LAB1 → PART1: FLOAT PARSER

REGEX: [+−]?[0−9]*\.?[0,9]+([eE][+−]?[0−9]+)?

NFA:
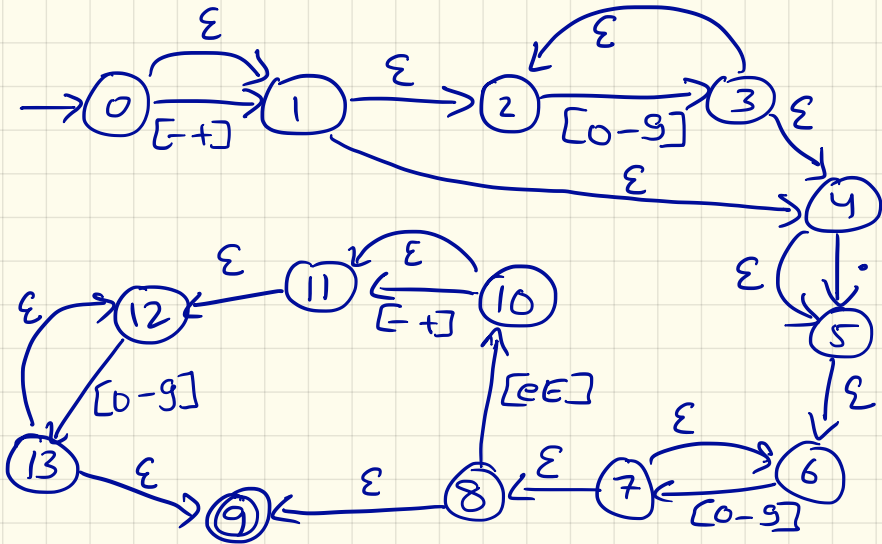
Transition Table

STATES	[−+]	[0−9]	\.	[eE]
A {0,1,2,4,5,6}	B {1,2,4,5,6}	C {2,3,4,5,6,7,8,9}	D {5,6}	{}
B {1,2,4,5,6}	{}	C {2,3,4,5,6,7,8,9}	D {5,6}	{}
C {2,3,4,5,6,7,8,9}	{}	C {2,3,4,5,6,7,8,9}	D {5,6}	E {10,11,12}
D {5,6}	{}	F {6,7,8,9}	{}	{}
E {10,11,12}	G {11,12}	H {12,13,9}	{}	E {10,11,12}
F {6,7,8,9}	{}	F {6,7,8,9}	{}	{}
G {11,12}	{}	H {12,13,9}	{}	{}
H {12,13,9}	{}	H {12,13,9}	{}	{}

DFA:
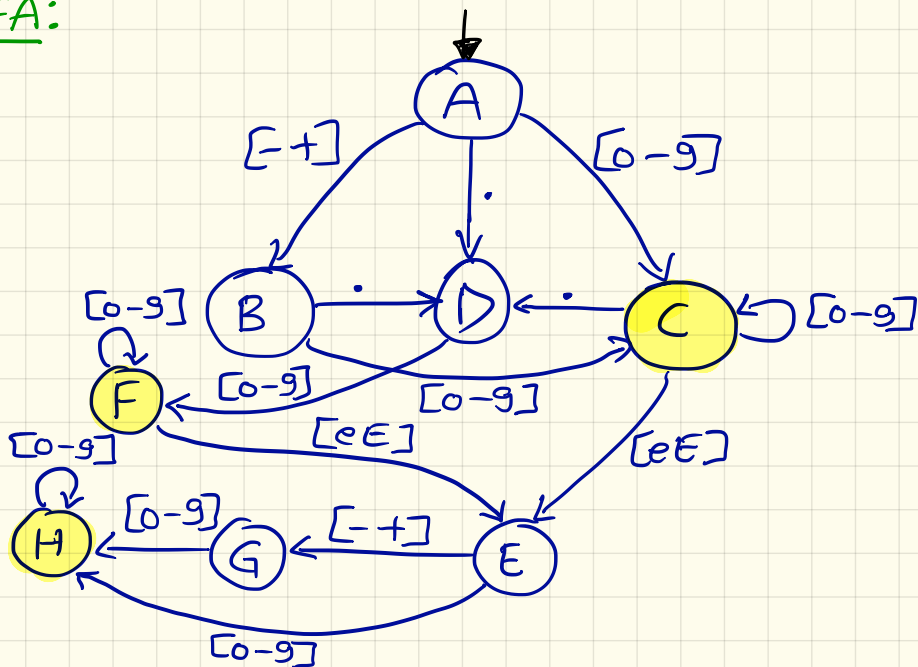
Accept states are highlighted.