

Parsed libic.sig successfully!

1: Declaration of class: Library  
2: Declaration of library method: println  
2: Primitive data type: void  
2: Parameter: s  
2: Primitive data type: string  
3: Declaration of library method: print  
3: Primitive data type: void  
3: Parameter: s  
3: Primitive data type: string  
4: Declaration of library method: printi  
4: Primitive data type: void  
4: Parameter: i  
4: Primitive data type: int  
5: Declaration of library method: printb  
5: Primitive data type: void  
5: Parameter: b  
5: Primitive data type: boolean  
7: Declaration of library method: readi  
7: Primitive data type: int  
8: Declaration of library method: readln  
8: Primitive data type: string  
9: Declaration of library method: eof  
9: Primitive data type: boolean  
11: Declaration of library method: stoi  
11: Primitive data type: int  
11: Parameter: s  
11: Primitive data type: string  
11: Parameter: n  
11: Primitive data type: int  
13: Declaration of library method: itos  
13: Primitive data type: string  
13: Parameter: i  
13: Primitive data type: int  
14: Declaration of library method: stoa  
14: Primitive data type: int  
14: Parameter: s  
14: Primitive data type: string  
15: Declaration of library method: atos  
15: Primitive data type: string  
15: Parameter: a  
15: Primitive data type: int  
17: Declaration of library method: random  
17: Primitive data type: int  
17: Parameter: n  
17: Primitive data type: int  
18: Declaration of library method: time  
18: Primitive data type: int  
19: Declaration of library method: exit  
19: Primitive data type: int  
19: Parameter: i  
19: Primitive data type: int

Parsed Quicksort.ic successfully!

Abstract Syntax Tree: Quicksort.ic

15: Declaration of class: Quicksort  
16: Declaration of field: a  
16: Primitive data type: 1-dimensional array of int  
18: Declaration of virtual method: partition  
18: Primitive data type: int  
18: Parameter: low  
18: Primitive data type: int  
18: Parameter: high  
18: Primitive data type: int  
19: Declaration of local variable: pivot, with initial value  
19: Primitive data type: int  
19: Reference to array  
19: Reference to variable: a  
19: Reference to variable: low  
20: Declaration of local variable: i, with initial value  
20: Primitive data type: int  
20: Reference to variable: low  
21: Declaration of local variable: j, with initial value  
21: Primitive data type: int  
21: Reference to variable: high  
22: Declaration of local variable: tmp  
22: Primitive data type: int  
24: While statement  
24: Boolean literal: true  
24: Block of statements  
25: While statement  
25: Logical binary operation: less than  
25: Reference to array  
25: Reference to variable: a  
25: Reference to variable: i  
25: Reference to variable: pivot  
25: Assignment statement  
25: Reference to variable: i  
25: Mathematical binary operation: addition  
25: Reference to variable: i  
25: Integer literal: 1  
26: While statement  
26: Logical binary operation: greater than  
26: Reference to array  
26: Reference to variable: a  
26: Reference to variable: j  
26: Reference to variable: pivot  
26: Assignment statement  
26: Reference to variable: j  
26: Mathematical binary operation: subtraction  
26: Reference to variable: j  
26: Integer literal: 1  
28: If statement  
28: Logical binary operation: greater than or equal to  
28: Reference to variable: i  
28: Reference to variable: j  
28: Break statement  
30: Assignment statement

30: Reference to variable: tmp  
30: Reference to array  
30: Reference to variable: a  
30: Reference to variable: i  
31: Assignment statement  
31: Reference to array  
31: Reference to variable: a  
31: Reference to variable: i  
31: Reference to array  
31: Reference to variable: a  
31: Reference to variable: j  
32: Assignment statement  
32: Reference to array  
32: Reference to variable: a  
32: Reference to variable: j  
32: Reference to variable: tmp  
33: Assignment statement  
33: Reference to variable: i  
33: Mathematical binary operation: addition  
33: Reference to variable: i  
33: Integer literal: 1  
34: Assignment statement  
34: Reference to variable: j  
34: Mathematical binary operation: subtraction  
34: Reference to variable: j  
34: Integer literal: 1  
37: Return statement, with return value  
37: Reference to variable: j  
40: Declaration of virtual method: quicksort  
40: Primitive data type: void  
40: Parameter: low  
40: Primitive data type: int  
40: Parameter: high  
40: Primitive data type: int  
41: If statement  
41: Logical binary operation: less than  
41: Reference to variable: low  
41: Reference to variable: high  
41: Block of statements  
42: Declaration of local variable: mid, with initial value  
42: Primitive data type: int  
42: Call to virtual method: partition  
42: Reference to variable: low  
42: Reference to variable: high  
43: Method call statement  
43: Call to virtual method: quicksort  
43: Reference to variable: low  
43: Reference to variable: mid  
44: Method call statement  
44: Call to virtual method: quicksort  
44: Mathematical binary operation: addition  
44: Reference to variable: mid  
44: Integer literal: 1  
44: Reference to variable: high  
48: Declaration of virtual method: initArray  
48: Primitive data type: void  
49: Declaration of local variable: i, with initial value

