

Universidade Federal de Alagoas
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Ciência da Computação

Nova - Lexer v2

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Sumário

Sumário	i
1 Outputs	1
1.1 Hello World	1
1.2 Fibonacci	1
1.3 ShellSort	4

1 Outputs

1.1 Hello World

```
1 [(Sequence: void, Token Category: 30, Position: (0, 0))
2 , (Sequence: main, Token Category: 32, Position: (0, 4))
3 , (Sequence: (, Token Category: 24, Position: (0, 8))
4 , (Sequence: ), Token Category: 25, Position: (0, 9))
5 , (Sequence: {, Token Category: 26, Position: (0, 10))
6 , (Sequence: printOut, Token Category: 31, Position: (1, 0))
7 , (Sequence: (, Token Category: 24, Position: (1, 8))
8 , (Sequence: "AloMundo!", Token Category: 4, Position: (1, 9))
9 , (Sequence: ), Token Category: 25, Position: (1, 20))
10 , (Sequence: ;; Token Category: 23, Position: (1, 21))
11 , (Sequence: }, Token Category: 27, Position: (2, 0))
12 , (Sequence: ;; Token Category: 23, Position: (2, 1))
13 ]
```

1.2 Fibonacci

```
1 [(Sequence: int, Token Category: 21, Position: (0, 0))
2 , (Sequence: fibonacci, Token Category: 1, Position: (0, 3))
3 , (Sequence: (, Token Category: 24, Position: (0, 12))
4 , (Sequence: int, Token Category: 21, Position: (0, 13))
5 , (Sequence: n, Token Category: 1, Position: (0, 16))
6 , (Sequence: ), Token Category: 25, Position: (0, 17))
7 , (Sequence: {, Token Category: 26, Position: (0, 18))
8 , (Sequence: int, Token Category: 21, Position: (1, 0))
9 , (Sequence: f1, Token Category: 1, Position: (1, 3))
10 , (Sequence: =, Token Category: 5, Position: (1, 5))
11 , (Sequence: 0, Token Category: 3, Position: (1, 6))
12 , (Sequence: ;; Token Category: 23, Position: (1, 7))
13 , (Sequence: int, Token Category: 21, Position: (2, 0))
14 , (Sequence: f2, Token Category: 1, Position: (2, 3))
15 , (Sequence: =, Token Category: 5, Position: (2, 5))
16 , (Sequence: 1, Token Category: 3, Position: (2, 6))
17 , (Sequence: ;; Token Category: 23, Position: (2, 7))
18 , (Sequence: int, Token Category: 21, Position: (3, 0))
19 , (Sequence: fi, Token Category: 1, Position: (3, 3))
20 , (Sequence: =, Token Category: 5, Position: (3, 5))
```

