

REGULAR EXPRESSIONS

(1) Keywords:-

(1.1) Int:

int

(1.2) Float:

float

(1.3) String:

string

(1.4) For:

for

(1.5) While:

while

(1.6) If:

if

(1.7) Else:

else

(2) Symbols & Punctuations:-

(2.1) ; :

;

(2.2) (:

(

(2.3)) :

(2.4) { :

{

(2.5) } :

}

(2.6) . :

.

(2.7) - :

-

(2.8) + :

+

(2.9) * :

*

(2.10) / :

/

(2.11) < :

<

(2.12) > :

>

(2.13) <= :

<=

(2.14) >= :

>=

(2.15) == :

==

(2.16) & ;

&

(2.17) ! ;

!

(2.18) | ;

|

(3) Numbers:-

 $\therefore \text{digit} \rightarrow [0-9]$ $\therefore (\text{digit})^* + ((\text{digit})^* \cdot (\text{digit})^*)$

(4) Literals:-

 $\therefore \text{letter} \rightarrow [a-z, A-Z]$ $\text{digit} \rightarrow [0-9]$ $\text{symbol} \rightarrow [; - !]$ $\therefore "(\text{letter}|\text{digit}|\text{symbol})^*" "$

It can be written in this form.

 $\Rightarrow "(\text{letter} + \text{digit} + \text{symbol})^*" "$

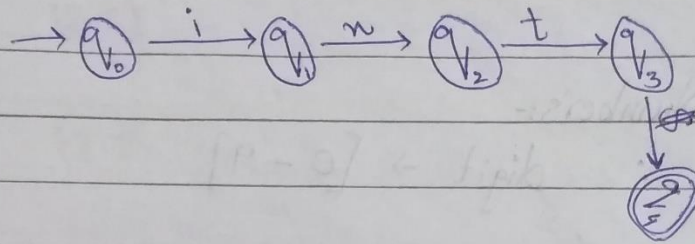
(5) Identifiers:-

 $\therefore \text{letter} \rightarrow [a-z, A-Z], - \text{ is underscore}$ $\text{digit} \rightarrow [0-9]$ $\therefore (\text{letter})^* + (\text{letter}^* \text{digit}^*) + (\text{letter}^* - \text{digit}^*) + (\text{letter}^* - \text{letter}^*)$

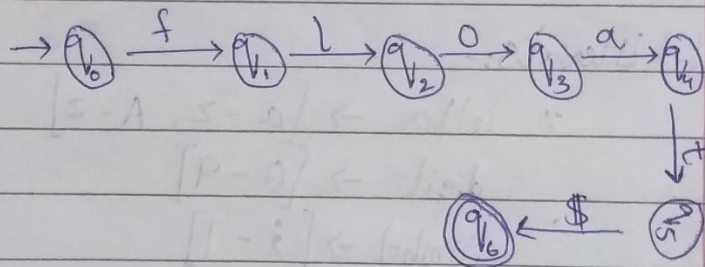
EQUIVALENT NFA'S

(1) Keywords:-

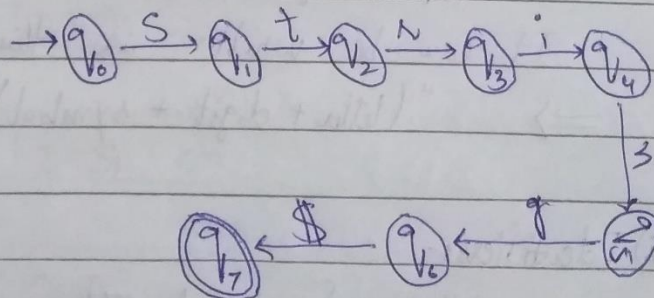
(1.1) Int:



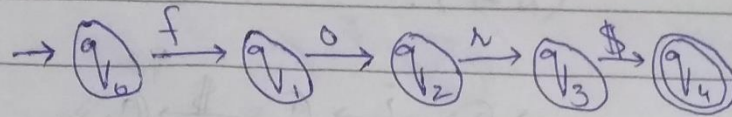
(1.2) Float:



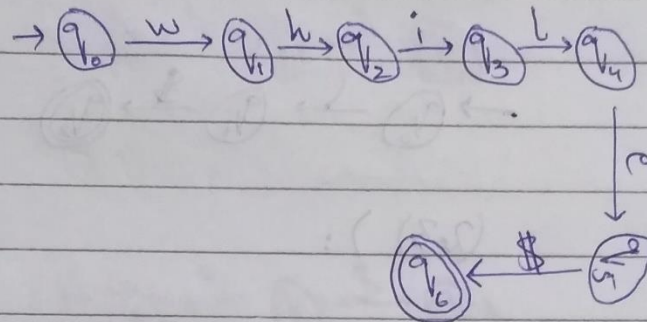
(1.3) String:



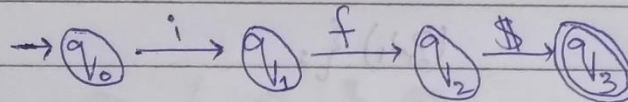
(1.4) For:



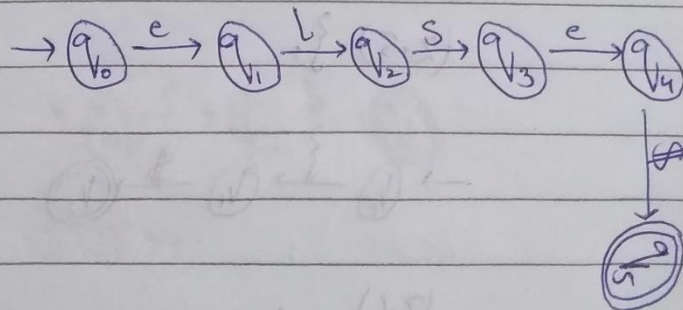
(1.5) While:



(1.6) If:

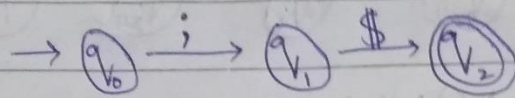


(1.7) Else:

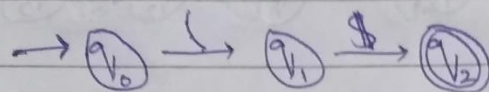


(2) Symbols & Punctuations:-

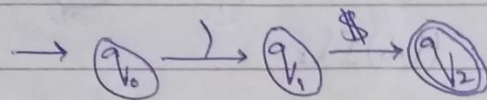
(2.1) ; :



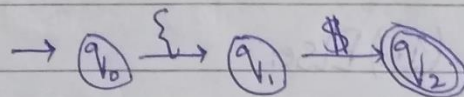
(2.2) \ :



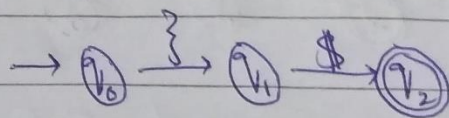
(2.3) \ :



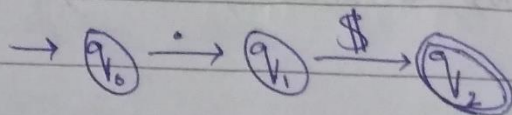
(2.4) { :



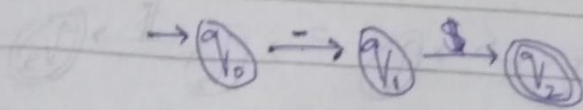
(2.5) } :



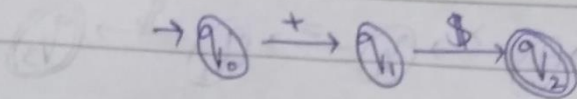
(2.6) . :



