

MicroJava OpCodes

Laden/Speichern von lokalen Variablen

1	load	b	... → ..., local[b]
2	load_0		... → ..., local[0]
3	load_1		... → ..., local[1]
4	load_2		... → ..., local[2]
5	load_3		... → ..., local[3]
6	store	b	..., val → ...
7	store_0		..., val → ...
8	store_1		..., val → ...
9	store_2		..., val → ...
10	store_3		..., val → ...

Laden/Speichern von global Variablen

11	getstatic	s	... → ..., global[s]
12	putstatic	s	..., val → ...

Laden/Speichern von Objektfeldern

13	getfield	s	..., adr → ..., adr.fields[s]
14	putfield	s	..., adr, val → ...

Laden von Konstanten

15	const_0		... → ..., 0
16	const_1		... → ..., 1
17	const_2		... → ..., 2
18	const_3		... → ..., 3
19	const_4		... → ..., 4
20	const_5		... → ..., 5
21	const_m1		... → ..., -1
22	const	w	... → ..., w

Arithmetik

23	add		..., v1, v2 → ..., v1 + v2
24	sub		..., v1, v2 → ..., v1 - v2
25	mul		..., v1, v2 → ..., v1 * v2
26	div		..., v1, v2 → ..., v1 / v2
27	rem		..., v1, v2 → ..., v1 % v2
28	neg		..., val → ..., -val
29	shl		..., v1, v2 → ..., v2 << v1
30	shr		..., v1, v2 → ..., v2 >> v1
31	inc	b1, b2 (= local[b1] + b2)	

Objekterzeugung

32	new	s	... → ..., adr
33	newarray	b	..., n → ..., adr

Arrayzugriff

34	aload		..., adr, index → ..., val
35	astore		..., adr, index, val → ...
36	baload		..., adr, index → ..., val
37	bastore		..., adr, index, val → ...
38	arraylength		..., adr → ..., len

Stackmanipulation

39	pop		..., val → ...
40	dup		..., val → ..., val, val
41	dup2		..., v1, v2 → ..., v1, v2, v1, v2

Sprünge

42	jmp	s	... → ...
43	jeq	s	..., val1, val2 → ...
44	jne	s	..., val1, val2 → ...
45	jlt	s	..., val1, val2 → ...
46	jle	s	..., val1, val2 → ...
47	jgt	s	..., val1, val2 → ...
48	jge	s	..., val1, val2 → ...

Methodenaufruf

49	call	s	
50	return		
51	enter	b1, b2 (b1...nPars, b2...nLocVars)	
52	exit		

Ein-/Ausgabe

53	read		... → ..., val
54	print		..., val, width → ...
55	bread		... → ..., val
56	bprint		..., val, width → ...

Sonstiges

57	trap	b	
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