21 , (Sequence: 0, Token Category: 3, Position: (3, 6))
 22 , (Sequence: ;, Token Category: 23, Position: (3, 7))
 23 , (Sequence: printOut, Token Category: 31, Position: (5, 0))
 24 , (Sequence: (, Token Category: 24, Position: (5, 8))
 25 , (Sequence: 0, Token Category: 3, Position: (5, 9))
 26 , (Sequence:), Token Category: 25, Position: (5, 10))
 27 , (Sequence: ;, Token Category: 23, Position: (5, 11))
 28 , (Sequence: printOut, Token Category: 31, Position: (6, 0))
 29 , (Sequence: (, Token Category: 24, Position: (6, 8))
 30 , (Sequence: "" , Token Category: 4, Position: (6, 9))
 31 , (Sequence: ,, Token Category: 23, Position: (6, 11))
 32 , (Sequence: "" , Token Category: 4, Position: (6, 12))
 33 , (Sequence:), Token Category: 25, Position: (6, 14))
 34 , (Sequence: ;, Token Category: 23, Position: (6, 15))
 35 , (Sequence: printOut, Token Category: 31, Position: (7, 0))
 36 , (Sequence: (, Token Category: 24, Position: (7, 8))
 37 , (Sequence: 1, Token Category: 3, Position: (7, 9))
 38 , (Sequence:), Token Category: 25, Position: (7, 10))
 39 , (Sequence: ;, Token Category: 23, Position: (7, 11))
 40 , (Sequence: if, Token Category: 16, Position: (9, 0))
 41 , (Sequence: (, Token Category: 24, Position: (9, 2))
 42 , (Sequence: n, Token Category: 1, Position: (9, 3))
 43 , (Sequence: =, Token Category: 5, Position: (9, 4))
 44 , (Sequence: =, Token Category: 5, Position: (9, 5))
 45 , (Sequence: 0, Token Category: 3, Position: (9, 6))
 46 , (Sequence: or, Token Category: 14, Position: (9, 7))
 47 , (Sequence: n, Token Category: 1, Position: (9, 9))
 48 , (Sequence: =, Token Category: 5, Position: (9, 10))
 49 , (Sequence: =, Token Category: 5, Position: (9, 11))
 50 , (Sequence: 1, Token Category: 3, Position: (9, 12))
 51 , (Sequence:), Token Category: 25, Position: (9, 13))
 52 , (Sequence: {, Token Category: 26, Position: (9, 14))
 53 , (Sequence: shoot, Token Category: 18, Position: (10, 0))
 54 , (Sequence: 1, Token Category: 3, Position: (10, 5))
 55 , (Sequence: ;, Token Category: 23, Position: (10, 6))
 56 , (Sequence: }, Token Category: 27, Position: (11, 0))
 57 , (Sequence: ;, Token Category: 23, Position: (11, 1))
 58 , (Sequence: while, Token Category: 19, Position: (13, 0))
 59 , (Sequence: (, Token Category: 24, Position: (13, 5))
 60 , (Sequence: fi, Token Category: 1, Position: (13, 6))
 61 , (Sequence: <, Token Category: 6, Position: (13, 8))

