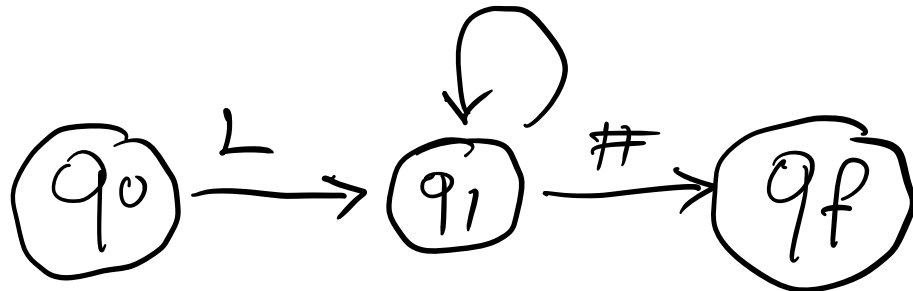


Task 1

Acceptor of Identifiers.
D

$L.D^+$



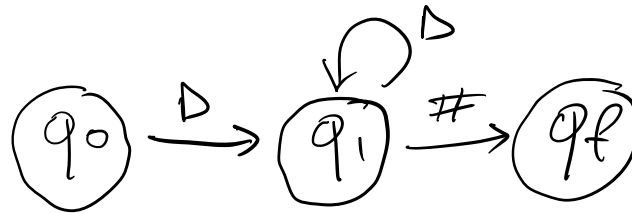
Table

	q_0	q_1
L	q_1	q_1
D	Fail	q_1
$\#$	Fail	q_f

Task 2

a) Unsigned decimal constants

D+



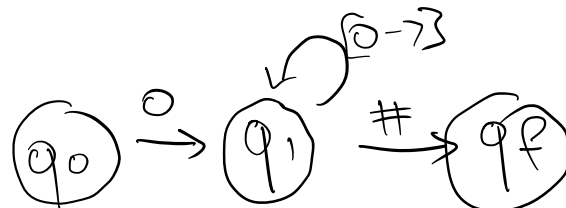
Table

	q ₀	q ₁
D	q ₁	q ₁
other	Fail	Fail
#	Fail	q _f

b) Octal constants (C or C++)

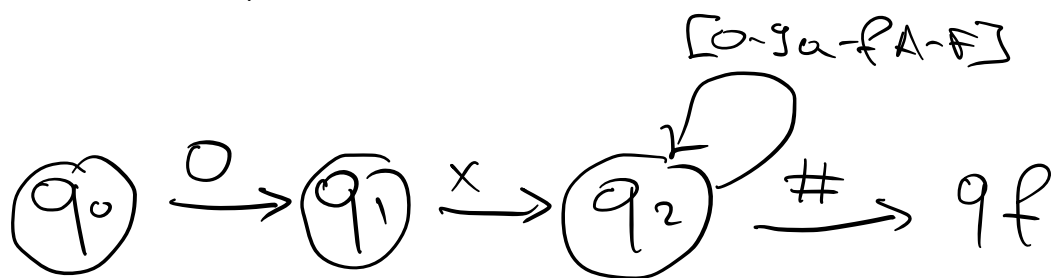
O[0-7]+

	q ₀	q ₁
0	q ₁	q ₁
0-7	q ₀	q ₁
other	Fail	Fail
#	Fail	q _f



c) Hexadecimal constants (C++)

0x[0-9a-fA-F]

