Universidade Federal de Alagoas Instituto de Computação Ciência da Computação

Nova - Lexer

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1 Outputs

1.1 Fibonacci

```
[(Sequence: int, Token Category: 23, Position: 0)
     (Sequence: fibonacci, Token Category: 1, Position: 3)
2
3
     (Sequence: (,
                   Token Category: 30, Position: 12)
     (Sequence: int, Token Category: 23, Position: 13)
4
                   Token Category: 1, Position: 16)
     (Sequence: n,
                   Token Category: 31, Position:
     (Sequence:),
     (Sequence: {,
                   Token Category: 32, Position: 18)
     (Sequence: int, Token Category: 23, Position: 20)
8
                    Token Category: 1, Position: 23)
9
     (Sequence: f1,
     (Sequence: =, Token Category: 5, Position:
10
     (Sequence: 0,
                   Token Category: 3, Position: 26)
11
                   Token Category: 29, Position: 27)
12
     (Sequence: ;,
13
     (Sequence: int, Token Category: 23, Position:
     (Sequence: f2, Token Category: 1, Position: 32)
14
     (Sequence: =, Token Category: 5, Position: 34)
15
16
     (Sequence: 1, Token Category: 3, Position:
                   Token Category: 29, Position:
17
     (Sequence:
18
     (Sequence: int, Token Category: 23, Position: 38)
19
     (Sequence:
                fi, Token Category: 1, Position: 41)
20
     (Sequence: =, Token Category: 5, Position: 43)
     (Sequence: 0, Token Category: 3, Position: 44)
21
22
     (Sequence: ;,
                   Token Category: 29, Position: 45)
23
     (Sequence: int, Token Category: 23, Position: 48)
24
                     Token Category: 1, Position: 51)
     (Sequence: Out,
25
                   Token Category: 30, Position: 54)
     (Sequence:
26
     (Sequence:
                   Token Category: 3, Position: 55)
                0,
27
     (Sequence:),
                   Token Category: 31, Position:
                   Token Category: 29, Position: 57)
28
     (Sequence:
29
     (Sequence: string, Token Category: 26, Position:
30
     (Sequence: Out, Token Category: 1, Position:
                   Token Category: 30, Position: 68)
31
     (Sequence:
                ",", Token Category: 4, Position:
32
     (Sequence:
33
                   Token Category: 31, Position:
     (Sequence:
34
     (Sequence: ;,
                   Token Category: 29, Position:
35
     (Sequence: int, Token Category: 23, Position: 75)
     (Sequence: Out, Token Category: 1, Position: 78)
36
37
     (Sequence: (, Token Category: 30, Position: 81)
```

```
(Sequence: 1, Token Category: 3, Position: 82)
38
39
                   Token Category: 31, Position: 83)
     (Sequence:),
40
                   Token Category: 29, Position: 84)
41
      Sequence: if, Token Category: 18, Position:
42
      Sequence: (, Token Category: 30, Position: 89)
43
      Sequence: n,
                   Token Category: 1, Position:
                                                  90)
44
     (Sequence: =, Token Category: 5, Position:
                                                  91)
45
     (Sequence: =, Token Category: 5, Position:
46
     (Sequence: 0, Token Category: 3, Position:
      Sequence: or, Token Category: 16, Position: 94)
47
      Sequence: n, Token Category: 1, Position:
48
49
      Sequence: =, Token Category: 5, Position:
                                                  97)
50
     (Sequence: =, Token Category: 5, Position:
                                                  98)
                1, Token Category: 3, Position:
51
     (Sequence:
52
     (Sequence:),
                   Token Category: 31, Position: 100)
53
     (Sequence: {, Token Category: 32, Position: 101)
54
      Sequence: shoot, Token Category: 20, Position: 103)
55
      Sequence: 1, Token Category: 3, Position: 108)
56
                   Token Category: 29, Position: 109)
