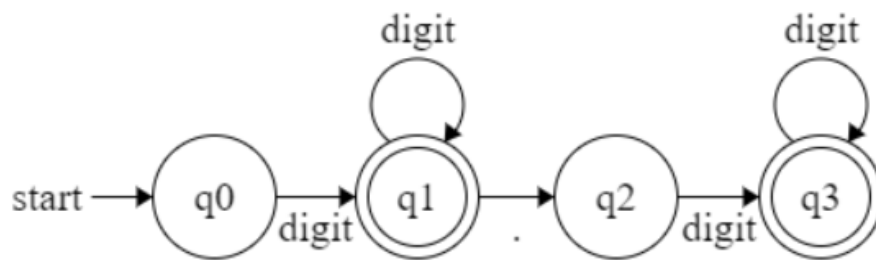
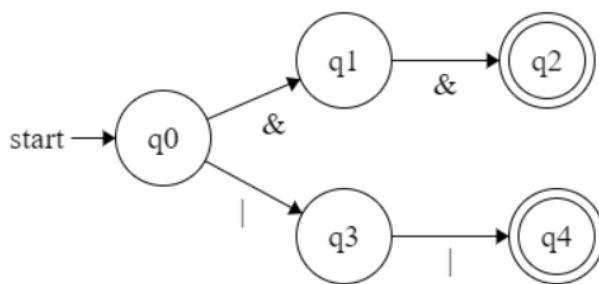


Regular Expressions & DFA

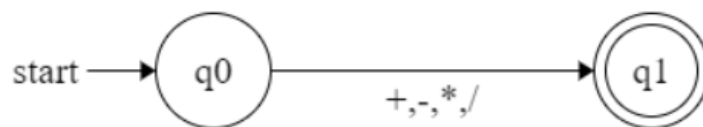
- 1) Number:
a) digit = [0-9]
b) nat = digit +
Number = nat("." nat)?



- 2) Boolean Operator = (& & | ||)



- 3) Arithmetic Operator = (\+ | - | * | /)



- 4) Brackets:
a) closed curly brace = }



b) open curly brace = {



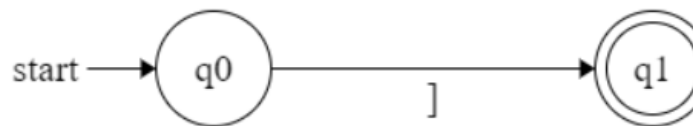
c) Closed round brace =)



d) Open round brace = (



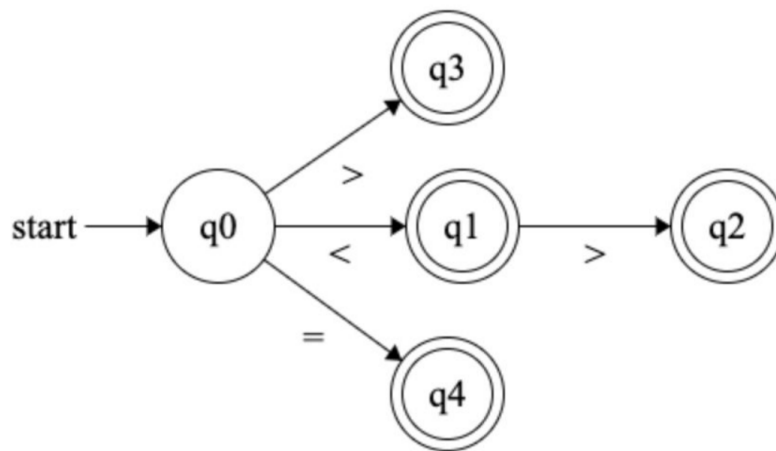
e) Closed square brace =]