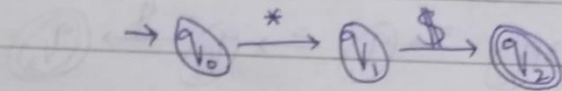
(2.7) - :



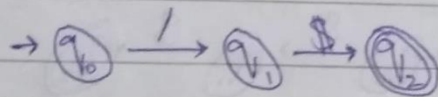
(2.8) + :



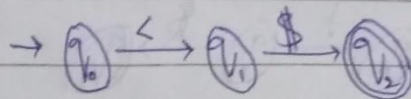
(2.9) * :



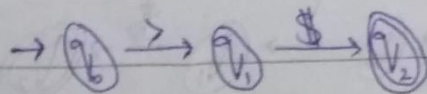
(2.10) / :

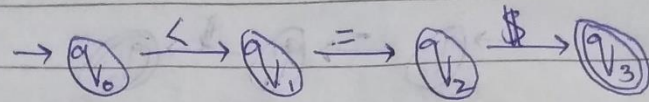
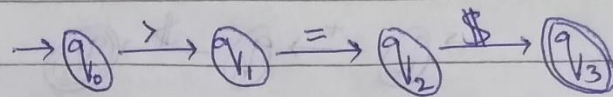
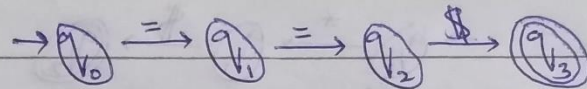
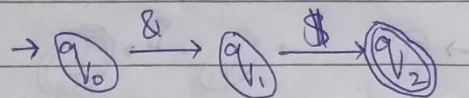
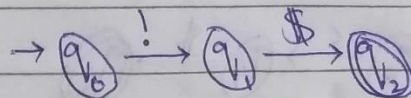
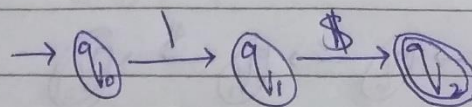


(2.11) < :



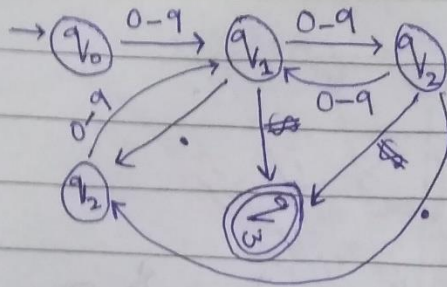
(2.12) > :



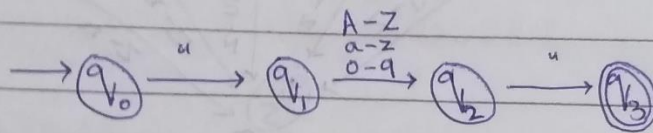
(2.13) \leq :(2.14) $>$:(2.15) $=$:(2.16) $\&$:(2.17) $!$:(2.18) $|$:

Date: _____

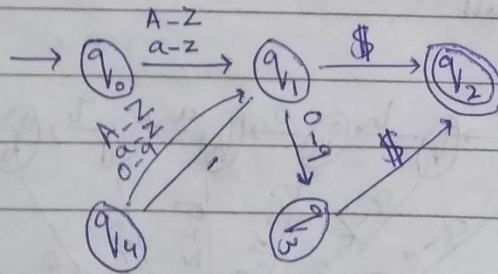
(3) Numbers:-



(4) Literals:-



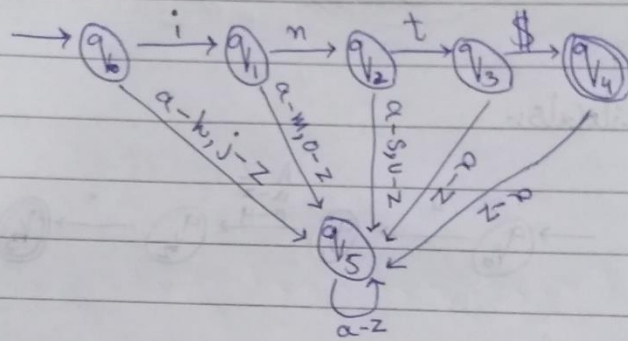
(5) Identifiers:-



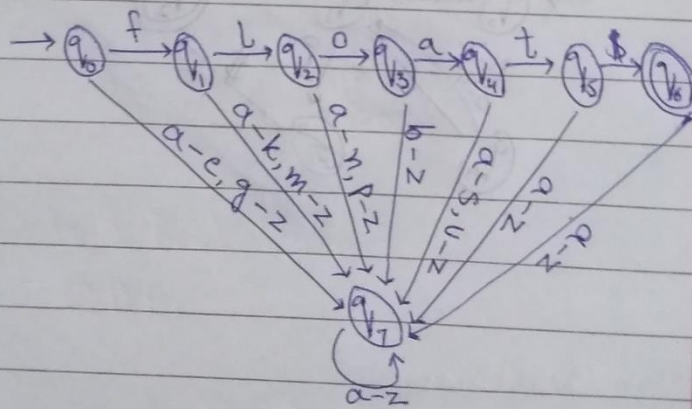
EQUIVALENT DFA'S

(1) Keywords:-

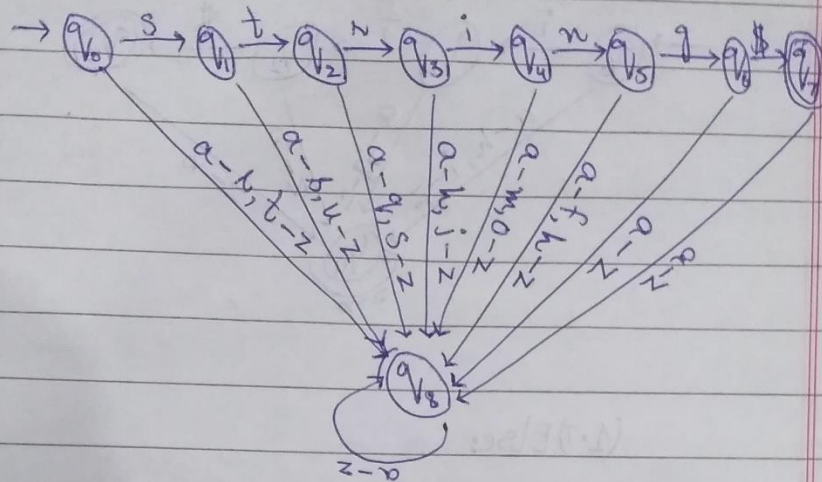
(1.1) Int:



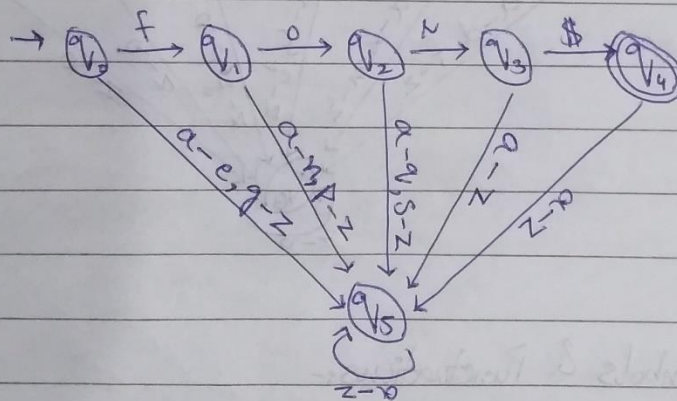
(1.2) Float:



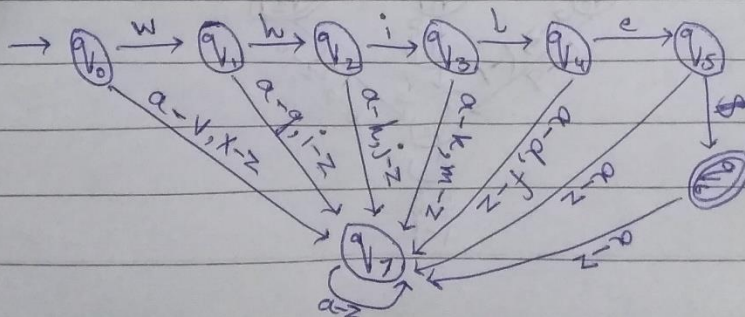
(1.3) Strings



(1.4) For:

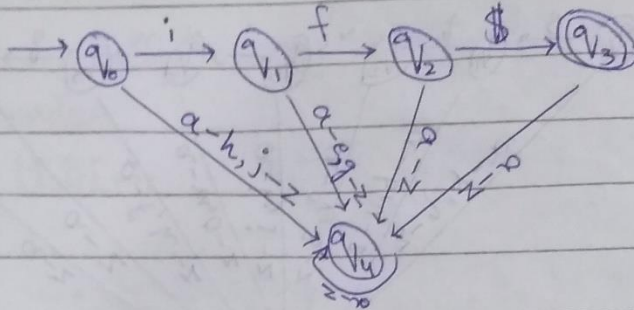


(1.5) While:

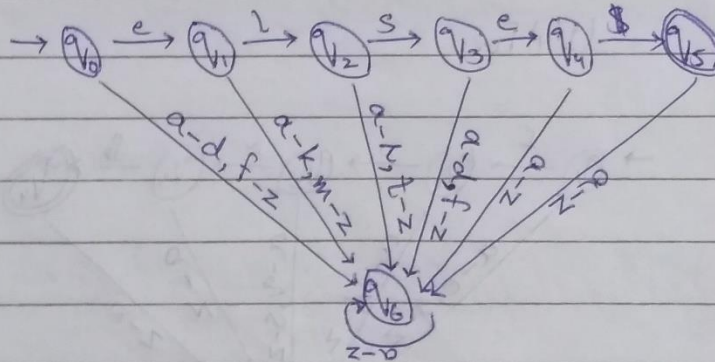


Date: _____

(1.6) If :

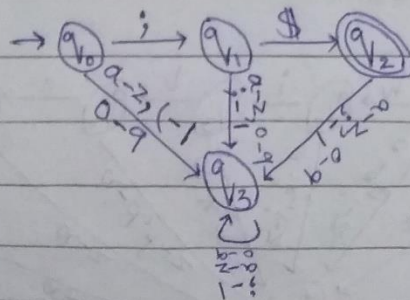


(1.7) Else:



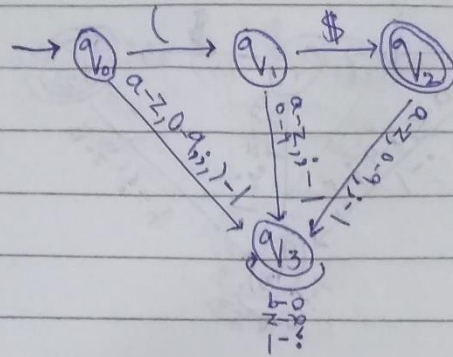
(2) Symbols & Punctuations:-

(2.1) ; :

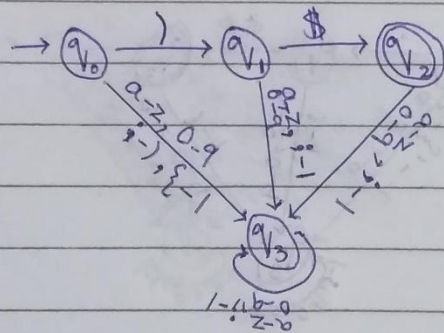


Date: _____

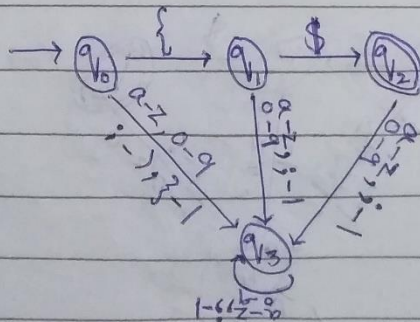
(2.2) \cup :