      Sequence: ;,
57
     (Sequence: }, Token Category: 33, Position: 111)
     (Sequence: while, Token Category: 21, Position: 114)
58
59
     (Sequence: (, Token Category: 30, Position: 119)
60
     (Sequence: fi, Token Category: 1, Position: 120)
61
     (Sequence: <, Token Category: 6, Position: 122)
62
      Sequence: n, Token Category: 1, Position: 123)
63
      Sequence: ), Token Category: 31, Position: 124)
64
     (Sequence: {, Token Category: 32, Position: 125)
     (Sequence: fi, Token Category: 1, Position:
65
                                                   127)
     (Sequence: =, Token Category: 5, Position: 129)
66
67
     (Sequence: f1, Token Category: 1, Position: 130)
68
     (Sequence: +, Token Category: 12, Position:
69
      Sequence: f2, Token Category: 1, Position:
70
     (Sequence: ;, Token Category: 29, Position:
                                                   135)
71
     (Sequence: f1, Token Category: 1, Position:
                                                   137)
72
     (Sequence: =, Token Category: 5, Position: 139)
73
     (Sequence: f2, Token Category: 1, Position: 140)
     (Sequence: ;, Token Category: 29, Position: 142)
74
75
     (Sequence: f2, Token Category: 1, Position:
76
     (Sequence: =, Token Category: 5, Position: 146)
77
     (Sequence: fi, Token Category: 1, Position: 147)
78
     (Sequence: ;, Token Category: 29, Position: 149)
```

```
79
      (Sequence: string, Token Category: 26, Position: 151)
      (Sequence: Out, Token Category: 1, Position: 157)
80
                 (, Token Category: 30, Position: 160)
81
                 ",", Token Category: 4, Position: 161)
82
      (Sequence:
83
      (Sequence: ), Token Category: 31, Position: 164)
                 ;, Token Category: 29, Position: 165)
84
      (Sequence:
85
      (Sequence: int, Token Category: 23, Position:
      (Sequence: Out, Token Category: 1, Position: 170)
86
87
                 (, Token Category: 30, Position: 173)
                 fi, Token Category: 1, Position:
88
      (Sequence:
                 ), Token Category: 31, Position:
89
      (Sequence:
90
                    Token Category: 29, Position:
      (Sequence:
91
                 }, Token Category: 33, Position: 179)
      (Sequence:
92
      (Sequence: shoot, Token Category: 20, Position: 182)
93
                 fi, Token Category: 1, Position: 187)
      (Sequence:
                 ;, Token Category: 29, Position: 189)
94
      (Sequence:
95
      (Sequence: }, Token Category: 33, Position: 191)
      (Sequence: voidmain, Token Category: 1, Position: 194)
96
97
      (Sequence: (,
                    Token Category: 30, Position:
                                                    202)
98
      (Sequence:
                 ), Token Category: 31, Position: 203)
99
      (Sequence: {,
                    Token Category: 32, Position:
      (Sequence: int, Token Category: 23, Position: 206)
100
101
      (Sequence: n, Token Category: 1, Position: 209)
102
      (Sequence: ;, Token Category: 29, Position: 210)
103
      (Sequence: int, Token Category: 23, Position:
104
      (Sequence: In, Token Category: 1, Position: 215)
                 (, Token Category: 30, Position: 217)
105
      (Sequence:
106
                    Token Category: 1, Position:
      (Sequence: n,
107
      (Sequence:
                 ),
                    Token Category: 31, Position: 219)
108
      (Sequence:
                    Token Category: 29, Position: 220)
109
      (Sequence: int, Token Category: 23, Position: 223)
110
      (Sequence: fib, Token Category: 1, Position: 226)
      (Sequence: =, Token Category: 5, Position: 229)
111
112
      (Sequence: fibonacci, Token Category: 1, Position: 230)
113
      (Sequence: (, Token Category: 30, Position:
114
                    Token Category: 1, Position: 240)
      (Sequence: n.