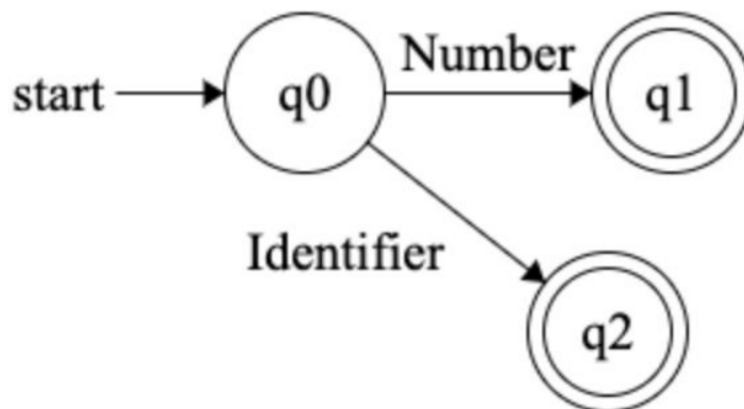
f) Open square brace = [



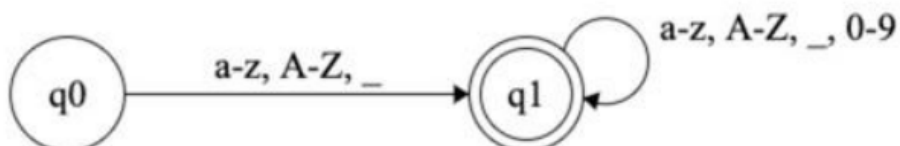
5) Conditional Operator = (< > | < | > | =)



6) Term RE = (Number | Identifier)

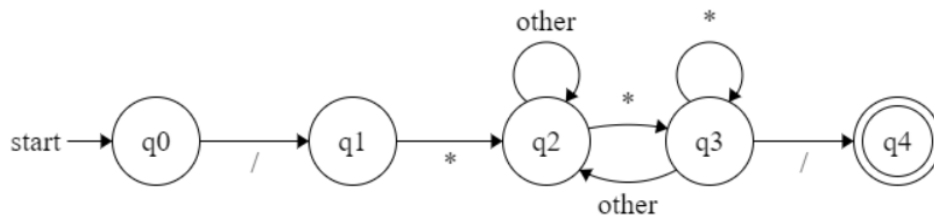


7) Identifiers & function name = (a-z | A-Z | _) (a-z | A-Z | _ | 0-9)*



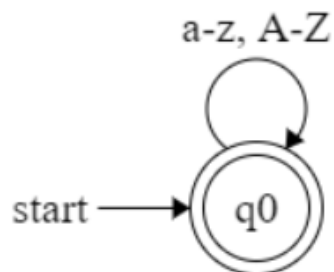
8) Comment= (\ / * . * * \ /)

other : any character or number

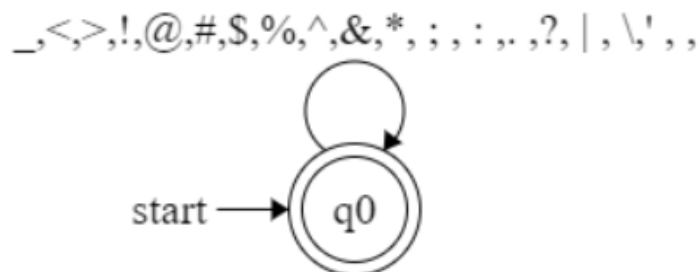


9) String:

a) Letters: ([a-z] | [A-Z])*

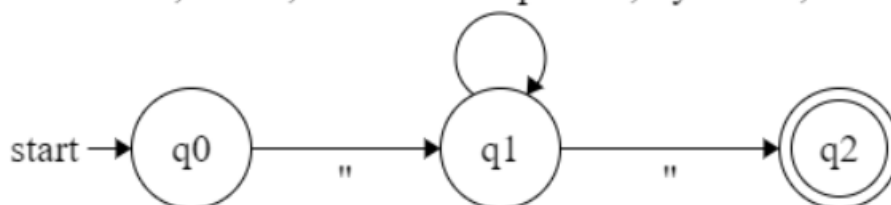


b) Symbols: (_ | < | > | ! | @ | # | \$ | % | ^ | & | * | ' | ; | : | , | \ | ? | \. | \| | \\ | £)*



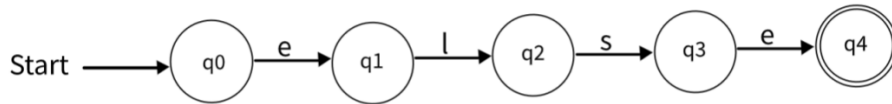
Strings = (Number | Letters | Arithmetic Operator | Symbols | Brackets)*

Number, Letter, Arithmetic Operator, Symbols , Brackets

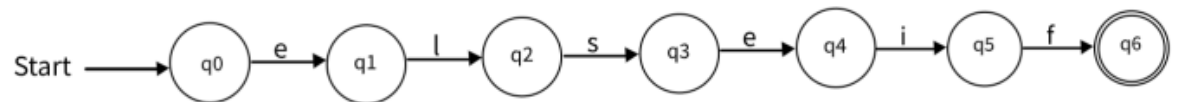


10) Reserved Words = (int | return | main | read | repeat | write | endl | until | string)