49: Primitive data type: int  
49: Integer literal: 0  
50: While statement  
50: Logical binary operation: less than  
50: Reference to variable: i  
50: Reference to array length  
50: Reference to variable: a  
50: Block of statements  
51: Assignment statement  
51: Reference to array  
51: Reference to variable: a  
51: Reference to variable: i  
51: Call to static method: random, in class Library  
51: Mathematical binary operation: multiplication  
51: Reference to array length  
51: Reference to variable: a  
51: Integer literal: 2  
52: Assignment statement  
52: Reference to variable: i  
52: Mathematical binary operation: addition  
52: Reference to variable: i  
52: Integer literal: 1  
56: Declaration of virtual method: printArray  
56: Primitive data type: void  
57: Declaration of local variable: i, with initial value  
57: Primitive data type: int  
57: Integer literal: 0  
59: Method call statement  
59: Call to static method: print, in class Library  
59: String literal: "Array elements: "  
60: While statement  
60: Logical binary operation: less than  
60: Reference to variable: i  
60: Reference to array length  
60: Reference to variable: a  
60: Block of statements  
61: Method call statement  
61: Call to static method: printi, in class Library  
61: Reference to array  
61: Reference to variable: a  
61: Reference to variable: i  
62: Method call statement  
62: Call to static method: print, in class Library  
62: String literal: " "  
63: Assignment statement  
63: Reference to variable: i  
63: Mathematical binary operation: addition  
63: Reference to variable: i  
63: Integer literal: 1  
65: Method call statement  
65: Call to static method: print, in class Library  
65: String literal: "\n"  
68: Declaration of static method: main  
68: Primitive data type: void  
68: Parameter: args  
68: Primitive data type: 1-dimensional array of string  
69: Declaration of local variable: n

69: Primitive data type: int  
71: If statement  
71: Logical binary operation: inequality  
71: Reference to array length  
71: Reference to variable: args  
71: Integer literal: 1  
71: Block of statements  
72: Method call statement  
72: Call to static method: println, in class Library  
72: String literal: "Unspecified array length"  
73: Method call statement  
73: Call to static method: exit, in class Library  
73: Integer literal: 1  
76: Assignment statement  
76: Reference to variable: n  
76: Call to static method: stoi, in class Library  
76: Reference to array  
76: Reference to variable: args  
76: Integer literal: 0  
76: Integer literal: 0  
77: If statement  
77: Logical binary operation: less than or equal to  
77: Reference to variable: n  
77: Integer literal: 0  
77: Block of statements  
78: Method call statement  
78: Call to static method: println, in class Library  
78: String literal: "Invalid array length"  
79: Method call statement  
79: Call to static method: exit, in class Library  
79: Integer literal: 1  
81: Declaration of local variable: s, with initial value  
81: User-defined data type: Quicksort  
81: Instantiation of class: Quicksort  
82: Assignment statement  
82: Reference to variable: a, in external scope  
82: Reference to variable: s  
82: Array allocation  
82: Primitive data type: int  
82: Reference to variable: n  
84: Method call statement  
84: Call to virtual method: initArray, in external scope  
84: Reference to variable: s  
85: Method call statement  
85: Call to virtual method: printArray, in external scope  
85: Reference to variable: s  
86: Method call statement  
86: Call to virtual method: quicksort, in external scope  
86: Reference to variable: s  
86: Integer literal: 0  
86: Mathematical binary operation: subtraction  
86: Reference to variable: n  
86: Integer literal: 1  
87: Method call statement  
87: Call to virtual method: printArray, in external scope  
87: Reference to variable: s