115
      (Sequence:),
                    Token Category: 31, Position: 241)
116
      (Sequence: ;, Token Category: 29, Position: 242)
117
      (Sequence: #dosomethingwithfib, Token Category: 38, Position: 244)
      (Sequence: }, Token Category: 33, Position: 264)
118
119
```

1.2 ShellSort

```
[(Sequence: voidmain, Token Category: 1, Position: 0)
2
     (Sequence: (, Token Category: 30, Position: 8)
3
     (Sequence: ), Token Category: 31, Position: 9)
     (Sequence: {, Token Category: 32, Position: 10)
4
      Sequence: int, Token Category: 23, Position: 12)
6
      Sequence: size, Token Category: 1, Position:
7
      Sequence: ;, Token Category: 29, Position: 19)
8
     (Sequence: int, Token Category: 23, Position: 21)
9
     (Sequence: In, Token Category: 1, Position: 24)
10
     (Sequence: (, Token Category: 30, Position: 26)
     (Sequence: size, Token Category: 1, Position: 27)
11
12
     (Sequence: ), Token Category: 31, Position: 31)
      Sequence: ;, Token Category: 29, Position: 32)
13
14
     (Sequence: int, Token Category: 23, Position: 35)
15
     (Sequence: vet, Token Category: 1, Position: 38)
                ::, Token Category: 39, Position: 41)
16
     (Sequence:
17
     (Sequence: size, Token Category: 1, Position: 43)
18
     (Sequence: ;, Token Category: 29, Position: 47)
19
     (Sequence: for, Token Category: 22, Position:
20
      Sequence: (, Token Category: 30, Position: 52)
21
      Sequence: int, Token Category: 23, Position: 53)
22
     (Sequence: i, Token Category: 1, Position: 56)
23
     (Sequence: =, Token Category: 5, Position:
24
     (Sequence: 0, Token Category: 3, Position: 58)
25
     (Sequence:
                   Token Category: 29, Position: 59)
26
     (Sequence: i, Token Category: 1, Position: 60)
27
      Sequence: <, Token Category: 6, Position: 61)
28
     (Sequence: size,
                      Token Category: 1, Position: 62)
29
                ;, Token Category: 29, Position: 66)
     (Sequence:
                   Token Category: 1, Position: 67)
30
     (Sequence: i,
     (Sequence: =, Token Category: 5, Position: 68)
31
32
     (Sequence: i,
                   Token Category: 1, Position: 69)
33
     (Sequence: +, Token Category: 12, Position:
34
     (Sequence: 1, Token Category: 3, Position: 71)
     (Sequence: ), Token Category: 31, Position: 72)
35
36
     (Sequence: {, Token Category: 32, Position: 73)
```

```
(Sequence: int, Token Category: 23, Position: 75)
37
     (Sequence: x, Token Category: 1, Position: 78)
38
39
     (Sequence: ;,
                   Token Category: 29, Position: 79)
     (Sequence: int, Token Category: 23, Position:
40
41
     (Sequence: In, Token Category: 1, Position: 84)
                   Token Category: 30, Position:
42
     (Sequence:
                ( ,
43
     (Sequence:
                   Token Category: 1, Position: 87)
                х,
                   Token Category: 31, Position: 88)
44
     (Sequence:
                ),
                    Token Category: 29, Position: 89)
45
     (Sequence:
     (Sequence: add, Token Category: 1, Position:
46
47
     (Sequence:
                ( ,
                   Token Category: 30, Position: 94)
     (Sequence: vet, Token Category: 1, Position:
48
                   Token Category: 29, Position: 98)
49
     (Sequence:
50
                   Token Category: 1, Position: 99)
     (Sequence: x,
                ),
                    Token Category: 31, Position:
51
     (Sequence:
                   Token Category: 29, Position:
52
     (Sequence:
53
     (Sequence: }, Token Category: 33, Position:
54
     (Sequence: int, Token Category: 23, Position: 106)
                value, Token Category: 1, Position: 109)
55
     (Sequence:
56
     (Sequence: ;, Token Category: 29, Position: 114)
     (Sequence: int, Token Category: 23, Position: 116)
57
     (Sequence: gap, Token Category: 1, Position: 119)
58
59
     (Sequence: =, Token Category: 5, Position: 122)
60
     (Sequence: 1, Token Category: 3, Position: 123)
61
     (Sequence:
                ; ,
                   Token Category: 29, Position: 124)
     (Sequence: while, Token Category: 21, Position: 126)
62
63
     (Sequence:
                (, Token Category: 30, Position: 131)
64
     (Sequence: gap, Token Category: 1, Position: 132)
     (Sequence: <, Token Category: 6, Position: 135)
65
                size, Token Category: 1, Position: 136)
66
     (Sequence:
67
     (Sequence: ), Token Category: 31, Position: 140)
     (Sequence:
                {, Token Category: 32, Position: 141)
68
69
     (Sequence: gap, Token Category: 1, Position: 143)
70
     (Sequence: =, Token Category: 5, Position: 146)
71
     (Sequence:
                3, Token Category: 3, Position: 147)
72
                   Token Category: 14, Position: 148)
     (Sequence:
                *.