62 , (Sequence: n, Token Category: 1, Position: (13, 9))
63 , (Sequence:), Token Category: 25, Position: (13, 10))
64 , (Sequence: {, Token Category: 26, Position: (13, 11))
65 , (Sequence: fi, Token Category: 1, Position: (14, 0))
66 , (Sequence: =, Token Category: 5, Position: (14, 2))
67 , (Sequence: f1, Token Category: 1, Position: (14, 3))
68 , (Sequence: +, Token Category: 8, Position: (14, 5))
69 , (Sequence: f2, Token Category: 1, Position: (14, 6))
70 , (Sequence: ;, Token Category: 23, Position: (14, 8))
71 , (Sequence: f1, Token Category: 1, Position: (15, 0))
72 , (Sequence: =, Token Category: 5, Position: (15, 2))
73 , (Sequence: f2, Token Category: 1, Position: (15, 3))
74 , (Sequence: ;, Token Category: 23, Position: (15, 5))
75 , (Sequence: f2, Token Category: 1, Position: (16, 0))
76 , (Sequence: =, Token Category: 5, Position: (16, 2))
77 , (Sequence: fi, Token Category: 1, Position: (16, 3))
78 , (Sequence: ;, Token Category: 23, Position: (16, 5))
79 , (Sequence: printOut, Token Category: 31, Position: (17, 0))
80 , (Sequence: (, Token Category: 24, Position: (17, 8))
81 , (Sequence: """ , Token Category: 4, Position: (17, 9))
82 , (Sequence: ,, Token Category: 23, Position: (17, 11))
83 , (Sequence: """ , Token Category: 4, Position: (17, 12))
84 , (Sequence:), Token Category: 25, Position: (17, 14))
85 , (Sequence: ;, Token Category: 23, Position: (17, 15))
86 , (Sequence: printOut, Token Category: 31, Position: (18, 0))
87 , (Sequence: (, Token Category: 24, Position: (18, 8))
88 , (Sequence: "fi", Token Category: 4, Position: (18, 9))
89 , (Sequence:), Token Category: 25, Position: (18, 13))
90 , (Sequence: ;, Token Category: 23, Position: (18, 14))
91 , (Sequence: }, Token Category: 27, Position: (19, 0))
92 , (Sequence: ;, Token Category: 23, Position: (19, 1))
93 , (Sequence: shoot, Token Category: 18, Position: (21, 0))
94 , (Sequence: fi, Token Category: 1, Position: (21, 5))
95 , (Sequence: ;, Token Category: 23, Position: (21, 7))
96 , (Sequence: }, Token Category: 27, Position: (22, 0))
97 , (Sequence: ;, Token Category: 23, Position: (22, 1))
98 , (Sequence: **void**, Token Category: 30, Position: (24, 0))
99 , (Sequence: main, Token Category: 32, Position: (24, 4))
100 , (Sequence: (, Token Category: 24, Position: (24, 8))
101 , (Sequence:), Token Category: 25, Position: (24, 9))
102 , (Sequence: {, Token Category: 26, Position: (24, 10))

```

103 , (Sequence: int, Token Category: 21, Position: (25, 0))
104 , (Sequence: n, Token Category: 1, Position: (25, 3))
105 , (Sequence: ;, Token Category: 23, Position: (25, 4))
106 , (Sequence: readIn, Token Category: 31, Position: (26, 0))
107 , (Sequence: (, Token Category: 24, Position: (26, 6))
108 , (Sequence: n, Token Category: 1, Position: (26, 7))
109 , (Sequence: ), Token Category: 25, Position: (26, 8))
110 , (Sequence: ;, Token Category: 23, Position: (26, 9))
111 , (Sequence: int, Token Category: 21, Position: (28, 0))
112 , (Sequence: fib, Token Category: 1, Position: (28, 3))
113 , (Sequence: =, Token Category: 5, Position: (28, 6))
114 , (Sequence: fibonacci, Token Category: 1, Position: (28, 7))
115 , (Sequence: (, Token Category: 24, Position: (28, 16))
116 , (Sequence: n, Token Category: 1, Position: (28, 17))
117 , (Sequence: ), Token Category: 25, Position: (28, 18))
118 , (Sequence: ;, Token Category: 23, Position: (28, 19))
119 , (Sequence: #dosomethingwithfib, Token Category: 11, Position: (29, 0))
120 , (Sequence: }, Token Category: 27, Position: (30, 0))
121 , (Sequence: ;, Token Category: 23, Position: (30, 1))
122 ]

```

1.3 ShellSort

```

1  [(Sequence: void, Token Category: 30, Position: (0, 0))
2  , (Sequence: main, Token Category: 32, Position: (0, 4))
3  , (Sequence: (, Token Category: 24, Position: (0, 8))
4  , (Sequence: ), Token Category: 25, Position: (0, 9))
5  , (Sequence: {, Token Category: 26, Position: (0, 10))
6  , (Sequence: int, Token Category: 21, Position: (1, 0))
7  , (Sequence: size, Token Category: 1, Position: (1, 3))
8  , (Sequence: ;, Token Category: 23, Position: (1, 7))
9  , (Sequence: readIn, Token Category: 31, Position: (2, 0))
10 , (Sequence: (, Token Category: 24, Position: (2, 6))
11 , (Sequence: size, Token Category: 1, Position: (2, 7))
12 , (Sequence: ), Token Category: 25, Position: (2, 11))
13 , (Sequence: ;, Token Category: 23, Position: (2, 12))
14 , (Sequence: int, Token Category: 21, Position: (4, 0))
15 , (Sequence: vet, Token Category: 1, Position: (4, 3))
16 , (Sequence: ::, Token Category: 12, Position: (4, 6))
17 , (Sequence: size, Token Category: 1, Position: (4, 8))

