State transition diagram (finite automaton):

- **start** → (on `0`) → **zero**
- **start** → (on `.(dot)`) → **flo_i**
- **start** → (on `d`) → **int**
- **start** → (on `q`) → **str_i**
- **start** → (on `a`) → **id**
- **start** → (on `+, -, *, %`) → **arthmetic ops**
- **start** → (on `/`) → **arthemetic ops**
- **start** → (on `<,>`) → **rel_op**
- **start** → (on `!`) → **NE_inter**
- **start** → (on `|, &, ^, ~`) → **bitwise**

- **zero** → (on `.(dot)`) → **flo_i**
- **flo_i** → (on `0|d`) → **flo**
- **flo** → (on `0|d`, self loop) → **flo**

- **int** → (on `.(dot)`) → **flo_i**
- **int** → (on `0|d`, self loop) → **int**

- **str_i** → (on `q`) → **str**
- **str_i** → (on `any char`, self loop) → **str_i**

- **id** → (on `a|d`, self loop) → **id**

- **arthmetic ops** → (on `=`) → **assignment ops**
- **arthemetic ops** → (on `=`) → **assignment ops**
- **arthemetic ops** → (on `/`) → **arthmetic ops**

- **rel_op** → (on `=`) → **rel_op**

- **NE_inter** → (on `=`) → **NE**

Legend

de = {';', ':', '{', '}', ',', '(', ')', '[', ']', '#'}

op = { '+', '-', '/', '*', '%', '=', '<', '>', '!', '^', '|', '&', '~', '?' }

ws = { ' ', '\n', '\t' }

ud = de+op+ws

ic = {'$', '@', '`', '\'}

a = [a-zA-Z_]

d = [1-9]

q = { "", '"' }

'0' - zero

'.' - - dot