1. open_character_stream

   [1, 2, 3, 5]   String str = ""

   [1, 2, 4, 5]   String str = "Hello"

2. get_char → Skipped
3. unget_char → Skipped

4. open_token_stream

   [1, 2, 3, 5]   String str = ""

   [1, 2, 4, 5]   String str = "Untitled.txt"

5. get_token

   [1, 2, 3]   String str = ""

   [1, 2, 4, 5, 6, 5, 7, 8]   String str = "\n"

   [1, 2, 4, 5, 6, 5, 7, 9, 10, 11]   String str = ","

   [1, 2, 4, 5, 6, 5, 7, 9, 10, 12, 14, 15, 16, 17]   String str = " z"

   [1, 2, 4, 5, 6, 5, 7, 9, 10, 12, 13, 14, 16, 18, 19, 20, 21, 23, 24]   String str = "xyz"

   [1, 2, 4, 5, 6, 5, 7, 9, 10, 12, 14, 15, 16, 18, 19, 20, 22, 19, 23, 25, 26]   String str = "try()"

   [1, 2, 4, 5, 6, 5, 7, 9, 10, 12, 14, 15, 16, 18, 19, 20, 22, 19, 23, 25, 27, 28]   String str = ""

   [1, 2, 4, 5, 6, 5, 7, 9, 10, 12, 14, 15, 16, 18, 19, 20, 22, 19, 23, 25, 27, 29, 30]   String str = "";"

   [1, 2, 4, 5, 6, 5, 7, 9, 10, 12, 14, 15, 16, 18, 19, 20, 22, 19, 23, 25, 27, 29, 31]   String str = ""

6. is_token_end

   [1, 2, 3]   String str = ""

   [1, 2, 4, 5, 6, 7]   String str = "Hello\n"

   [1, 2, 4, 5, 6, 8]   String str = "HelloN"

   [1, 2, 4, 5, 9, 10, 11]   String str = "Hello\""

   [1, 2, 4, 5, 9, 10, 12]   String str = ";NewN"

   [1, 2, 4, 5, 9, 13, 14]   String str = "(]"

   [1, 2, 4, 5, 9, 13, 15, 16]   String str = "(\r"

[1, 2, 4, 5, 9, 13, 15, 17]   String str = "(N"

7. token_type

   [1,2,4] : String tok = "and"

   [1,2,4,5] : String tok = "("

   [1,2,4,6,7] : String tok = "Hi"

   [1,2,4,6,8,9] : String tok = "5"

   [1,2,4,6,8,10,11] : String tok = "\"Hello\""

   [1,2,4,6,8,10,12,13] : String tok = "#sum"

   [1,2,4,6,8,10,12,14,15] : String tok = ";note"

   [1,2,4,6,8,10,12,14,16] : String tok = "#\"hello\""

8. print_token

   [1,2,3,4,6,8,10,12,14,15] :String tok = "#\"hello\""

   [1,2,4,5,6,8,10,12,14,15]: String tok = "and"

   [1,2,4,6,7,8,10,12,14,15]: String tok = "("

   [1,2,4,6,8,9,10,12,14,15,16]: String tok = "Hi"

   [1,2,4,6,8,10,11,12,14,15]: String = "5"

   [1,2,4,6,8,10,12,13,14,15] : String tok = "\"Hello\""

   [1,2,4,6,8,10,12,14,15] : String tok = "#sum"

9. is_comment
   [1, 2, 3]   String str = ";hello"
   [1, 2, 4]   String str = "hello"

10. is_keyword

   [1, 2, 3]   String str = "and"

   [1, 2, 4]   String str = "hello"

11. is_char_constant

   [1,2,3]: String str = "#sum"

   [1,2,4]: String str = "$try"

12. is_num_constant

   [1,2,3,6] : String str = "1"

   [1,2,3,5,8]: String str = "1T"

   [1,2,3,5,7]: String str = "12"

   [1,2,3,5,7,3,5,7] String str = "123"

   [1,2,3,5,7,3,5,8]: String str = "12P"

   [1,2,4]: String str = "#Hello"

13. is_str_constant

   [1,2,3,6] : String str = "\"$"

   [1,2,3,5,8]: String str = "\"H"

   [1,2,3,5,7]: String str = "\"Hello\""

   [1,2,3,5,7,3,5,7] String str = "\"Hello World\""

   [1,2,3,5,7,3,5,8]: String str = "\"Hello\"$"

   [1,2,4]: String str = "#Hello"

14. is_identifier

   [1,2]: String str = "$"

   [1,2,3,5] : String str = "W"

   [1,2,3,4,7]: String str = "h$"

   [1,2,3,4,6]: String str = "f4"

   [1,2,3,4,6,2,3,4,6]: String str = "ff4"

15. unget_error → Skipped

16. print_spec_symbol
   [1,2,3]   String str = "("
   [1,2,4,5]   String str = ")"
   [1,2,4,6,7]   String str = "["
   [1,2,4,6,8,9]   String str = "]"
   [1,2,4,6,8,10,11]   String str = ""
   [1,2,4,6,8,10,12,13]   String str = "`"

[1,2,4,6,8,10,12,14]   String str = ","

17. is_spec_symbol
 [1,2,10]   char c = '('
 [1,2,3,10]   char c = ')'
 [1,2,3,4,10]   char c = '['
 [1,2,3,4,5,10]   char c = ']'
 [1,2,3,4,5,6,10]   char c = ''
 [1,2,3,4,5,6,7,10]   char c = '`'
 [1,2,3,4,5,6,7,8,10]   char c = ','
 [1,2,3,4,5,6,7,8,9]   char c = '+'

18. main method
 [1, 2, 4, 6]   String[] args = {"", "new"};
 [1, 2, 4, 5, 7, 8, 10]   String[] args = {""};
 [1, 2, 3, 7, 8, 9, 8, 10]   String[] args = {};