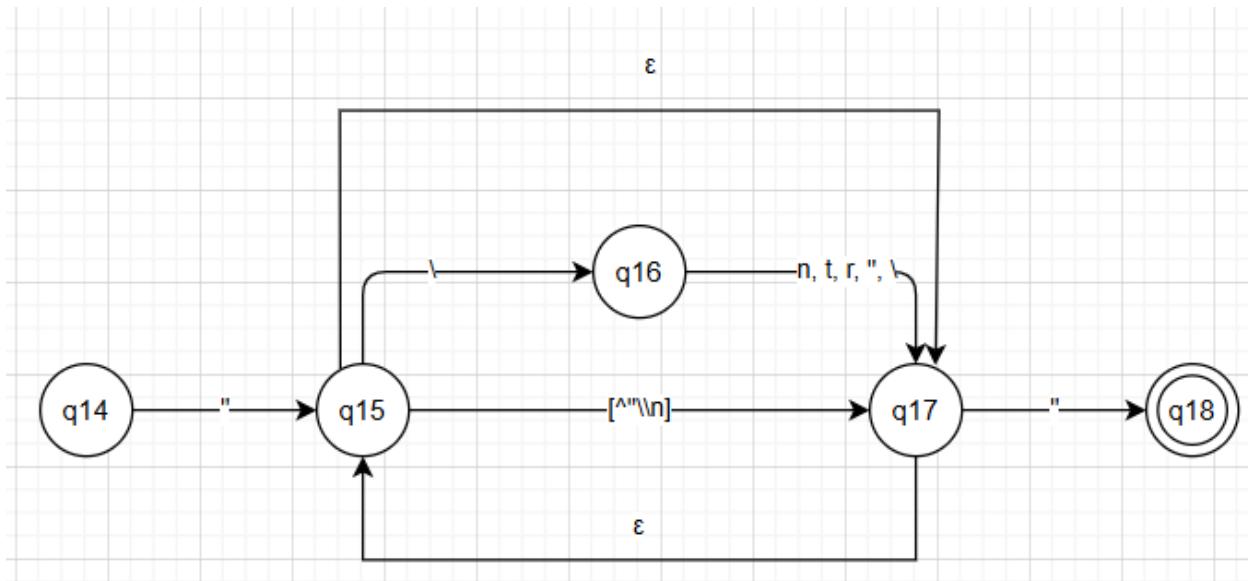
Integer Literals Regex: [+-]?[0-9]+



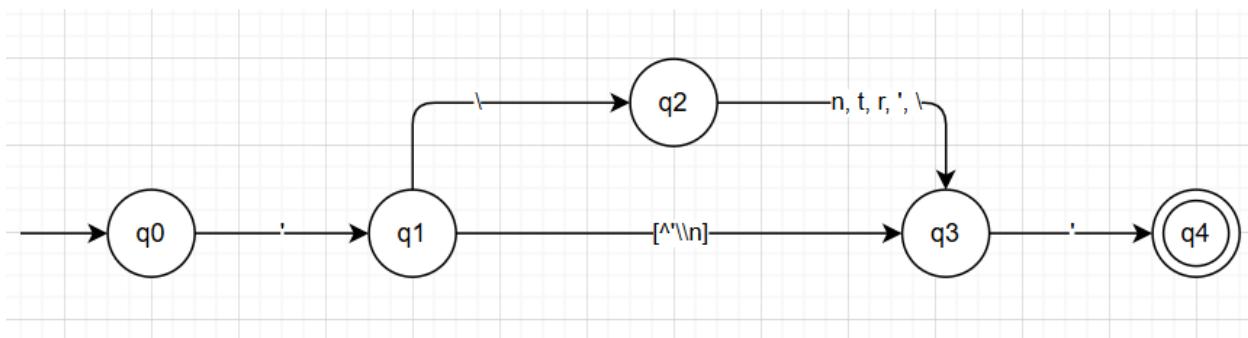
Floating-Point Literals Regex: [+-]?[0-9]+.[0-9]{1,6}([eE][+-]?[0-9]+)?