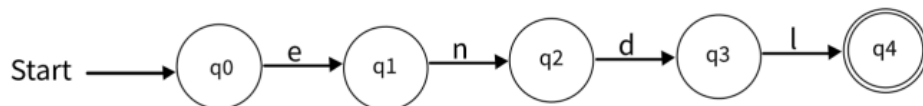
a) Else



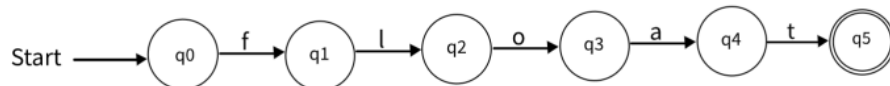
b) Else if



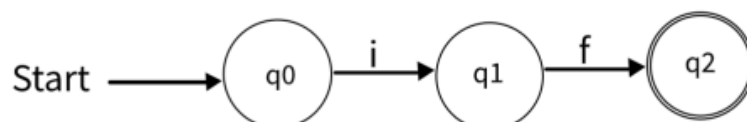
c) endl



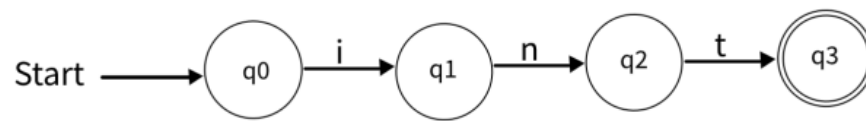
d) Float



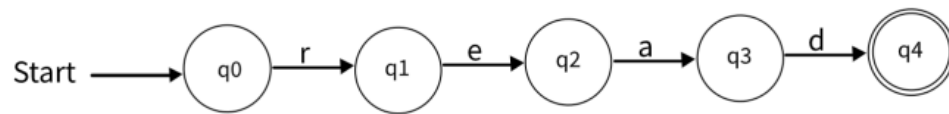
e) if



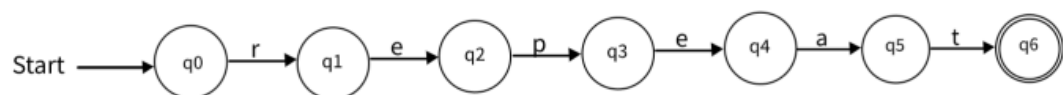
f) int



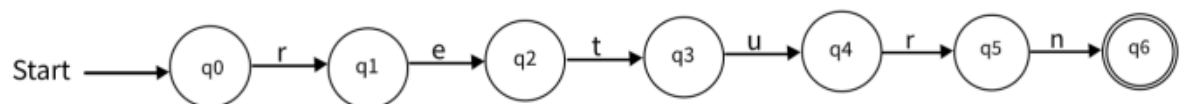
g) Read



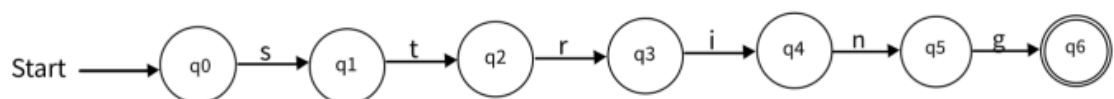
h) Repeat



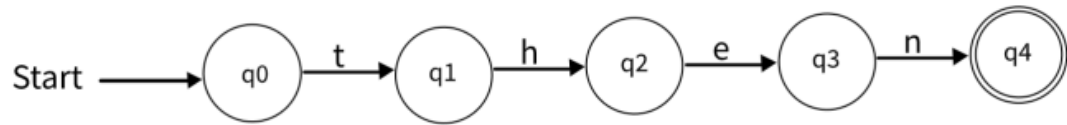
i) Return



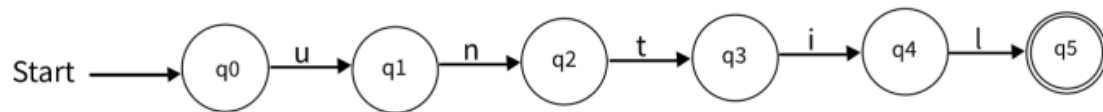
j) string



k) Then



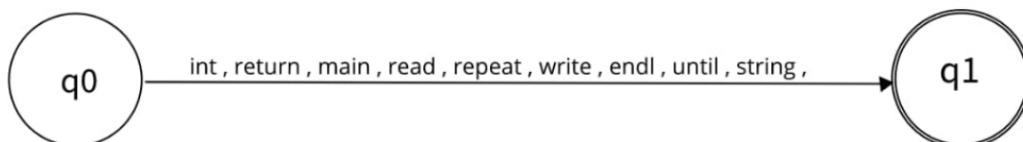
l) until



m) write



Reserved word DFA:



11) Datatype = (int | string | float)

