

# Assignment 2

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## Question

In the Javascript book, the transition diagrams are discussed (till pages 9 and 10). Go through them carefully. Go through them and write a short note.

## Answer

1. The whitespaces accepted are:
  - a. All spaces
  - b. All tabs
  - c. // followed by any combination of symbols and then line end
  - d. *'/' followed by any combination of symbols except '\*'* at which it halts.
5. Combination of a, b, c, d, e
2. The names accepted are (assume letters include '\_'):
  - a. Any combination of letters
  - b. A letter followed by any combination of numbers and numbers.
3. The numbers accepted are:
  - a. An interger
  - b. An integer followed by fraction
  - c. An integer followed by exponent
  - d. An integer followed by fraction and then exponent

where,

Integers accepted are:

- a. 0
- b. Any digit except zero and any combination of digits after that.

Fractions accepted are:

- a. '.' followed by any combination of digits

Exponent accepted are:

- a. 'e' or 'E' followed by any combination of digits
- b. 'e' or 'E' followed by '+' and then any combination of digits
- c. 'e' or 'E' followed by '-' and then any combination of digits

4. String literals accepted are:

- a. A single quote followed by a single quote.
- b. A single quote followed by any combination of (any Unicode character except ' and \ and control character) and (escape characters), then a single quote.
- c. A double quote followed by a double quote.
- d. A double quote followed by any combination of (any Unicode character except " and \ and control character) and (escape characters), then a double quote.

5. Escape characters accepted are:

- a. A single backslash followed by "
- b. A single backslash followed by '
- c. A single backslash followed by \
- d. A single backslash followed by /
- e. A single backslash followed by b
- f. A single backslash followed by f
- g. A single backslash followed by n
- h. A single backslash followed by r
- i. A single backslash followed by t
- j. A single backslash followed by u, then 4 digits in hexadecimal form

6. Statements accepted are:

a. null

b. keyword 'var' followed by any one of more combination of the form (name of variable, '=', expression) or (name of variable, comma(',')), followed by ';' .

c. One or more combinations of (b).