(2.3) \cap :

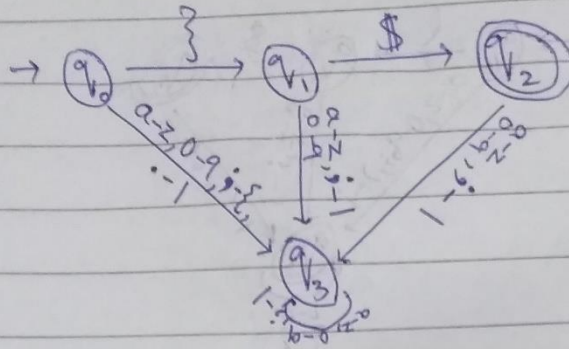


(2.4) $\{$:

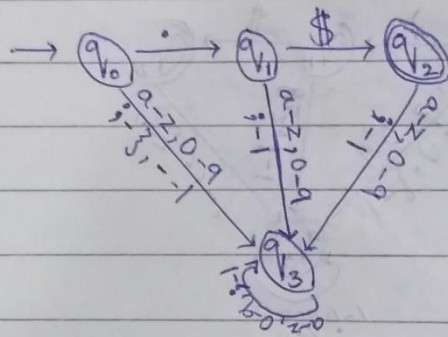


Date: _____

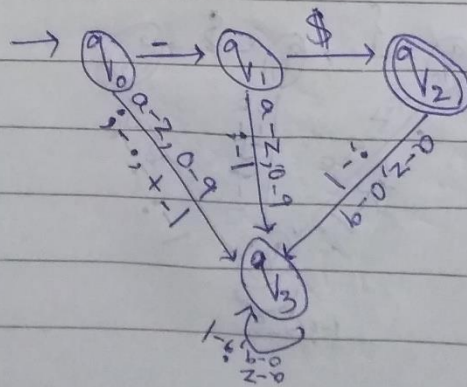
(2.5) }:



(2.6) .:

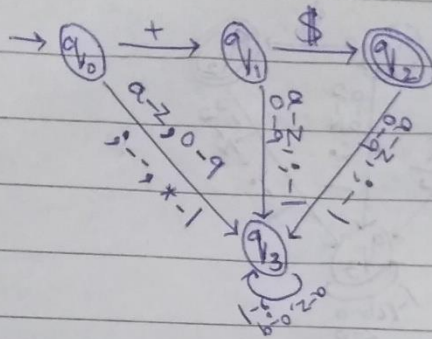


(2.7) -:

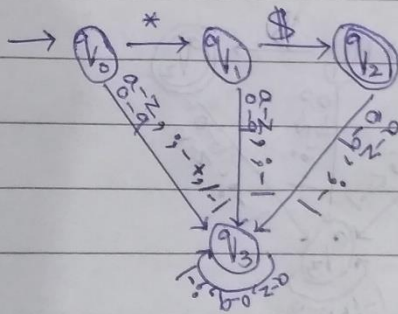


Date: _____

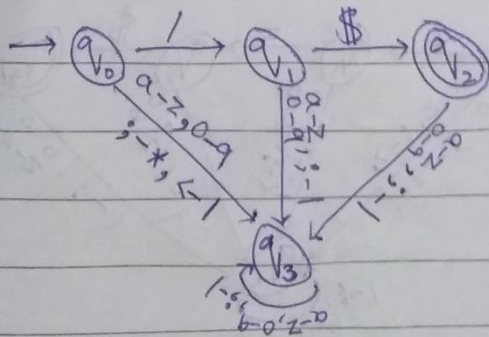
$(2.8) + :$



$(2.9) * :$

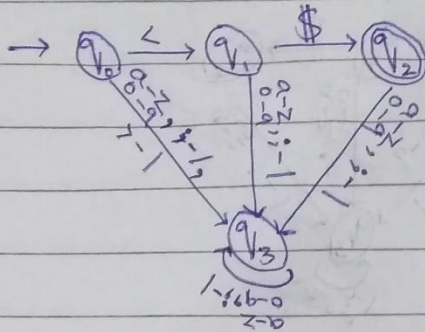


$(2.10) / :$

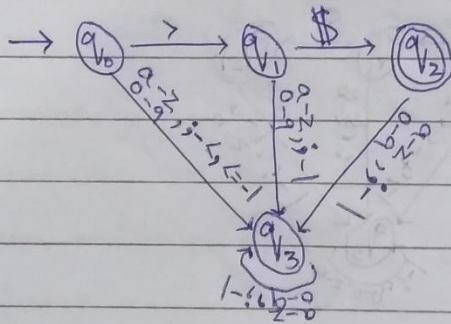


Date: _____

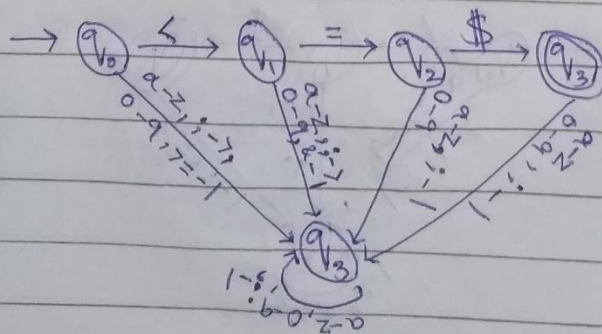
(2.11) $<$:

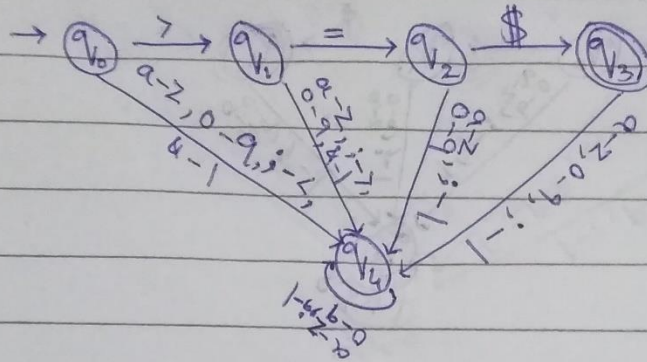
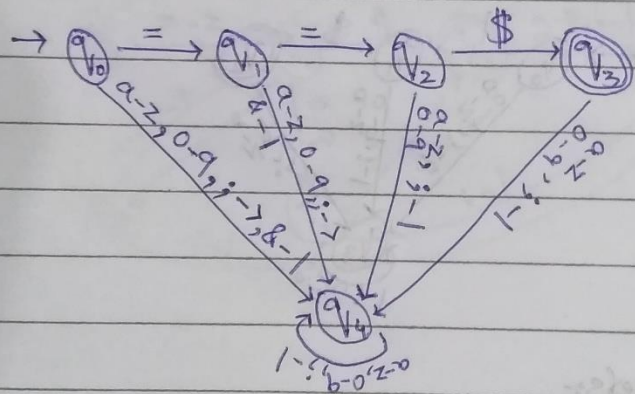
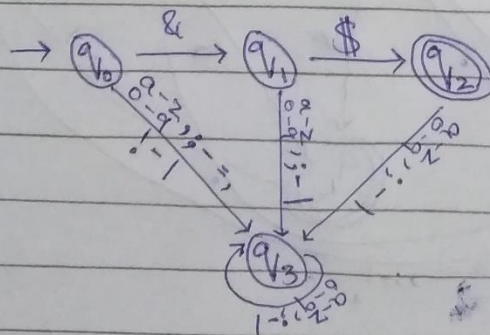