```


18 , (Sequence: ;, Token Category: 23, Position: (4, 12))
 19 , (Sequence: **for**, Token Category: 20, Position: (5, 0))
 20 , (Sequence: (, Token Category: 24, Position: (5, 3))
 21 , (Sequence: **int**, Token Category: 21, Position: (5, 4))
 22 , (Sequence: i, Token Category: 1, Position: (5, 7))
 23 , (Sequence: =, Token Category: 5, Position: (5, 8))
 24 , (Sequence: 0, Token Category: 3, Position: (5, 9))
 25 , (Sequence: ;, Token Category: 23, Position: (5, 10))
 26 , (Sequence: i, Token Category: 1, Position: (5, 11))
 27 , (Sequence: <, Token Category: 6, Position: (5, 12))
 28 , (Sequence: size, Token Category: 1, Position: (5, 13))
 29 , (Sequence: ;, Token Category: 23, Position: (5, 17))
 30 , (Sequence: i, Token Category: 1, Position: (5, 18))
 31 , (Sequence: =, Token Category: 5, Position: (5, 19))
 32 , (Sequence: i, Token Category: 1, Position: (5, 20))
 33 , (Sequence: +, Token Category: 8, Position: (5, 21))
 34 , (Sequence: 1, Token Category: 3, Position: (5, 22))
 35 , (Sequence:), Token Category: 25, Position: (5, 23))
 36 , (Sequence: {, Token Category: 26, Position: (5, 24))
 37 , (Sequence: **int**, Token Category: 21, Position: (6, 0))
 38 , (Sequence: x, Token Category: 1, Position: (6, 3))
 39 , (Sequence: ;, Token Category: 23, Position: (6, 4))
 40 , (Sequence: readIn, Token Category: 31, Position: (7, 0))
 41 , (Sequence: (, Token Category: 24, Position: (7, 6))
 42 , (Sequence: x, Token Category: 1, Position: (7, 7))
 43 , (Sequence:), Token Category: 25, Position: (7, 8))
 44 , (Sequence: ;, Token Category: 23, Position: (7, 9))
 45 , (Sequence: add, Token Category: 1, Position: (8, 0))
 46 , (Sequence: (, Token Category: 24, Position: (8, 3))
 47 , (Sequence: vet, Token Category: 1, Position: (8, 4))
 48 , (Sequence: ,, Token Category: 23, Position: (8, 7))
 49 , (Sequence: x, Token Category: 1, Position: (8, 8))
 50 , (Sequence:), Token Category: 25, Position: (8, 9))
 51 , (Sequence: ;, Token Category: 23, Position: (8, 10))
 52 , (Sequence: }, Token Category: 27, Position: (9, 0))
 53 , (Sequence: ;, Token Category: 23, Position: (9, 1))
 54 , (Sequence: **int**, Token Category: 21, Position: (11, 0))
 55 , (Sequence: value, Token Category: 1, Position: (11, 3))
 56 , (Sequence: ;, Token Category: 23, Position: (11, 8))
 57 , (Sequence: **int**, Token Category: 21, Position: (12, 0))
 58 , (Sequence: gap, Token Category: 1, Position: (12, 3))