73
     (Sequence: gap, Token Category: 1, Position: 149)
74
     (Sequence: +, Token Category: 12, Position: 152)
75
     (Sequence: 1,
                   Token Category: 3, Position: 153)
76
     (Sequence: ;,
                    Token Category: 29, Position:
     (Sequence: }, Token Category: 33, Position: 156)
```

```
(Sequence: while, Token Category: 21, Position: 159)
78
79
      (Sequence: (, Token Category: 30, Position: 164)
80
      (Sequence: gap, Token Category: 1, Position: 165)
       Sequence: >, Token Category: 7, Position: 168)
81
82
      (Sequence: 1, Token Category: 3, Position: 169)
83
      (Sequence: ), Token Category: 31, Position: 170)
84
      (Sequence: {, Token Category: 32, Position: 171)
85
      (Sequence: gap, Token Category: 1, Position: 173)
      (Sequence: =, Token Category: 5, Position: 176)
86
87
      (Sequence: gap, Token Category: 1, Position: 177)
       Sequence: /, Token Category: 36, Position: 180)
88
89
       Sequence: 3, Token Category: 3, Position: 181)
90
      (Sequence: ;, Token Category: 29, Position: 182)
91
      (Sequence: for, Token Category: 22, Position:
92
      (Sequence: (, Token Category: 30, Position: 187)
93
      (Sequence: int, Token Category: 23, Position: 188)
94
      (Sequence: i, Token Category: 1, Position: 191)
      (Sequence: =, Token Category: 5, Position: 192)
95
96
      (Sequence: gap, Token Category: 1, Position: 193)
97
      (Sequence: ;, Token Category: 29, Position: 196)
      (Sequence: i, Token Category: 1, Position: 197)
98
99
      (Sequence: <, Token Category: 6, Position: 198)
100
      (Sequence: size, Token Category: 1, Position: 199)
101
      (Sequence: ;, Token Category: 29, Position: 203)
102
       Sequence: i,
                    Token Category: 1, Position: 204)
103
       Sequence: =, Token Category: 5, Position: 205)
104
                    Token Category: 1, Position: 206)
      (Sequence: i,
105
                 +, Token Category: 12, Position:
      (Sequence:
                                                    207)
106
      (Sequence: 1, Token Category: 3, Position: 208)
107
      (Sequence: ), Token Category: 31, Position: 209)
      (Sequence: {, Token Category: 32, Position: 210)
108
109
      (Sequence: value, Token Category: 1, Position: 212)
      (Sequence: =, Token Category: 5, Position: 217)
110
111
      (Sequence: getValue, Token Category: 1, Position: 218)
112
      (Sequence: (, Token Category: 30, Position: 226)
113
      (Sequence: vet, Token Category: 1, Position:
114
                    Token Category: 29, Position: 230)
      (Sequence:
115
      (Sequence: i, Token Category: 1, Position: 231)
      (Sequence: ), Token Category: 31, Position: 232)
116
      (Sequence: ;, Token Category: 29, Position: 233)
117
118
      (Sequence: int, Token Category: 23, Position: 235)
```

```
119
      (Sequence: j,
                    Token Category: 1, Position:
120
      (Sequence: =,
                    Token Category: 5, Position:
                                                   239)
121
      (Sequence: i,
                    Token Category: 1, Position: 240)
122
      (Sequence:
                 -, Token Category: 13, Position: 241)
123
      (Sequence: gap, Token Category: 1, Position:
124
      (Sequence: ;, Token Category: 29, Position: 245)
125
      (Sequence: while,
                        Token Category: 21, Position:
126
                    Token Category: 30, Position: 253)
      (Sequence: (,
                    Token Category: 1, Position: 254)