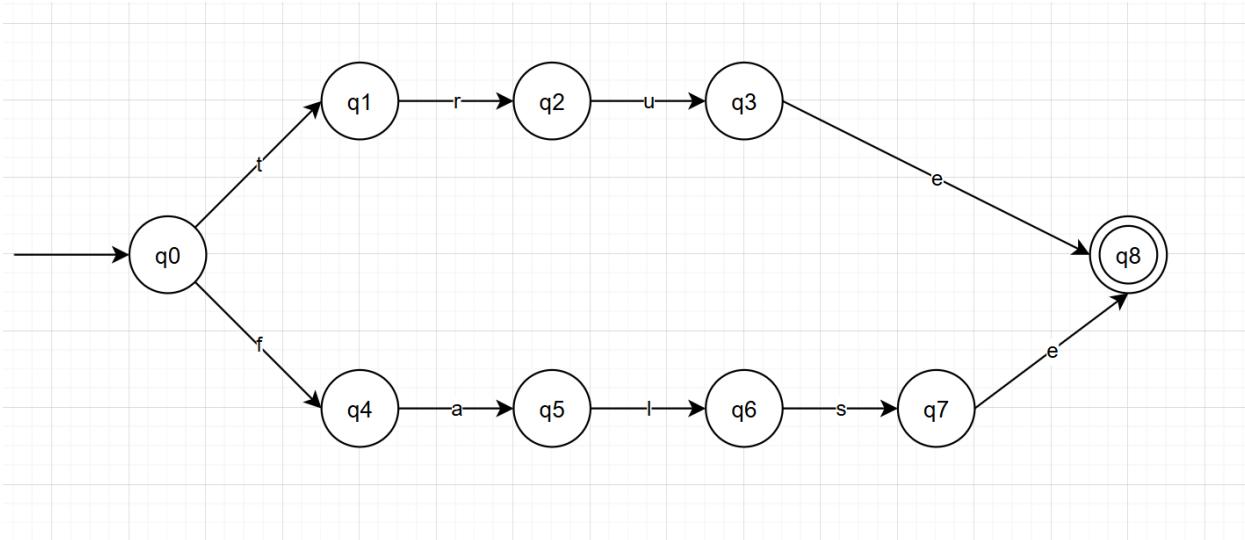
String Literals Regex: "([^"\\"n]|\\"ntr])*"



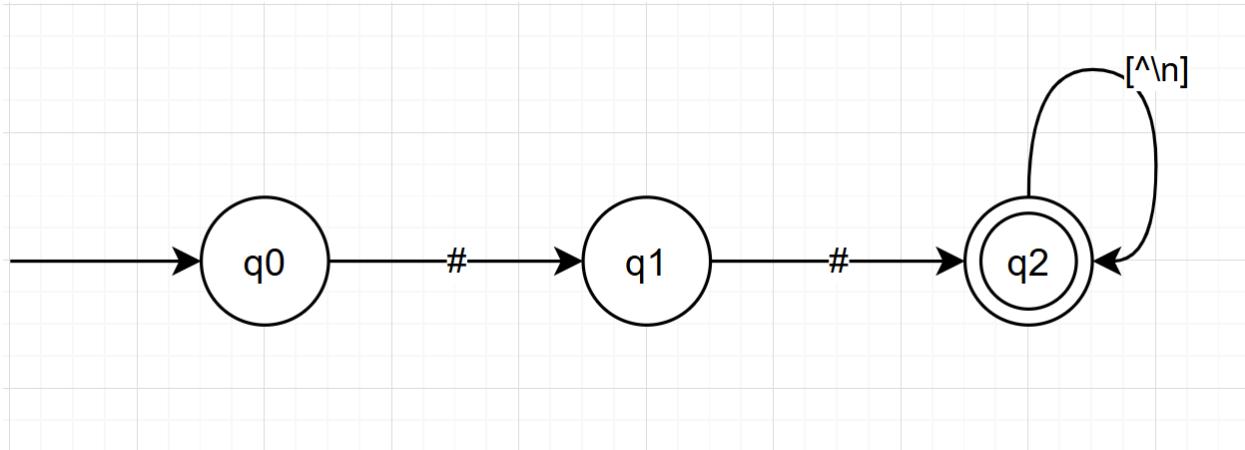
Character Literals Regex: '([^'\\"n]|\\'ntr)'