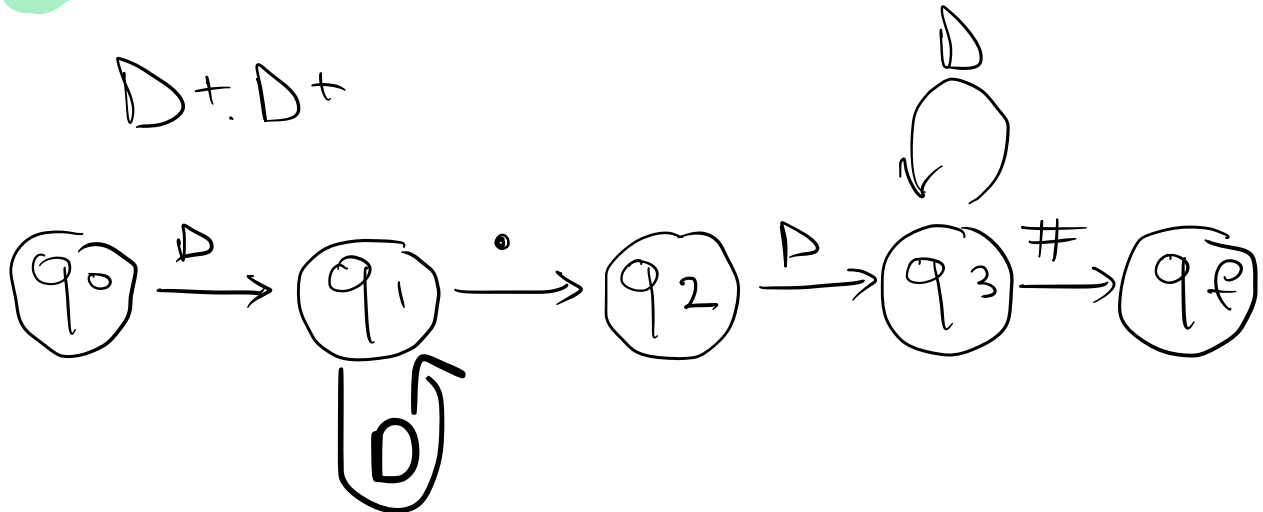


Table

	q_0	q_1	q_2
0	1	Fail	q_2
x	Fail	q_2	Fail
0-9a-fA-F	Fail	Fail	q_2
other	Fail	Fail	Fail
#	Fail	Fail	qf

d) Real decimals :

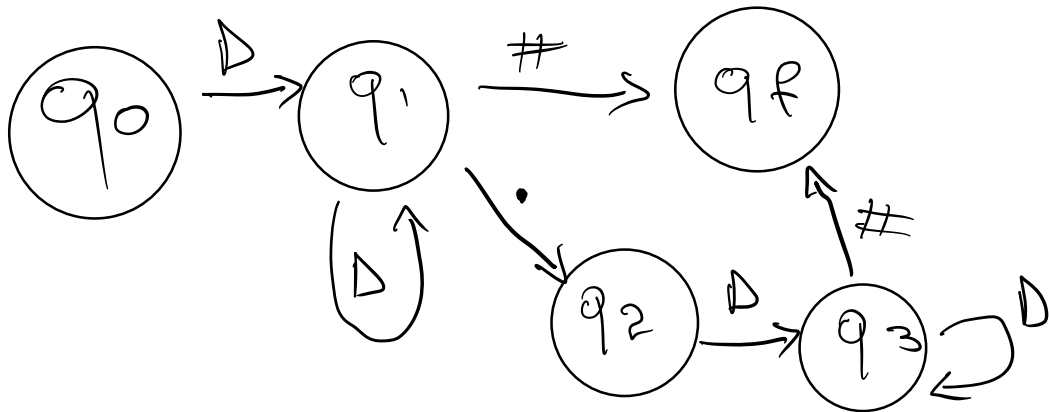
$D+.D^+$



Table

	q_0	q_1	q_2	q_3
D	q_1	q_1	q_3	q_3
.	Fail	q_2	Fail	Fail
other	Fail	Fail	Fail	Fail
#	Fail	Fail	Fail	q_f

$D + D^*$

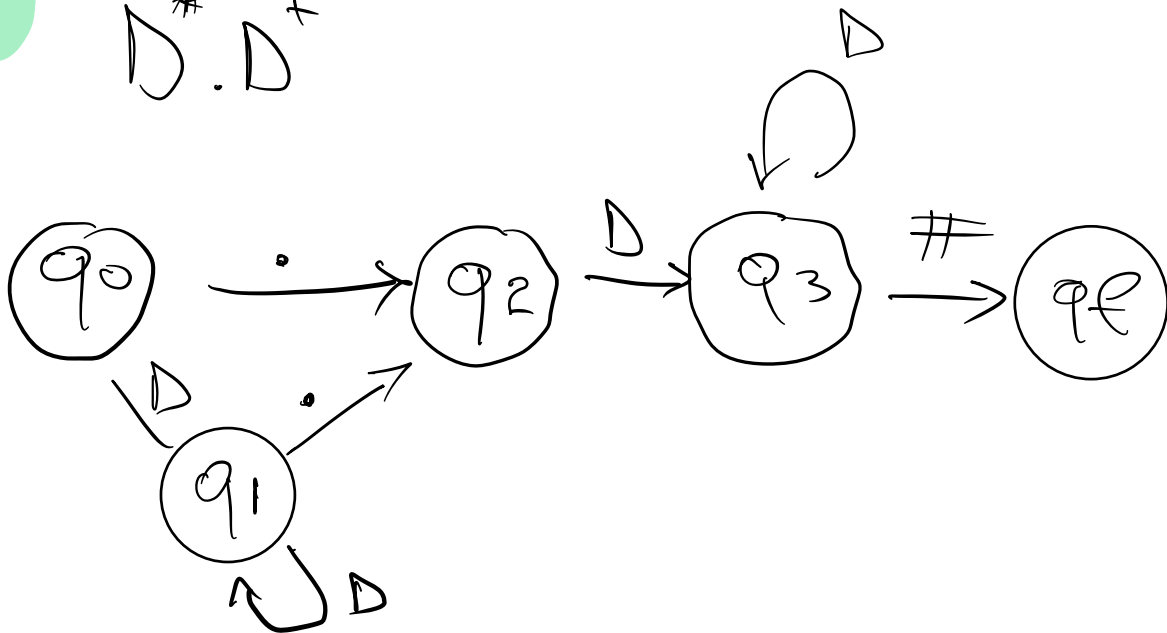


Table

	q_0	q_1	q_2	q_3
D	q_1	q_1	q_3	q_3
.	Fail	q_2	Fail	Fail
other	Fail	Fail	Fail	Fail
#	Fail	q_f	Fail	q_f



