

Regular expression

1- Regular expression to match identifier

letter = `_ | [a-z] | [A-Z]`

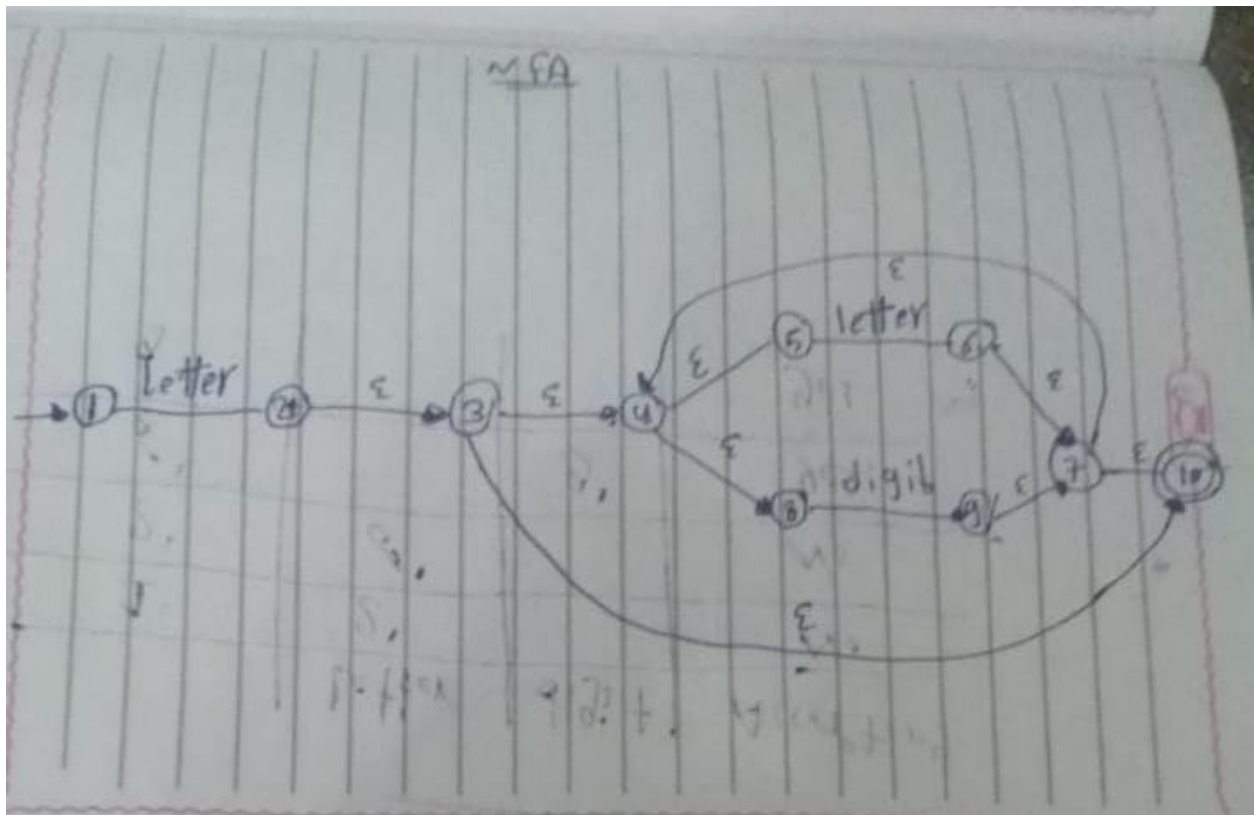
digit = `[0-9]`

identifier = `letter (letter | digit)*`

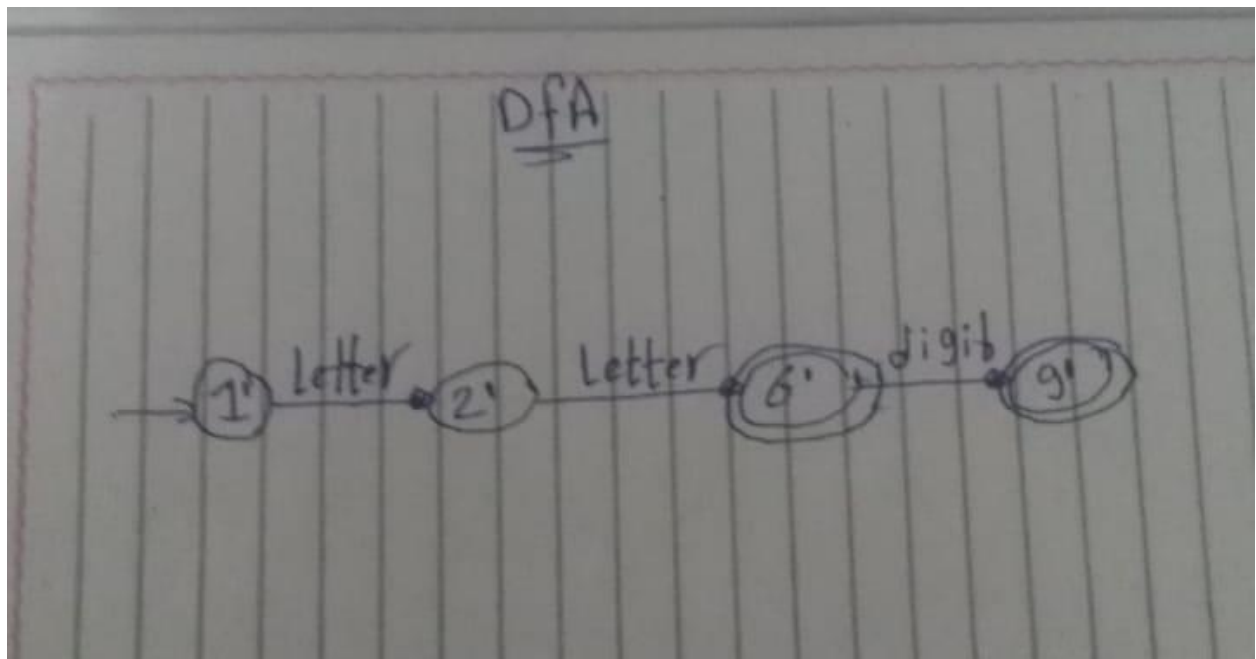
`[_a-zA-Z][_a-zA-Z0-9]*`

Finite automata:

NFA by using Thompson's construction:



DFA by using subset construction:



TransitionTable:

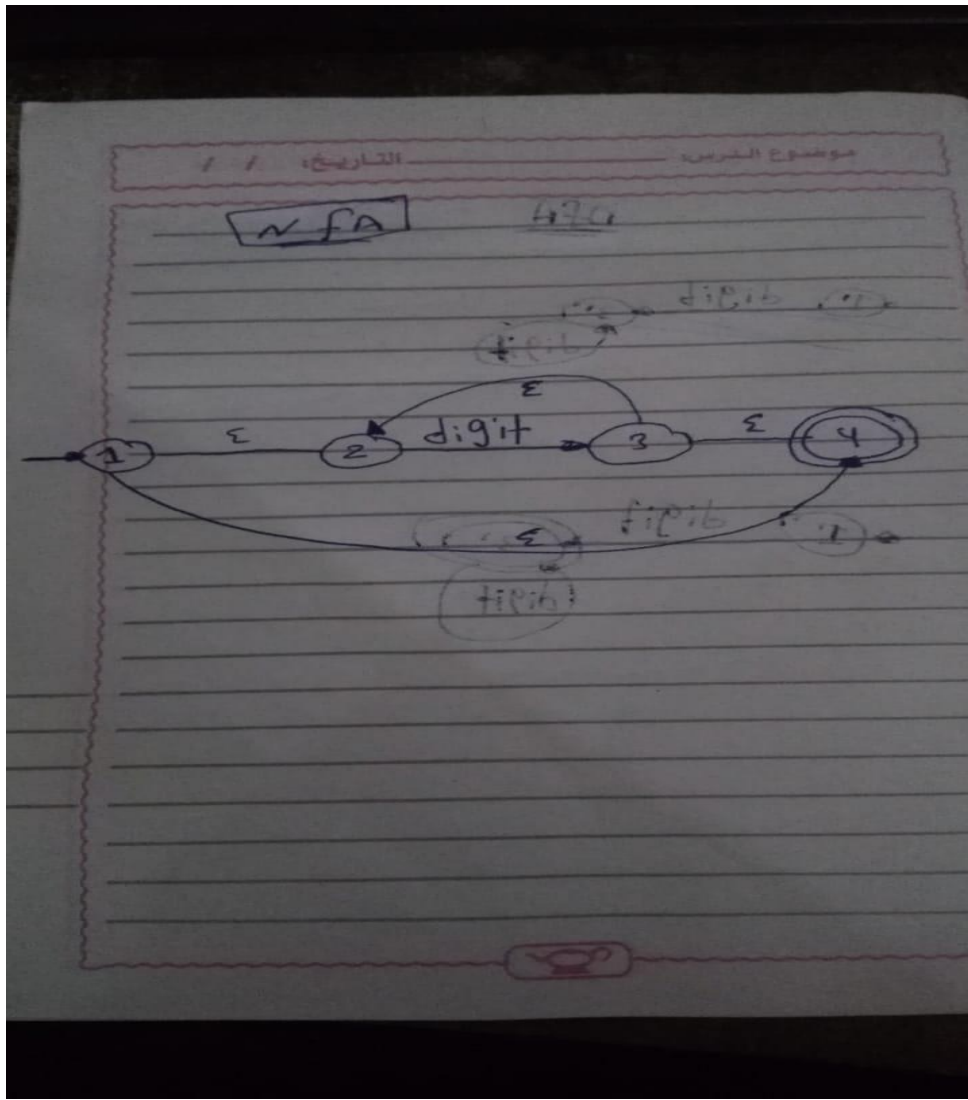
Transition table

	Letter	digit	Accepting
1'	2'		No
2'	6'		No
6'		9'	yes
9'			yes

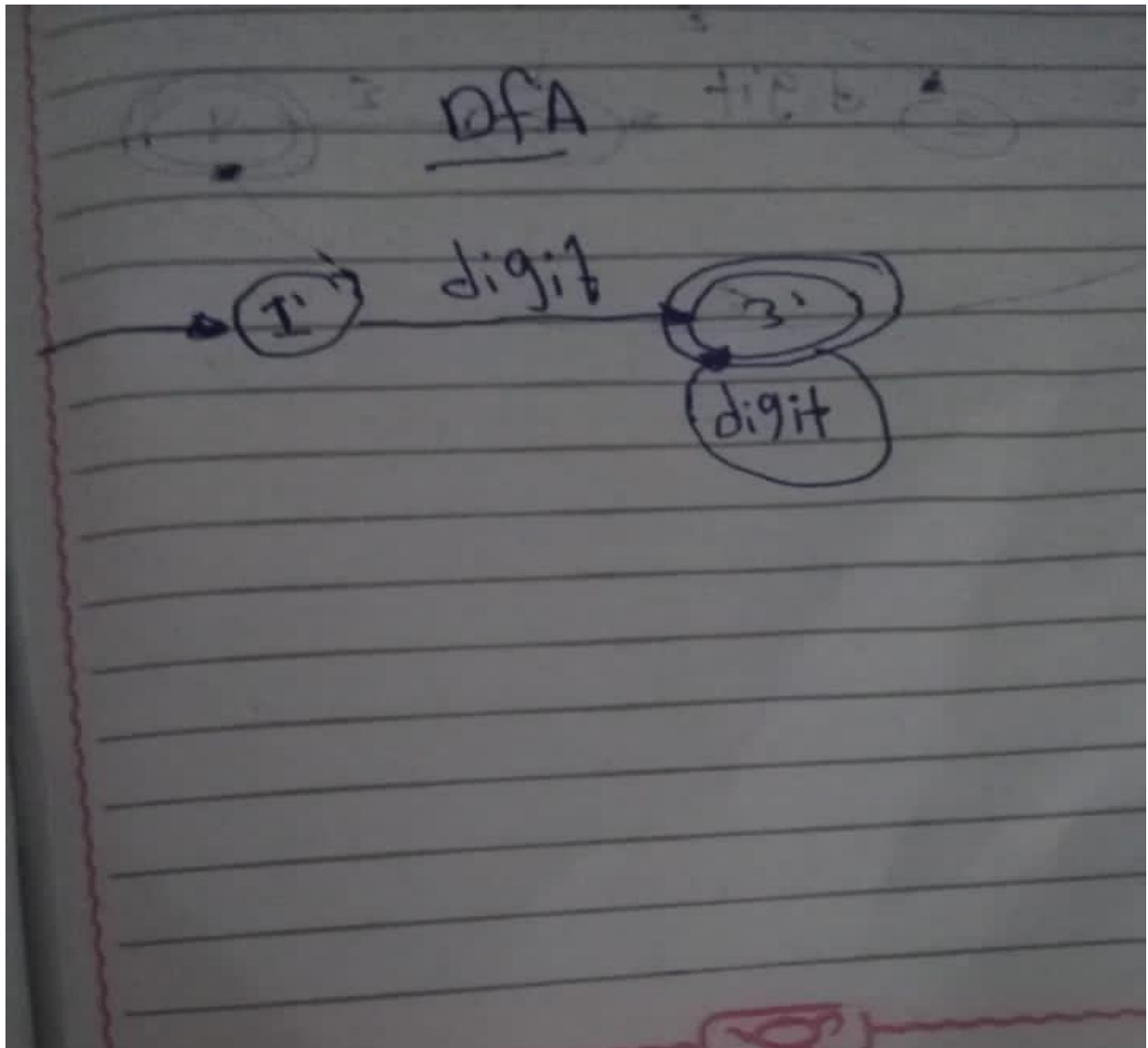
2-Regular expresion to match identifier exception

$^[0-9]^*\$$

NFA by using Thompson's construction:



DFA by using subset construction:



Transition Table:

Transition table

	digib	accepting
1'	3'	No
3'	3'	yes.