59 , (Sequence: =, Token Category: 5, Position: (12, 6))
 60 , (Sequence: 1, Token Category: 3, Position: (12, 7))
 61 , (Sequence: ;, Token Category: 23, Position: (12, 8))
 62 , (Sequence: **while**, Token Category: 19, Position: (13, 0))
 63 , (Sequence: (, Token Category: 24, Position: (13, 5))
 64 , (Sequence: gap, Token Category: 1, Position: (13, 6))
 65 , (Sequence: <, Token Category: 6, Position: (13, 9))
 66 , (Sequence: size, Token Category: 1, Position: (13, 10))
 67 , (Sequence:), Token Category: 25, Position: (13, 14))
 68 , (Sequence: {, Token Category: 26, Position: (13, 15))
 69 , (Sequence: gap, Token Category: 1, Position: (14, 0))
 70 , (Sequence: =, Token Category: 5, Position: (14, 3))
 71 , (Sequence: 3, Token Category: 3, Position: (14, 4))
 72 , (Sequence: *, Token Category: 9, Position: (14, 5))
 73 , (Sequence: gap, Token Category: 1, Position: (14, 6))
 74 , (Sequence: +, Token Category: 8, Position: (14, 9))
 75 , (Sequence: 1, Token Category: 3, Position: (14, 10))
 76 , (Sequence: ;, Token Category: 23, Position: (14, 11))
 77 , (Sequence: }, Token Category: 27, Position: (15, 0))
 78 , (Sequence: ;, Token Category: 23, Position: (15, 1))
 79 , (Sequence: **while**, Token Category: 19, Position: (17, 0))
 80 , (Sequence: (, Token Category: 24, Position: (17, 5))
 81 , (Sequence: gap, Token Category: 1, Position: (17, 6))
 82 , (Sequence: >, Token Category: 6, Position: (17, 9))
 83 , (Sequence: 1, Token Category: 3, Position: (17, 10))
 84 , (Sequence:), Token Category: 25, Position: (17, 11))
 85 , (Sequence: {, Token Category: 26, Position: (17, 12))
 86 , (Sequence: gap, Token Category: 1, Position: (18, 0))
 87 , (Sequence: =, Token Category: 5, Position: (18, 3))
 88 , (Sequence: gap, Token Category: 1, Position: (18, 4))
 89 , (Sequence: /, Token Category: 9, Position: (18, 7))
 90 , (Sequence: 3, Token Category: 3, Position: (18, 8))
 91 , (Sequence: ;, Token Category: 23, Position: (18, 9))
 92 , (Sequence: **for**, Token Category: 20, Position: (19, 0))
 93 , (Sequence: (, Token Category: 24, Position: (19, 3))
 94 , (Sequence: **int**, Token Category: 21, Position: (19, 4))
 95 , (Sequence: i, Token Category: 1, Position: (19, 7))
 96 , (Sequence: =, Token Category: 5, Position: (19, 8))
 97 , (Sequence: gap, Token Category: 1, Position: (19, 9))
 98 , (Sequence: ;, Token Category: 23, Position: (19, 12))
 99 , (Sequence: i, Token Category: 1, Position: (19, 13))

100 , (Sequence: <, Token Category: 6, Position: (19, 14))
101 , (Sequence: size, Token Category: 1, Position: (19, 15))
102 , (Sequence: ;, Token Category: 23, Position: (19, 19))
103 , (Sequence: i, Token Category: 1, Position: (19, 20))
104 , (Sequence: =, Token Category: 5, Position: (19, 21))
105 , (Sequence: i, Token Category: 1, Position: (19, 22))
106 , (Sequence: +, Token Category: 8, Position: (19, 23))
107 , (Sequence: 1, Token Category: 3, Position: (19, 24))
108 , (Sequence:), Token Category: 25, Position: (19, 25))
109 , (Sequence: {, Token Category: 26, Position: (19, 26))
110 , (Sequence: value, Token Category: 1, Position: (20, 0))
111 , (Sequence: =, Token Category: 5, Position: (20, 5))
112 , (Sequence: getValue, Token Category: 1, Position: (20, 6))
113 , (Sequence: (, Token Category: 24, Position: (20, 14))
114 , (Sequence: vet, Token Category: 1, Position: (20, 15))
115 , (Sequence: ,, Token Category: 23, Position: (20, 18))
116 , (Sequence: i, Token Category: 1, Position: (20, 19))
117 , (Sequence:), Token Category: 25, Position: (20, 20))
118 , (Sequence: ;, Token Category: 23, Position: (20, 21))
119 , (Sequence: **int**, Token Category: 21, Position: (21, 0))
120 , (Sequence: j, Token Category: 1, Position: (21, 3))
121 , (Sequence: =, Token Category: 5, Position: (21, 4))
122 , (Sequence: i, Token Category: 1, Position: (21, 5))
123 , (Sequence: -, Token Category: 8, Position: (21, 6))
124 , (Sequence: gap, Token Category: 1, Position: (21, 7))
125 , (Sequence: ;, Token Category: 23, Position: (21, 10))
126 , (Sequence: **while**, Token Category: 19, Position: (23, 0))
127 , (Sequence: (, Token Category: 24, Position: (23, 5))
128 , (Sequence: j, Token Category: 1, Position: (23, 6))
129 , (Sequence: >, Token Category: 6, Position: (23, 7))
130 , (Sequence: =, Token Category: 5, Position: (23, 8))
131 , (Sequence: 0, Token Category: 3, Position: (23, 9))
132 , (Sequence: **and**, Token Category: 13, Position: (23, 10))
133 , (Sequence: value, Token Category: 1, Position: (23, 13))
134 , (Sequence: <, Token Category: 6, Position: (23, 18))
135 , (Sequence: getValue, Token Category: 1, Position: (23, 19))
136 , (Sequence: (, Token Category: 24, Position: (23, 27))
137 , (Sequence: vet, Token Category: 1, Position: (23, 28))
138 , (Sequence: ,, Token Category: 23, Position: (23, 31))
139 , (Sequence: j, Token Category: 1, Position: (23, 32))
140 , (Sequence:), Token Category: 25, Position: (23, 33))

141 , (Sequence:), Token Category: 25, Position: (23, 34))
 142 , (Sequence: {, Token Category: 26, Position: (23, 35))
 143 , (Sequence: setValue, Token Category: 1, Position: (24, 0))
 144 , (Sequence: (, Token Category: 24, Position: (24, 8))
 145 , (Sequence: vet, Token Category: 1, Position: (24, 9))
 146 , (Sequence: ,, Token Category: 23, Position: (24, 12))
 147 , (Sequence: j, Token Category: 1, Position: (24, 13))
 148 , (Sequence: +, Token Category: 8, Position: (24, 14))
 149 , (Sequence: gap, Token Category: 1, Position: (24, 15))
 150 , (Sequence: ,, Token Category: 23, Position: (24, 18))
 151 , (Sequence: getValue, Token Category: 1, Position: (24, 19))
 152 , (Sequence: (, Token Category: 24, Position: (24, 27))
 153 , (Sequence: vet, Token Category: 1, Position: (24, 28))
 154 , (Sequence: ,, Token Category: 23, Position: (24, 31))
 155 , (Sequence: j, Token Category: 1, Position: (24, 32))
 156 , (Sequence:), Token Category: 25, Position: (24, 33))
 157 , (Sequence:), Token Category: 25, Position: (24, 34))
 158 , (Sequence: ;, Token Category: 23, Position: (24, 35))
 159 , (Sequence: j, Token Category: 1, Position: (25, 0))
 160 , (Sequence: =, Token Category: 5, Position: (25, 1))
 161 , (Sequence: j, Token Category: 1, Position: (25, 2))
 162 , (Sequence: -, Token Category: 8, Position: (25, 3))
 163 , (Sequence: gap, Token Category: 1, Position: (25, 4))
 164 , (Sequence: ;, Token Category: 23, Position: (25, 7))
 165 , (Sequence: }, Token Category: 27, Position: (26, 0))
 166 , (Sequence: ;, Token Category: 23, Position: (26, 1))
 167 , (Sequence: setValue, Token Category: 1, Position: (28, 0))
 168 , (Sequence: (, Token Category: 24, Position: (28, 8))
 169 , (Sequence: vet, Token Category: 1, Position: (28, 9))
 170 , (Sequence: ,, Token Category: 23, Position: (28, 12))
 171 , (Sequence: j, Token Category: 1, Position: (28, 13))
 172 , (Sequence: +, Token Category: 8, Position: (28, 14))
 173 , (Sequence: gap, Token Category: 1, Position: (28, 15))
 174 , (Sequence: ,, Token Category: 23, Position: (28, 18))
 175 , (Sequence: value, Token Category: 1, Position: (28, 19))
 176 , (Sequence:), Token Category: 25, Position: (28, 24))
 177 , (Sequence: ;, Token Category: 23, Position: (28, 25))
 178 , (Sequence: }, Token Category: 27, Position: (29, 0))
 179 , (Sequence: ;, Token Category: 23, Position: (29, 1))
 180 , (Sequence: }, Token Category: 27, Position: (30, 0))
 181 , (Sequence: ;, Token Category: 23, Position: (30, 1))

182 , (Sequence: }, Token Category: 27, Position: (31, 0))
183 , (Sequence: ;, Token Category: 23, Position: (31, 1))
184]