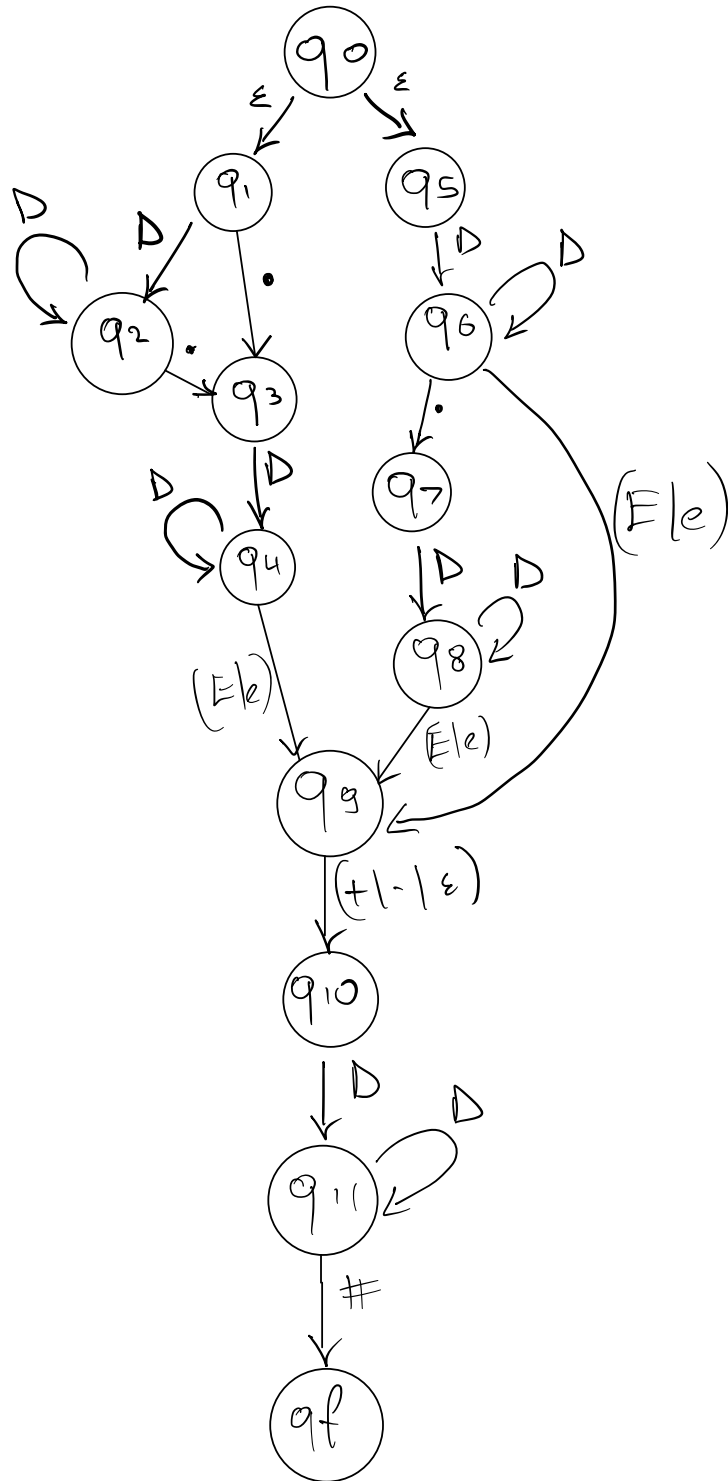
$D^* D^+$



Table

	q ₀	q ₁	q ₂	q ₃
D	q ₁	q ₁	q ₃	q ₃
•	q ₂	q ₂	Fail	Fail
other	Fail	Fail	Fail	Fail
#	Fail	Fail	Fail	q _f

$(D^+ \cdot D^* \ D^* \cdot D^+) (E|e) (+|-|\epsilon) D^+$



Table

	q ₀	q ₁	q ₂	q ₃	q ₄	q ₅	q ₆	q ₇	q ₈	q ₉	q ₁₀	q ₁₁
D	X	q ₂	q ₂	q ₄	q ₄	q ₆	q ₆	q ₈	q ₈	X	q ₁₁	q ₁₁
.	X	q ₃	q ₃	X	X	X	q ₇	X	X	X	X	X
(E/e)	X	X	X	X	q ₉	X	X	X	q ₉	X	X	X
+/-	X	X	X	X	X	X	X	X	X	q ₁₀	X	X
other	X	X	X	X	X	X	X	X	X	X	X	X
#	X	X	X	X	X	X	X	X	X	X	X	q ₁₁

e | q₁, q₅ | ... X, X...