127
      (Sequence: j,
128
      (Sequence: >, Token Category: 7, Position:
129
      (Sequence: =, Token Category: 5, Position:
130
      (Sequence: 0, Token Category: 3, Position:
131
      (Sequence: and, Token Category: 15, Position: 258)
132
      (Sequence: value, Token Category: 1, Position:
133
      (Sequence: <, Token Category: 6, Position: 266)
      (Sequence: getValue, Token Category: 1, Position: 267)
134
135
      (Sequence:
                 (, Token Category: 30, Position: 275)
136
      (Sequence: vet, Token Category: 1, Position:
137
                    Token Category: 29, Position:
      (Sequence:
138
      (Sequence: i,
                    Token Category: 1, Position: 280)
139
                    Token Category: 31, Position:
      (Sequence:
140
                    Token Category: 31, Position: 282)
      (Sequence:
141
      (Sequence:
                 {, Token Category: 32, Position: 283}
142
      (Sequence: setValue, Token Category: 1, Position: 285)
143
      (Sequence: (,
                    Token Category: 30, Position: 293)
144
      (Sequence: vet, Token Category: 1, Position:
                 ,, Token Category: 29, Position: 297)
145
      (Sequence:
146
                    Token Category: 1, Position: 298)
      (Sequence: j,
147
      (Sequence: +, Token Category: 12, Position: 299)
      (Sequence: gap, Token Category: 1, Position: 300)
148
149
      (Sequence:
                    Token Category: 29, Position: 303)
                 , ,
150
      (Sequence: getValue, Token Category: 1, Position: 304)
                    Token Category: 30, Position: 312)
151
      (Sequence: (,
152
      (Sequence: vet, Token Category: 1, Position: 313)
153
                    Token Category: 29, Position:
      (Sequence:
                                                    316)
154
      (Sequence: j,
                    Token Category: 1, Position: 317)
155
      (Sequence:
                    Token Category: 31, Position:
                 ),
156
      (Sequence:
                    Token Category: 31, Position:
157
      (Sequence:
                    Token Category: 29, Position:
                                                    320)
                    Token Category: 1, Position: 322)
158
      (Sequence: j,
      (Sequence: =, Token Category: 5, Position: 323)
159
```

```
160
     (Sequence: j, Token Category: 1, Position: 324)
161
      (Sequence: -, Token Category: 13, Position: 325)
      (Sequence: gap, Token Category: 1, Position: 326)
162
      (Sequence: ;, Token Category: 29, Position: 329)
163
164
      (Sequence: }, Token Category: 33, Position: 331)
      (Sequence: setValue, Token Category: 1, Position: 334)
165
166
      (Sequence: (, Token Category: 30, Position: 342)
      (Sequence: vet, Token Category: 1, Position: 343)
167
168
      (Sequence: ,, Token Category: 29, Position: 346)
      (Sequence: j, Token Category: 1, Position: 347)
169
      (Sequence: +, Token Category: 12, Position: 348)
170
171
      (Sequence: gap, Token Category: 1, Position: 349)
172
      (Sequence: ,, Token Category: 29, Position: 352)
173
      (Sequence: value, Token Category: 1, Position: 353)
174
      (Sequence: ), Token Category: 31, Position: 358)
      (Sequence: ;, Token Category: 29, Position:
175
      (Sequence: }, Token Category: 33, Position:
176
177
      (Sequence: }, Token Category: 33, Position:
                                                    363)
178
      (Sequence: }, Token Category: 33, Position: 365)
179
```