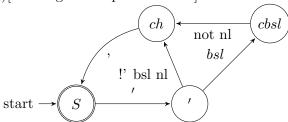
1 DFA schema

1.1 constant number

 $(0(o([0-7])+|([0-9A-Fa-f])+)?)|([1-9][0-9]*(\.[0-9]+)?(e[0-9]+)?)$)[0-7]oct[0-7]oso [0-9A-Fa-f]X [0-9A-Fa-f] start zhshex[1-9] [0-9] dot dece е [0-9][0-9] [0-9]

1.2 character const

 $'(\)$ [ascii digits and punctuations]'



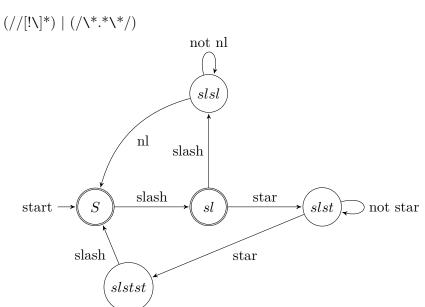
1.3 string literal

"([!"\\n]*|\[!\n])*"

 $\begin{array}{c} \text{not quote,backslash or nl} \\ \\ \text{start} \longrightarrow \left(S\right) & \begin{array}{c} \text{quote} \\ \\ \end{array} & \begin{array}{c} \text{backslash} \\ \\ \text{not nl} \end{array} & \begin{array}{c} \text{bslash} \\ \end{array} \end{array}$

quote

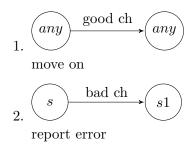
1.4 comment



1.5 identifier or keywords

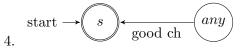
$$[A-Za-z_{_}][0-9A-Za-z_{_}]^*$$
 start \longrightarrow
$$S \xrightarrow{[A-Za-z_{_}]} (ik) \xrightarrow{[0-9A-Za-z_{_}]}$$

2 automaton behavior



3. s1 bad ch s?

push back the character, parse the previous token, and return to initial state



parse the token