(2.12) $>$:

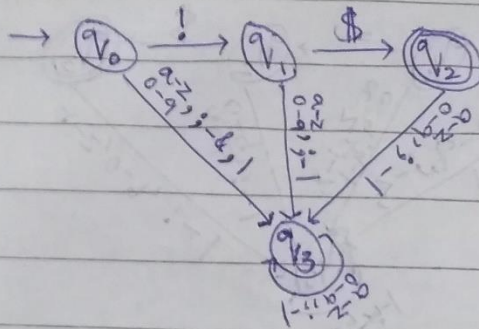


(2.13) $<=$:

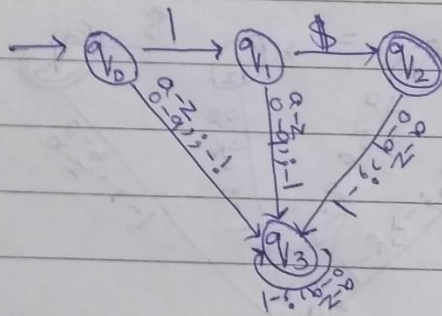


(2.14) $\gamma = :$ (2.15) $= = :$ (2.16) $\& :$ 

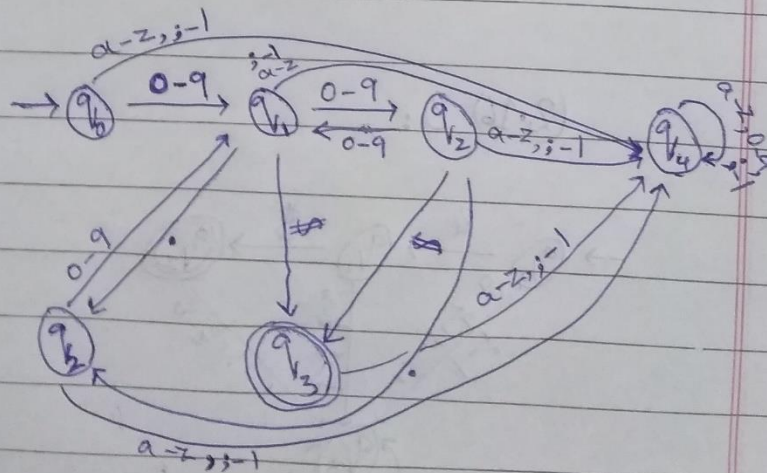
(2.17) !:



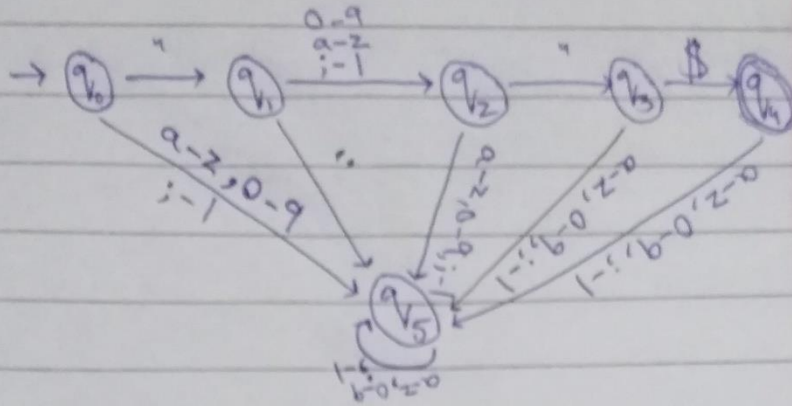
(2.18) !:



(3) Numbers:-



(4) Literals:-



(5) Identifiers:-