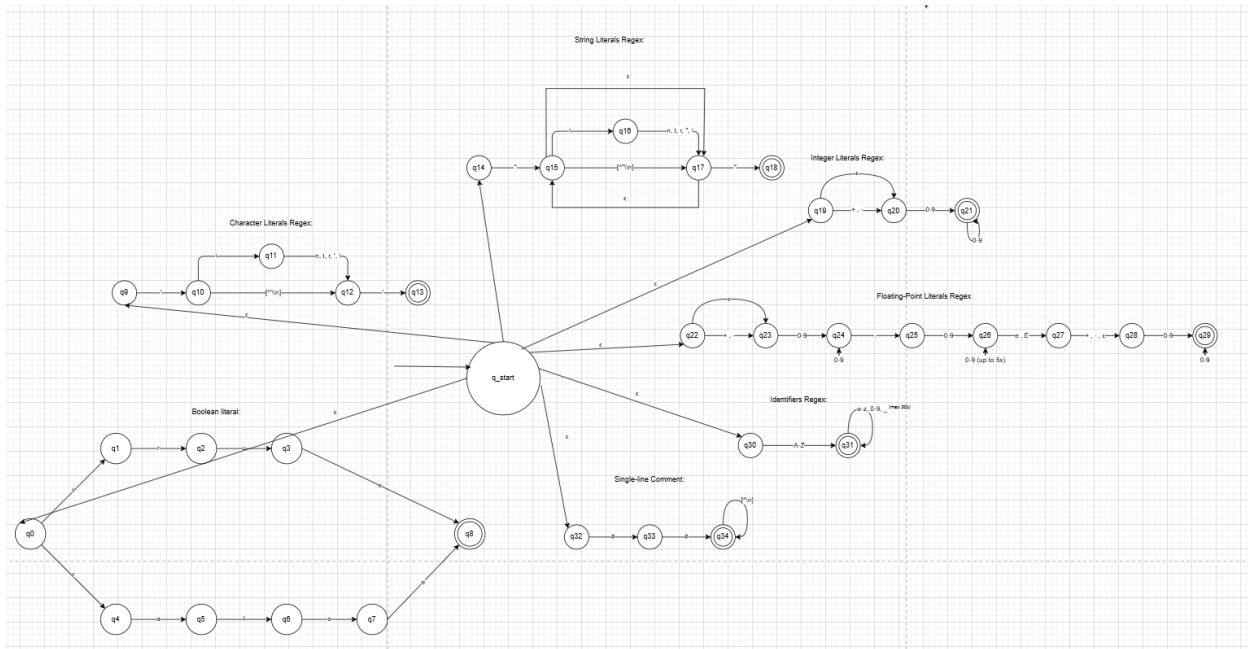
Boolean Literals Regex: (true|false)



Single-line Comment: ##[^\n]*



Combined NFA:



DFA Transition Table:

Current State	[A-Z]	[a-z0-9_]	[0-9]	[+-]	.	e/E	t	f	#	'	"	\	Other
Start	Identifier	-	Integer	got '+/-'	-	-	got 't'	got 'f'	got '#'	Char Open	String Open	-	DE AD
Identifier*	-	Identifier	Identifier	-	-	-	-	-	-	-	-	-	DE AD
Integer*	-	-	Integer	-	got '.'	-	-	-	-	-	-	-	DE AD
got '+/-'	-	-	Integer	-	-	-	-	-	-	-	-	-	DE AD
got '.'	-	-	Float	-	-	-	-	-	-	-	-	-	DE AD
Float*	-	-	Float	-	-	got 'e/E'	-	-	-	-	-	-	DE AD
got 'e/E'	-	-	Float+Exp	got 'e+/-'	-	-	-	-	-	-	-	-	DE AD
got 'e+/-'	-	-	Float+Exp	-	-	-	-	-	-	-	-	-	DE AD
Float+Exp*	-	-	Float+Exp	-	-	-	-	-	-	-	-	-	DE AD
got 't'	-	-	-	-	-	-	-	-	-	-	-	-	DE AD
true*	-	-	-	-	-	-	-	-	-	-	-	-	DE AD
got 'f'	-	-	-	-	-	-	-	-	-	-	-	-	DE AD
false*	-	-	-	-	-	-	-	-	-	-	-	-	DE AD
Char Open	Char Body	Char Body	Char Body	Char Body	Char Body	Char Body	Char Body	Char Body	Char Body	Char Body	Char Escape	Char Body	DE AD

DFA Diagram:

