

Block 0

resumepoint 2 2 2 1 0 2 2

0 Parameter THIS\_SLOT

Value

1 Parameter 0

Value

2 Constant undefined

Undefined

3 Start

4 CheckOverRecursed

5 Constant magic uninitialized-lexical

MagicUninitializedLexical

6 Constant 0x0

Int32

14 Goto → block 1

Block 1 (loop header)

resumepoint 13 12 11 10 9 8 7

7 Phi ← Constant#2, Constant#2

Value

8 Phi ← Constant#2, Constant#2

Value

9 Phi ← Parameter#0, Parameter#0

Value

10 Phi ← Parameter#1, Parameter#1

Value

11 Phi ← Constant#6, UnreachableResult#34

Value

12 Phi ← Constant#2, UnreachableResult#21

Value

13 Phi ← Constant#2, UnreachableResult#30

Value

15 InterruptCheck

16 Bail

17 UnreachableResult

Bool

18 Test ← UnreachableResult#17 → block 2, block 3

Block 2 (backedge)

resumepoint 13 12 11 10 9 8 7

19 Constant magic uninitialized-lexical

MagicUninitializedLexical

20 Bail

21 UnreachableResult

Object

22 Constant 0x0

Int32

23 Constant string 3fb4252d780

String

24 Bail

25 Constant 0x1

Int32

26 Constant string 3fb4252be60

String

27 Bail

28 Constant 0x1

Int32

29 Bail

30 UnreachableResult

Value

31 Bail

32 UnreachableResult

Value

33 Bail

34 UnreachableResult

Value

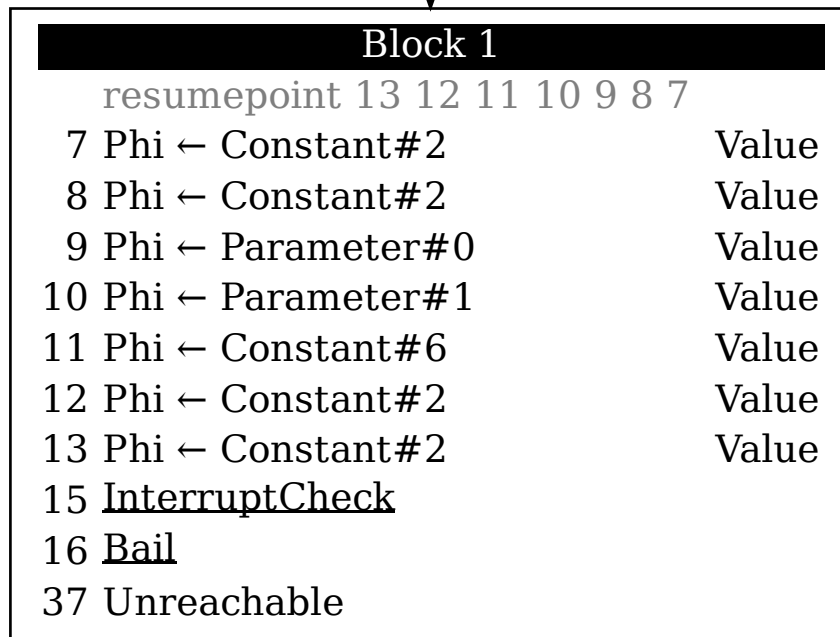
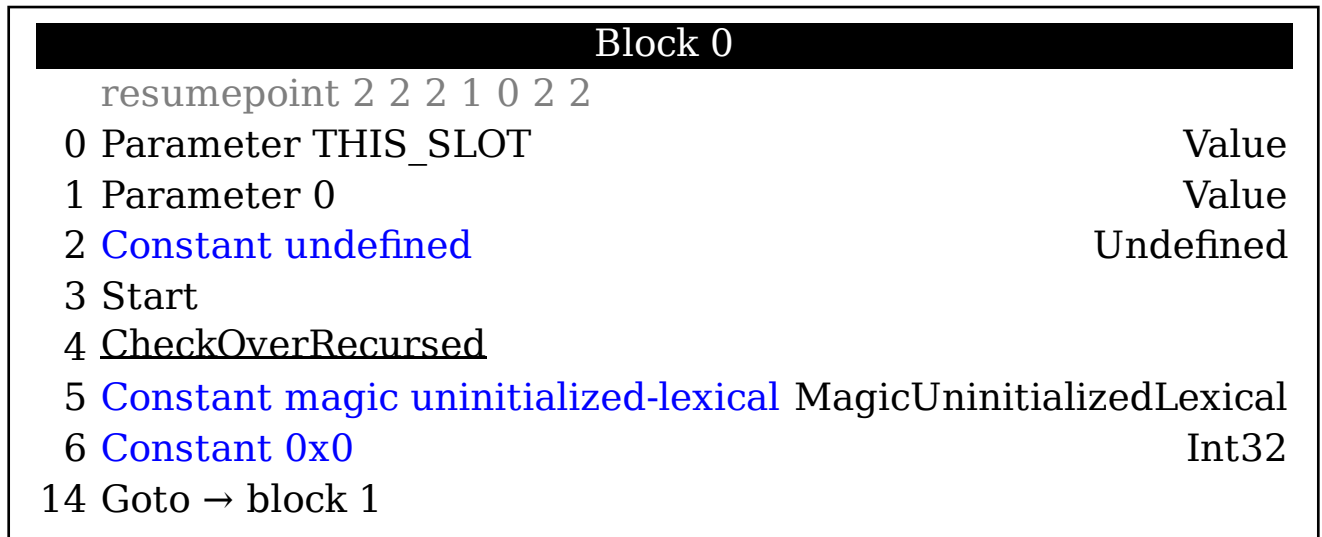
35 Goto → block 1

Block 3

resumepoint 13 12 11 10 9 8 7

36 Return ← Phi#8

**./Benchmarkers/prop\_access.js:2 - Prune Unused Branches**  
movable, guard, in worklist, recovered on bailout



**./Benchmarks/prop\_access.js:2 - Fold Empty Blocks**  
movable, guard, in worklist, recovered on bailout

**Block 0**

resumepoint 2 2 2 1 0 2 2

0	Parameter THIS_SLOT	Value
1	Parameter 0	Value
2	Constant undefined	Undefined
3	Start	
4	<u>CheckOverRecurse</u>	
5	Constant magic uninitialized-lexical	MagicUninitializedLexical
6	Constant 0x0	Int32
14	Goto → block 1	

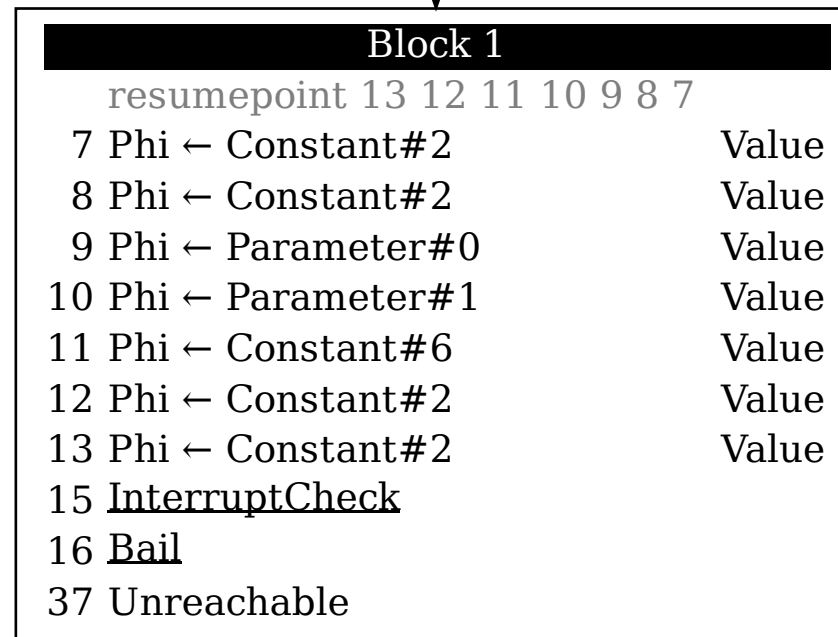
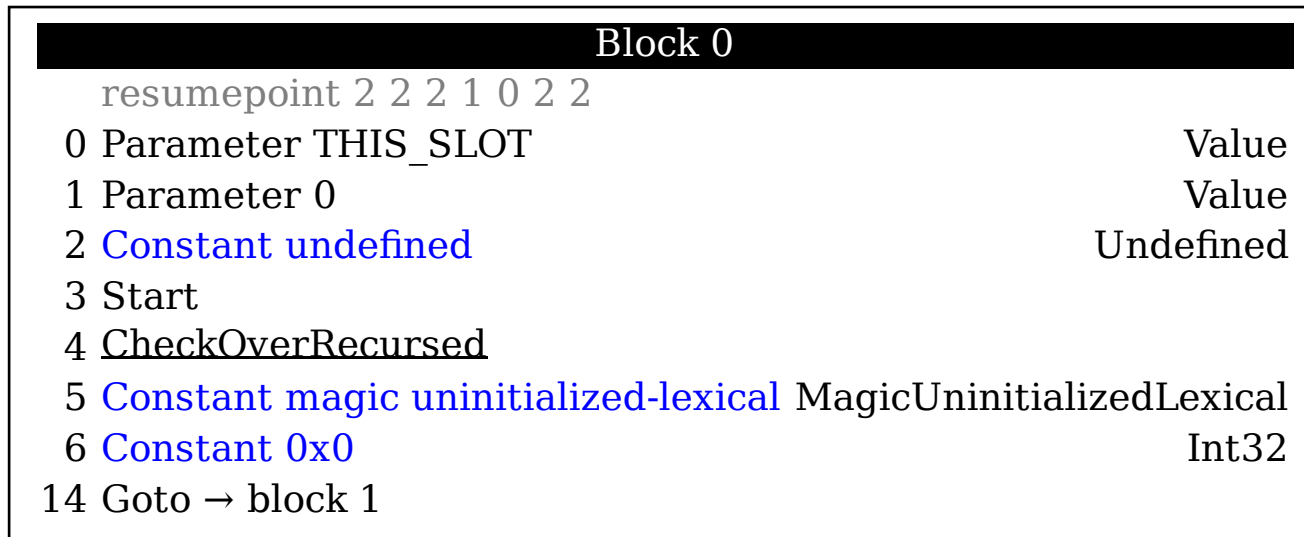


**Block 1**

resumepoint 13 12 11 10 9 8 7

7	Phi ← Constant#2	Value
8	Phi ← Constant#2	Value
9	Phi ← Parameter#0	Value
10	Phi ← Parameter#1	Value
11	Phi ← Constant#6	Value
12	Phi ← Constant#2	Value
13	Phi ← Constant#2	Value
15	<u>InterruptCheck</u>	
16	<u>Bail</u>	
37	Unreachable	

**./Benchmarkers/prop\_access.js:2 - Eliminate trivially dead resume point operands**  
movable, guard, in worklist, recovered on bailout



**./Benchmarkers/prop\_access.js:2 - Fold Tests**  
movable, guard, in worklist, recovered on bailout

**Block 0**

resume point 2 2 2 1 0 2 2

0	Parameter THIS_SLOT	Value
1	Parameter 0	Value
2	Constant undefined	Undefined
3	Start	
4	<u>CheckOverRecurse</u>	
5	Constant magic uninitialized-lexical	MagicUninitializedLexical
6	Constant 0x0	Int32
14	Goto → block 1	

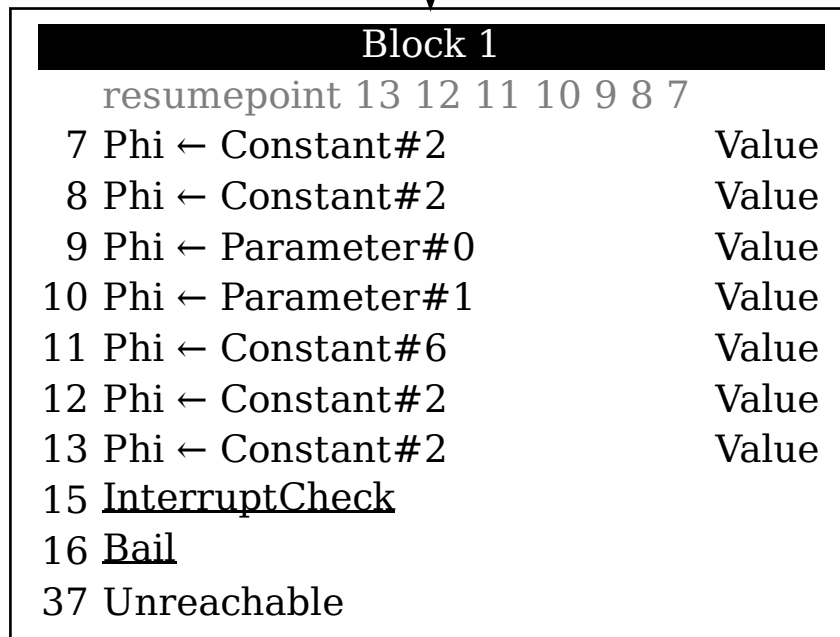
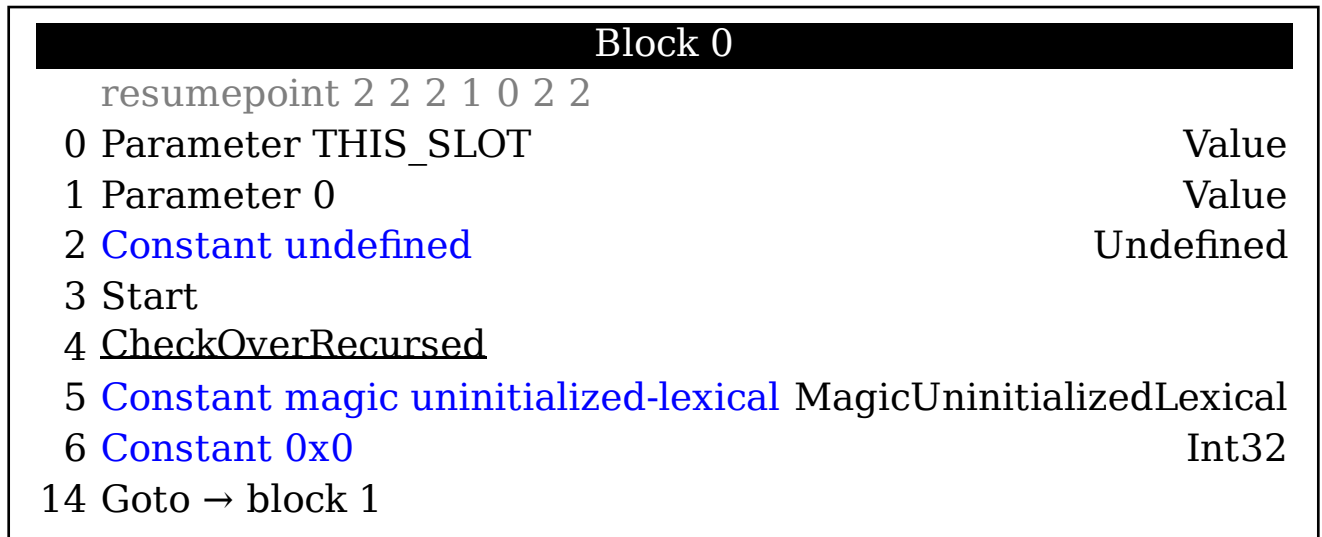


**Block 1**

resume point 13 12 11 10 9 8 7

7	Phi ← Constant#2	Value
8	Phi ← Constant#2	Value
9	Phi ← Parameter#0	Value
10	Phi ← Parameter#1	Value
11	Phi ← Constant#6	Value
12	Phi ← Constant#2	Value
13	Phi ← Constant#2	Value
15	<u>InterruptCheck</u>	
16	<u>Bail</u>	
37	Unreachable	

**./Benchmarkers/prop\_access.js:2 - Split Critical Edges**  
movable, guard, in worklist, recovered on bailout



## ./Benchmarkers/prop\_access.js:2 - Renumber Blocks

movable, guard, in worklist, recovered on bailout

### Block 0

resume point 2 2 2 1 0 2 2

0	Parameter THIS_SLOT	Value
1	Parameter 0	Value
2	Constant undefined	Undefined
3	Start	
4	<u>CheckOverRecurse</u>	
5	Constant magic uninitialized-lexical	MagicUninitializedLexical
6	Constant 0x0	Int32
14	Goto → block 1	



### Block 1

resume point 13 12 11 10 9 8 7

7	Phi ← Constant#2	Value
8	Phi ← Constant#2	Value
9	Phi ← Parameter#0	Value
10	Phi ← Parameter#1	Value
11	Phi ← Constant#6	Value
12	Phi ← Constant#2	Value
13	Phi ← Constant#2	Value
15	<u>InterruptCheck</u>	
16	<u>Bail</u>	
37	Unreachable	

**./Benchmarks/prop\_access.js:2 - Eliminate this**  
movable, guard, in worklist, recovered on bailout

**Block 0**

resumepoint 2 2 2 1 0 2 2

0 Parameter THIS\_SLOT Value

1 Parameter 0 Value

2 Constant undefined Undefined

3 Start

4 CheckOverRecursed

5 Constant magic uninitialized-lexical MagicUninitializedLexical

6 Constant 0x0 Int32

14 Goto → block 1



**Block 1**

resumepoint 2 2 6 1 0 2 2

15 InterruptCheck

16 Bail

37 Unreachable



## ./Benchmarks/prop\_access.js:2 - Iterator Indices

**movable**, **guard**, **in worklist**, recovered on bailout

### Block 0

resumepoint 2 2 2 1 0 2 2

0	Parameter THIS_SLOT	Value
1	Parameter 0	Value
2	<b>Constant undefined</b>	Undefined
3	Start	
4	<u>CheckOverRecursed</u>	
5	<b>Constant magic uninitialized-lexical</b>	MagicUninitializedLexical
6	<b>Constant 0x0</b>	Int32
14	Goto → block 1	



### Block 1

resumepoint 2 2 6 1 0 2 2

15 InterruptCheck  
16 Bail  
37 Unreachable

## ./Benchmarks/prop\_access.js:2 - Scalar Replacement

*movable*, *guard*, *in worklist*, *recovered on bailout*

### Block 0

resumepoint 2 2 2 1 0 2 2

0	Parameter THIS_SLOT	Value
1	Parameter 0	Value
2	Constant undefined	Undefined
3	Start	
4	<del>CheckOverRecursed</del>	
5	Constant magic uninitialized-lexical	MagicUninitializedLexical
6	Constant 0x0	Int32
14	Goto → block 1	



### Block 1

resumepoint 2 2 6 1 0 2 2

15 ~~InterruptCheck~~  
16 Bail  
37 Unreachable

**./Benchmarkers/prop\_access.js:2 - Apply types**  
movable, guard, in worklist, recovered on bailout

**Block 0**

resumepoint 2 2 2 1 0 2 2

0 Parameter THIS\_SLOT Value

1 Parameter 0 Value

2 Constant undefined Undefined

3 Start

4 CheckOverRecursed

5 Constant magic uninitialized-lexical MagicUninitializedLexical

6 Constant 0x0 Int32

14 Goto → block 1

**Block 1**

resumepoint 2 2 6 1 0 2 2

15 InterruptCheck

16 Bail

37 Unreachable

**./Benchmarks/prop\_access.js:2 - Alias analysis**  
movable, guard, in worklist, recovered on bailout

**Block 0**

resumepoint 2 2 2 1 0 2 2

0	Parameter THIS_SLOT	Value
1	Parameter 0	Value
2	Constant undefined	Undefined
3	Start	
4	CheckOverRecursed	
5	Constant magic uninitialized-lexical	MagicUninitializedLexical
6	Constant 0x0	Int32
7	Goto → block 1	



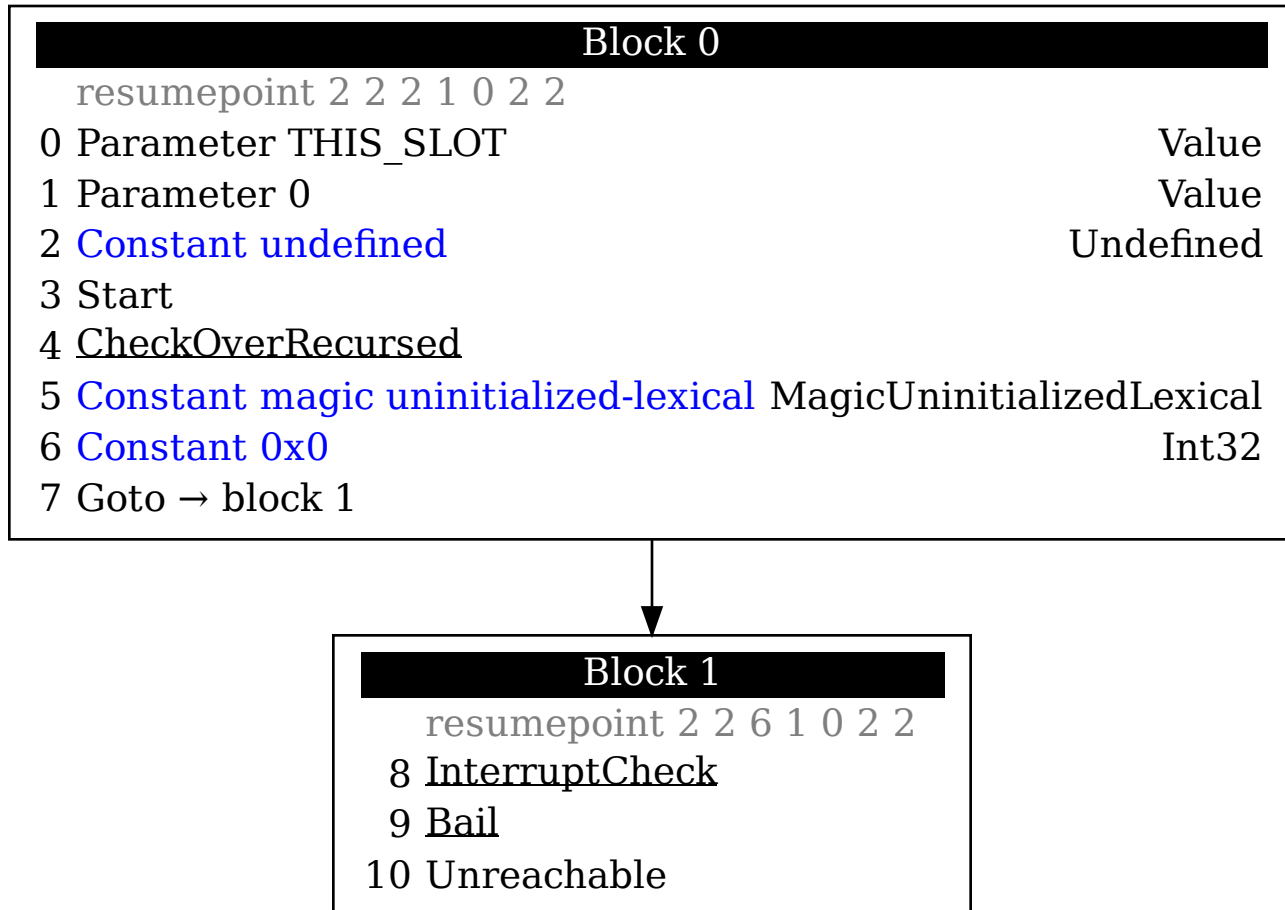
**Block 1**

resumepoint 2 2 6 1 0 2 2

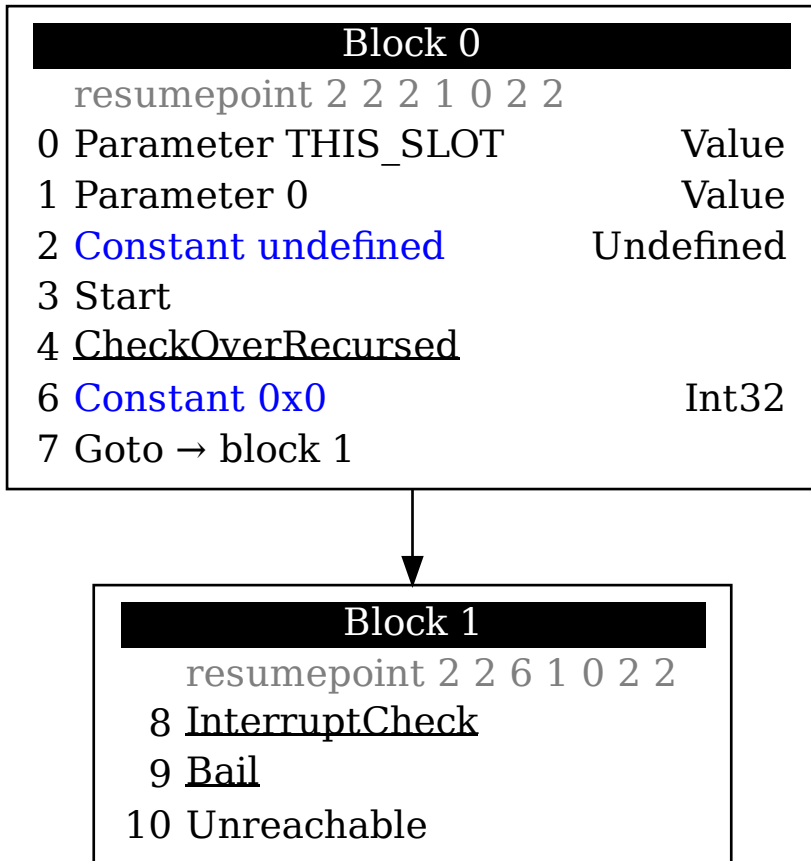
8 InterruptCheck  
9 Bail  
10 Unreachable

## ./Benchmarkers/prop\_access.js:2 - Eliminate dead resume point operands

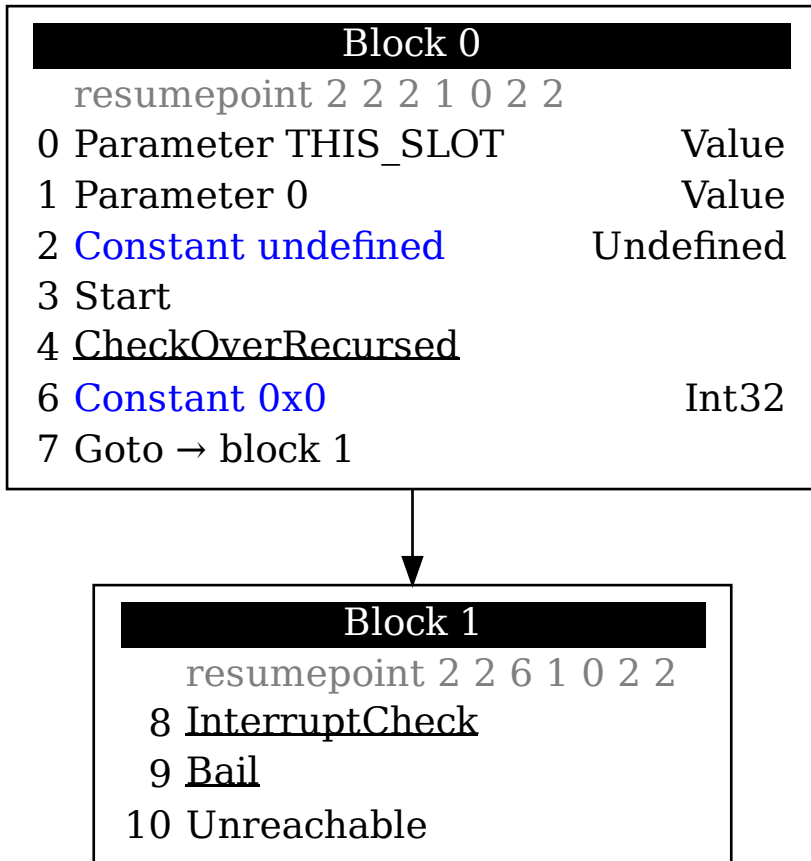
**movable**, **guard**, **in worklist**, recovered on bailout



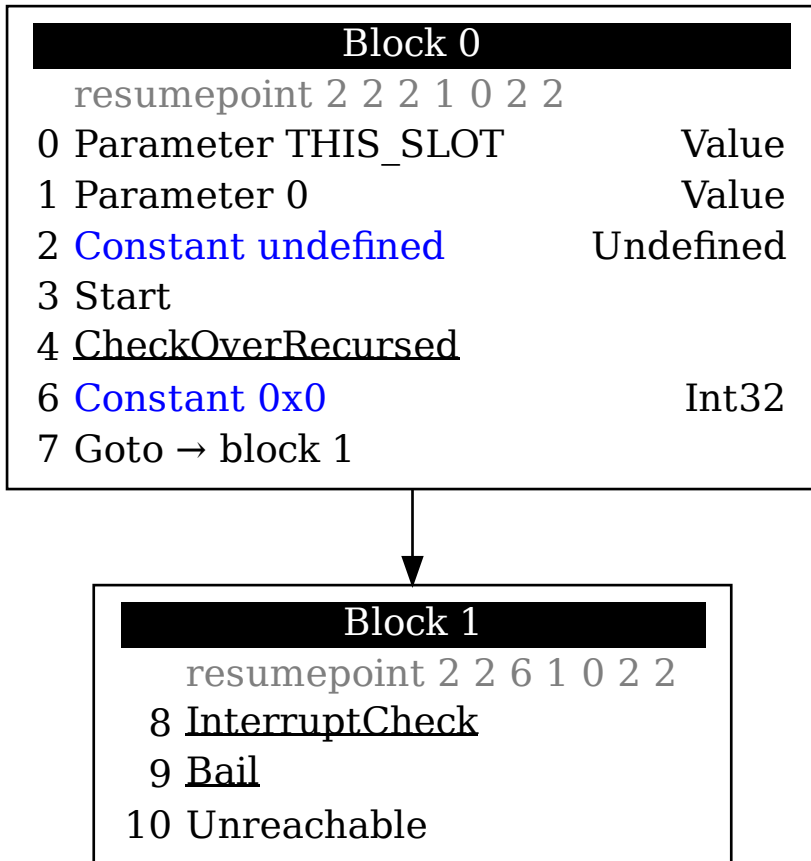
**./Benchmarks/prop\_access.js:2 - GVN**  
movable, guard, in worklist, recovered on bailout



**./Benchmarkers/prop\_access.js:2 - LICM**  
movable, guard, in worklist, recovered on bailout



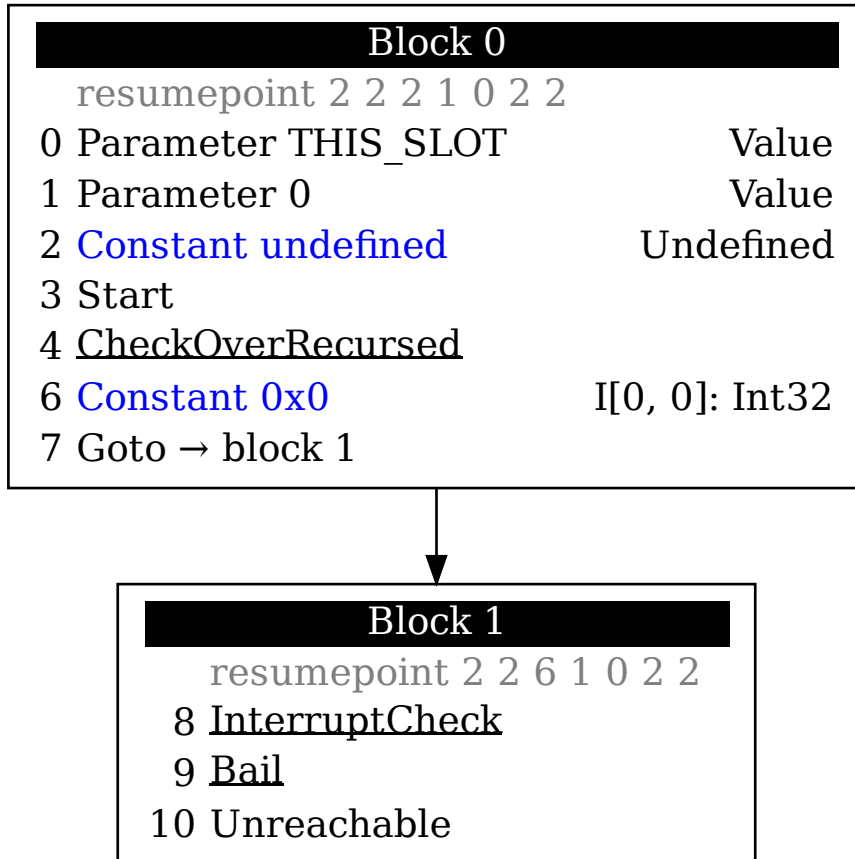
**./Benchmarks/prop\_access.js:2 - Beta**  
movable, guard, in worklist, recovered on bailout



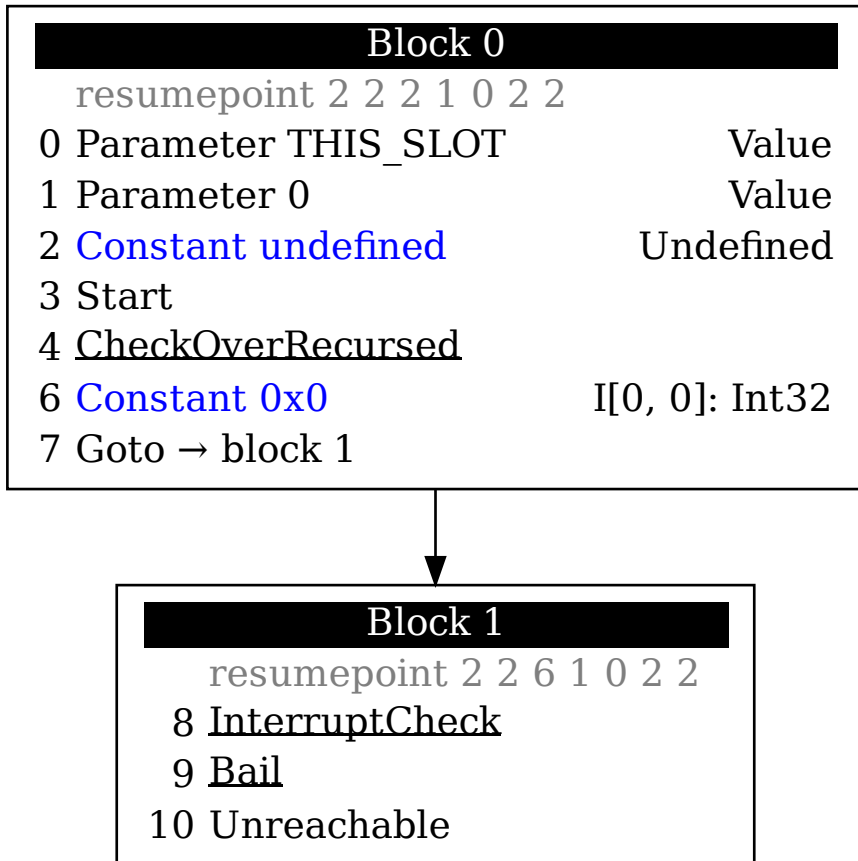


## ./Benchmarks/prop\_access.js:2 - Range Analysis

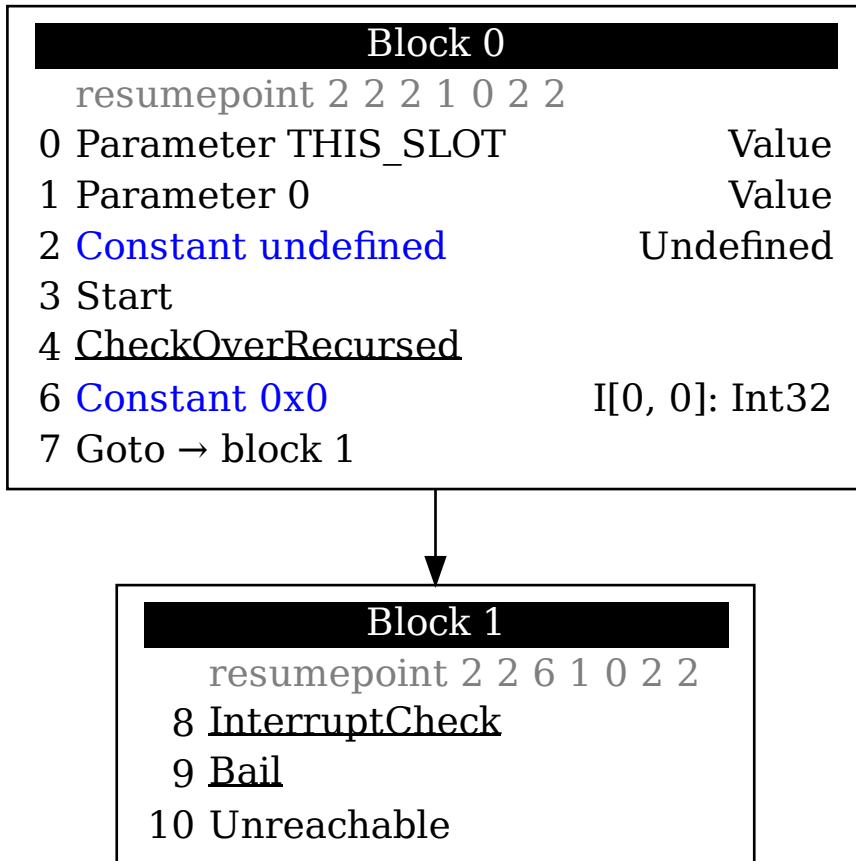
**movable**, **guard**, **in worklist**, recovered on bailout



**./Benchmarkers/prop\_access.js:2 - De-Beta**  
**movable**, **guard**, **in worklist**, recovered on bailout

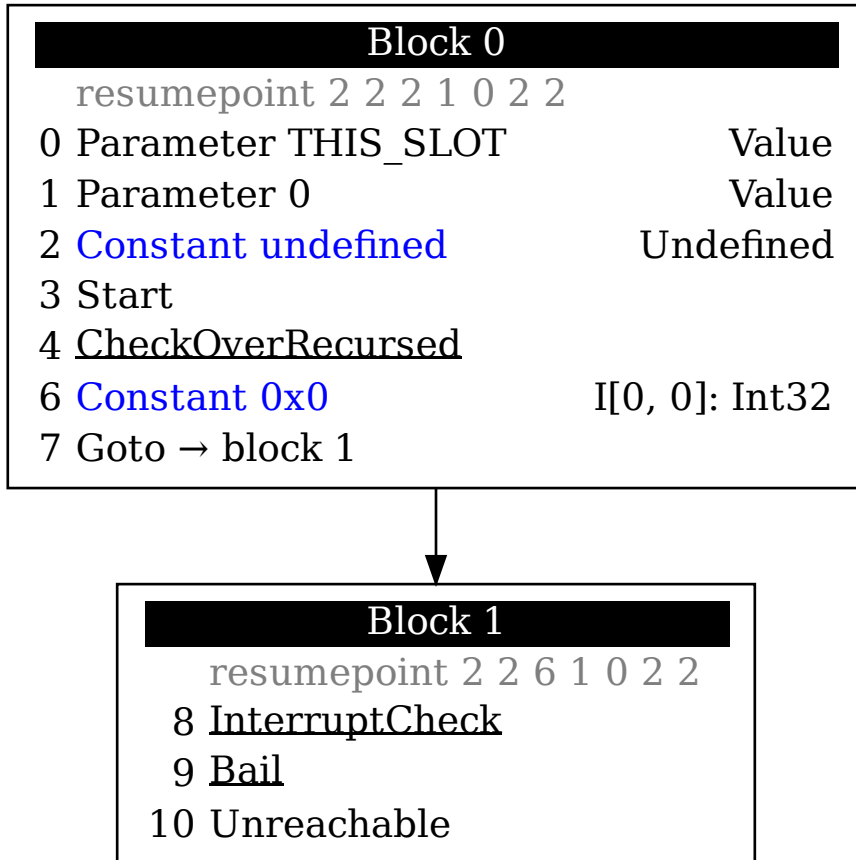


**./Benchmarks/prop\_access.js:2 - RA check UCE**  
**movable**, guard, **in worklist**, recovered on bailout

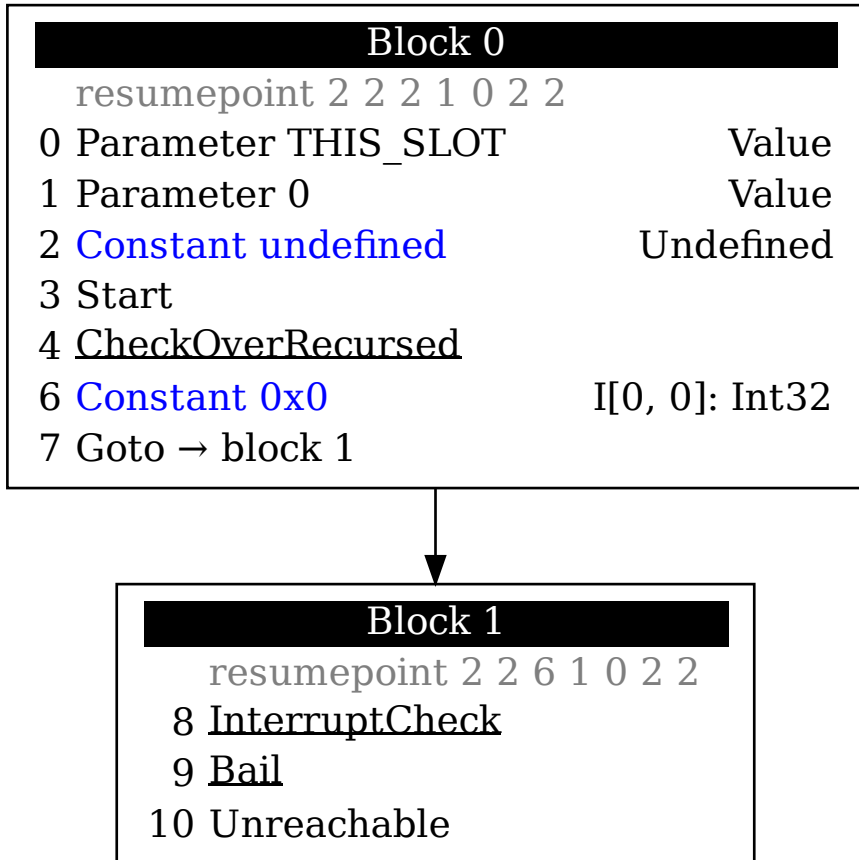


## ./Benchmarkers/prop\_access.js:2 - Truncate Doubles

**movable**, guard, **in worklist**, recovered on bailout

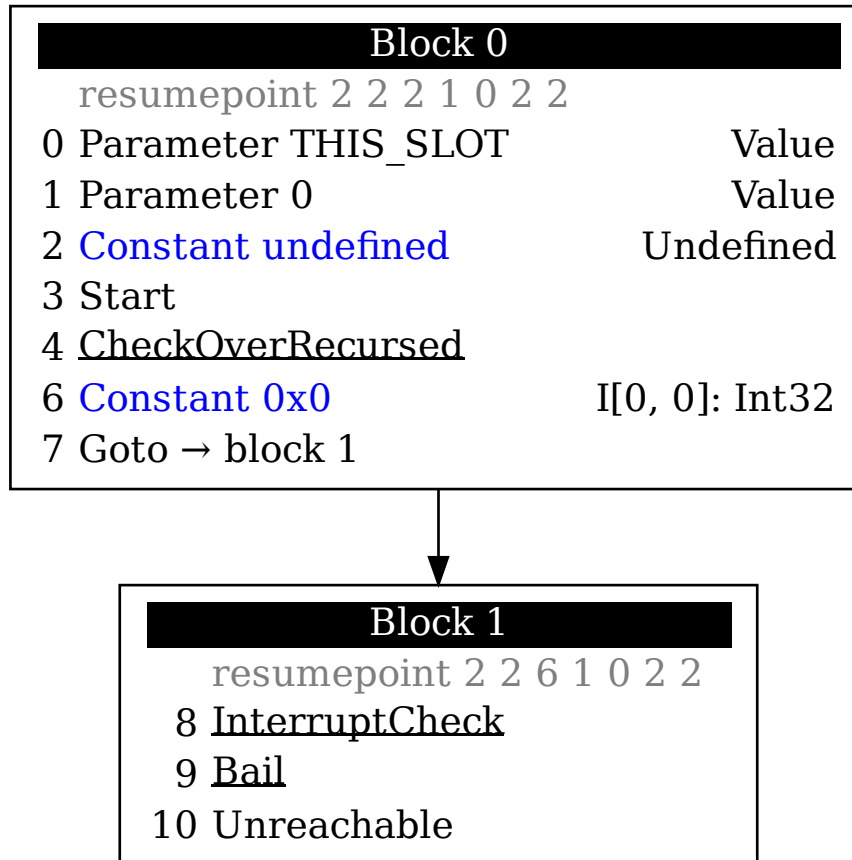


**./Benchmarks/prop\_access.js:2 - Sink**  
movable, guard, in worklist, recovered on bailout



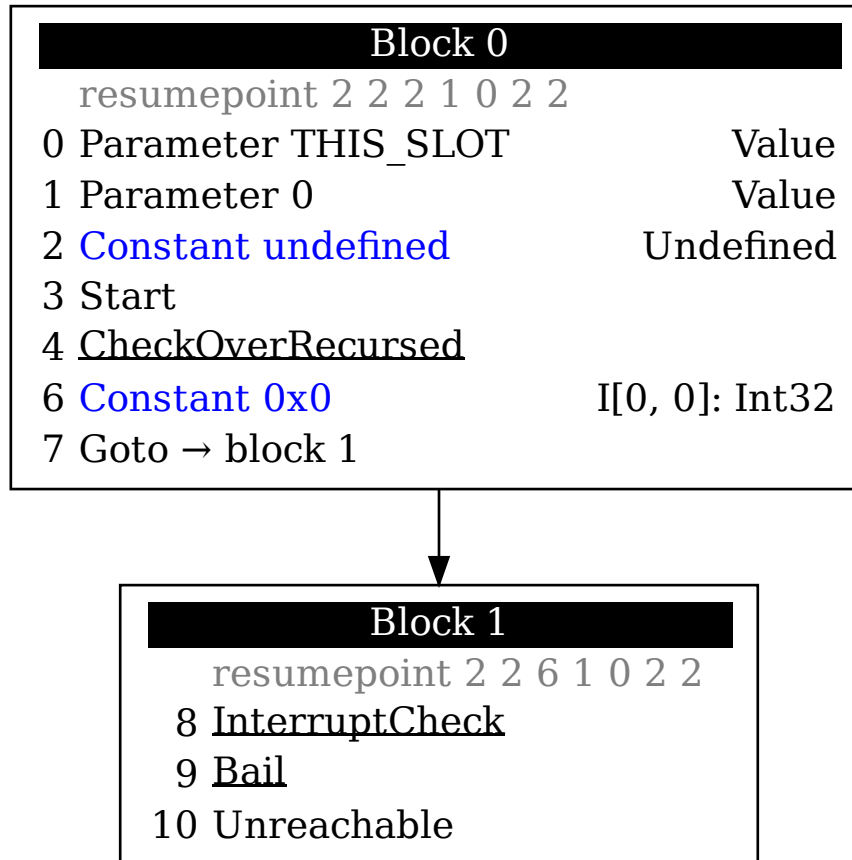
## ./Benchmarkers/prop\_access.js:2 - Remove Unnecessary Bitops

**movable**, **guard**, **in worklist**, recovered on bailout



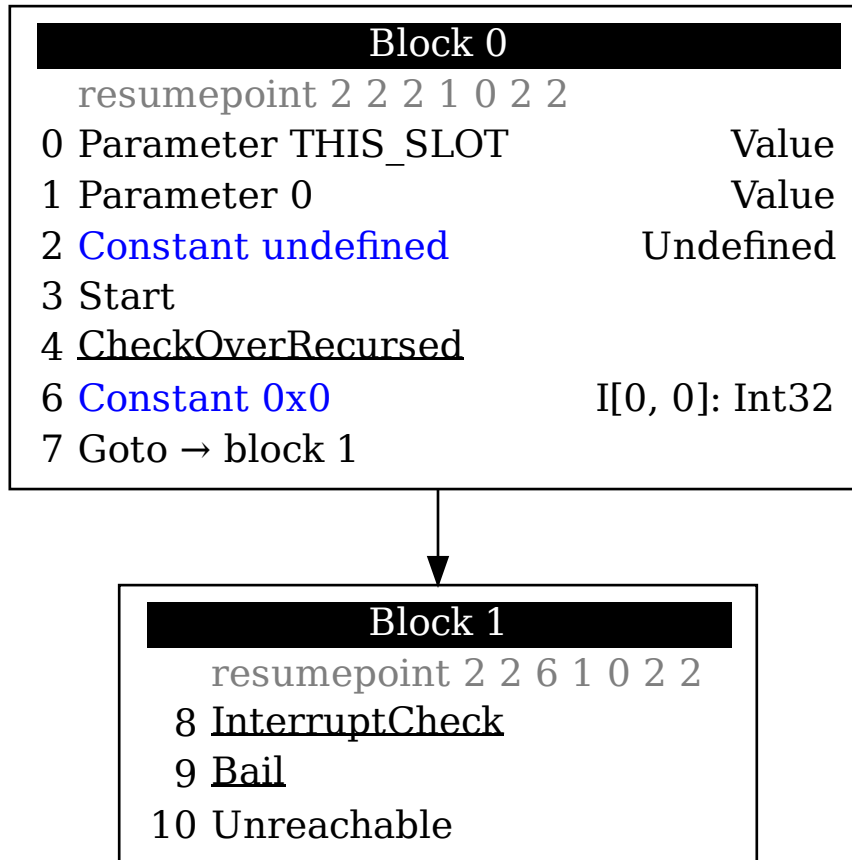
## ./Benchmarkers/prop\_access.js:2 - Fold Linear Arithmetic Constants

movable, guard, in worklist, recovered on bailout



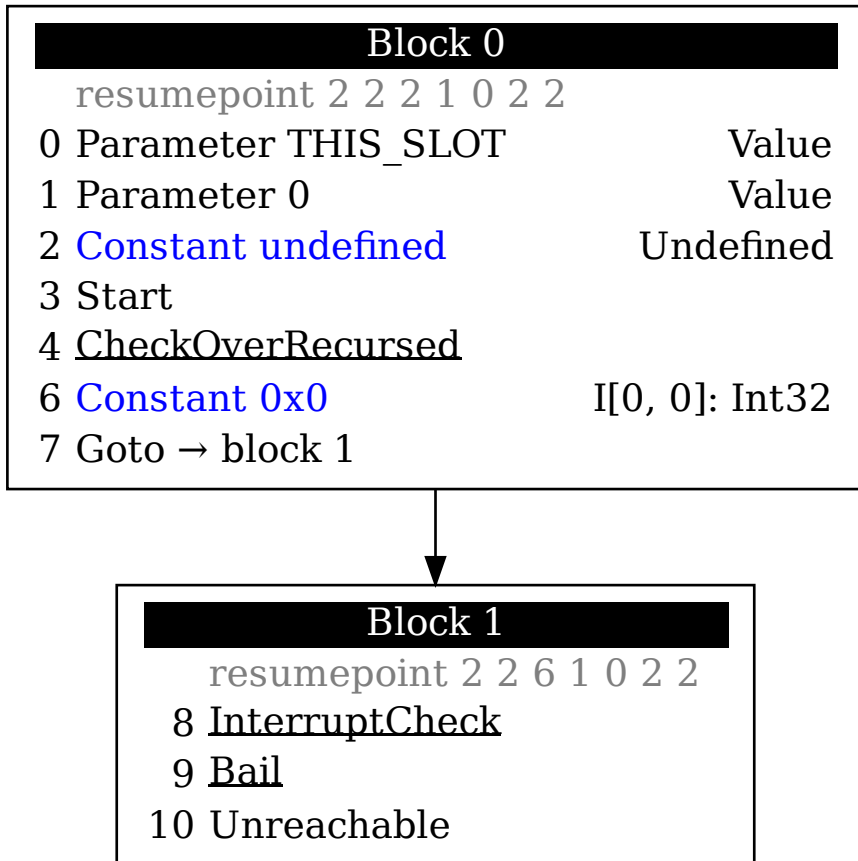
## ./Benchmarkers/prop\_access.js:2 - Effective Address Analysis

**movable**, **guard**, **in worklist**, recovered on bailout



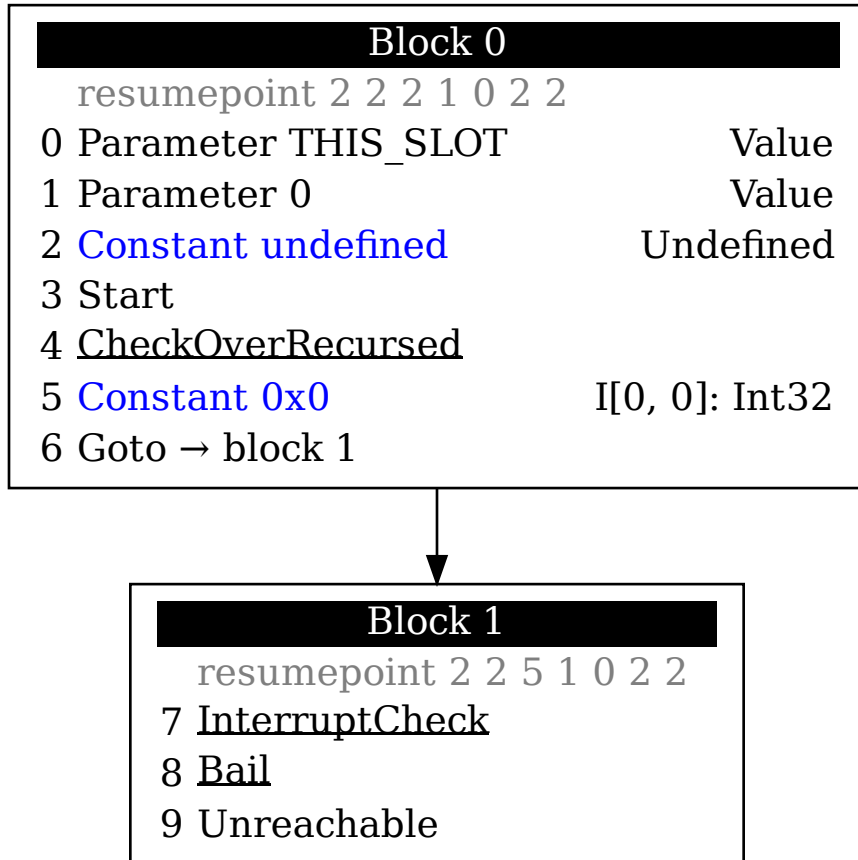


**./Benchmarks/prop\_access.js:2 - DCE**  
movable, guard, in worklist, recovered on bailout

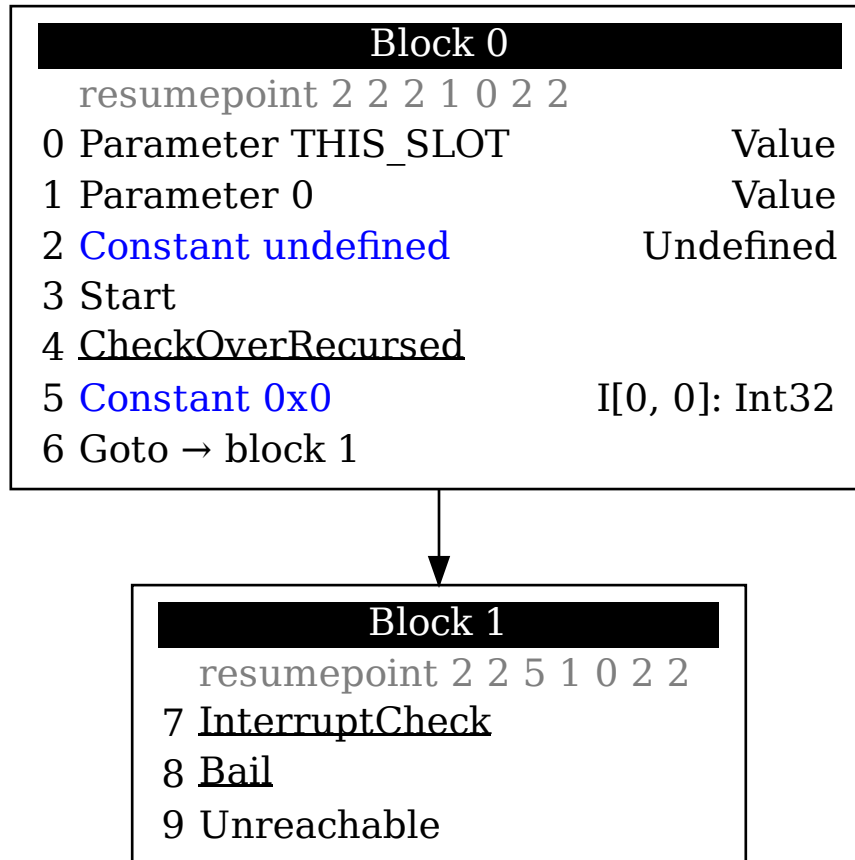


## ./Benchmarkers/prop\_access.js:2 - Reordering

**movable**, guard, **in worklist**, recovered on bailout

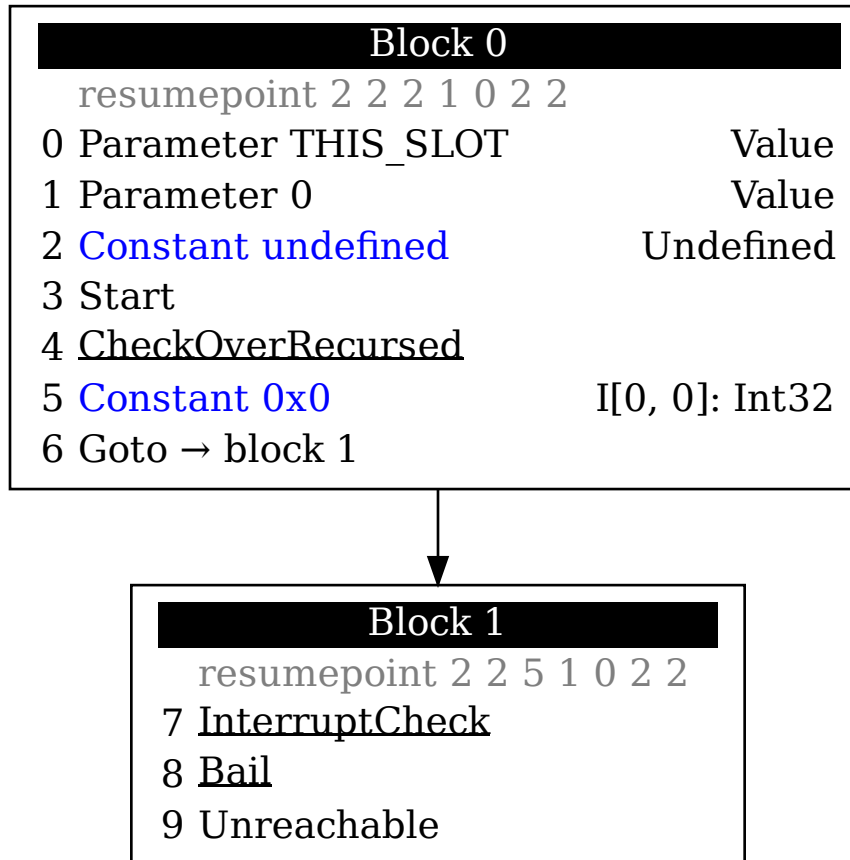


**./Benchmarkers/prop\_access.js:2 - Make loops contiguous**  
movable, guard, in worklist, recovered on bailout



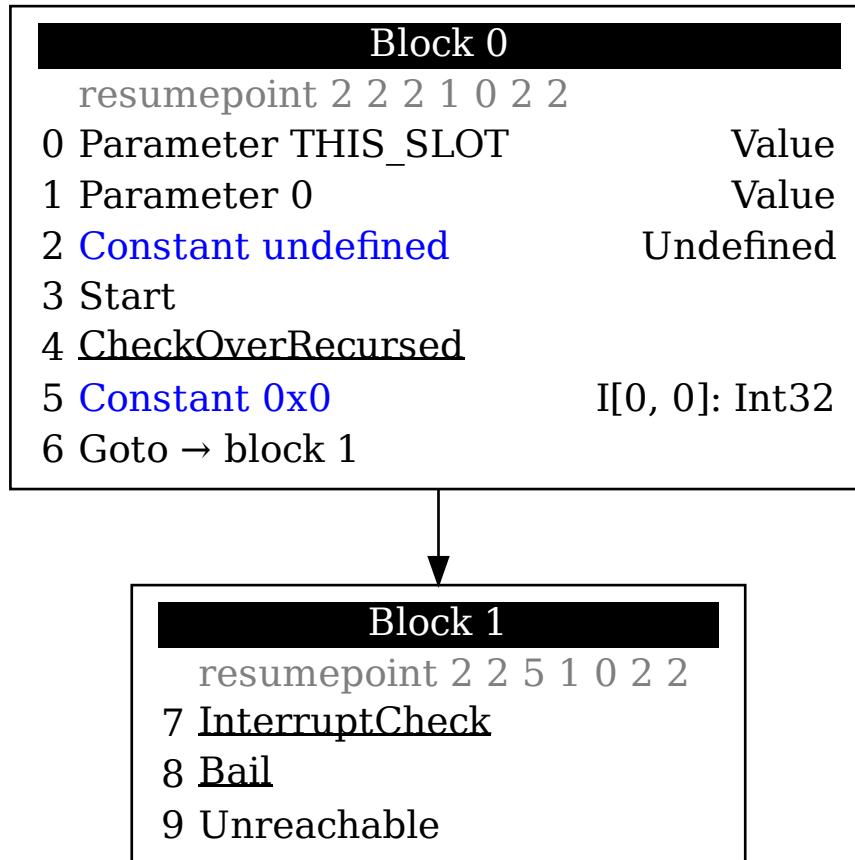
## ./Benchmarkers/prop\_access.js:2 - Edge Case Analysis (Late)

**movable**, **guard**, **in worklist**, recovered on bailout



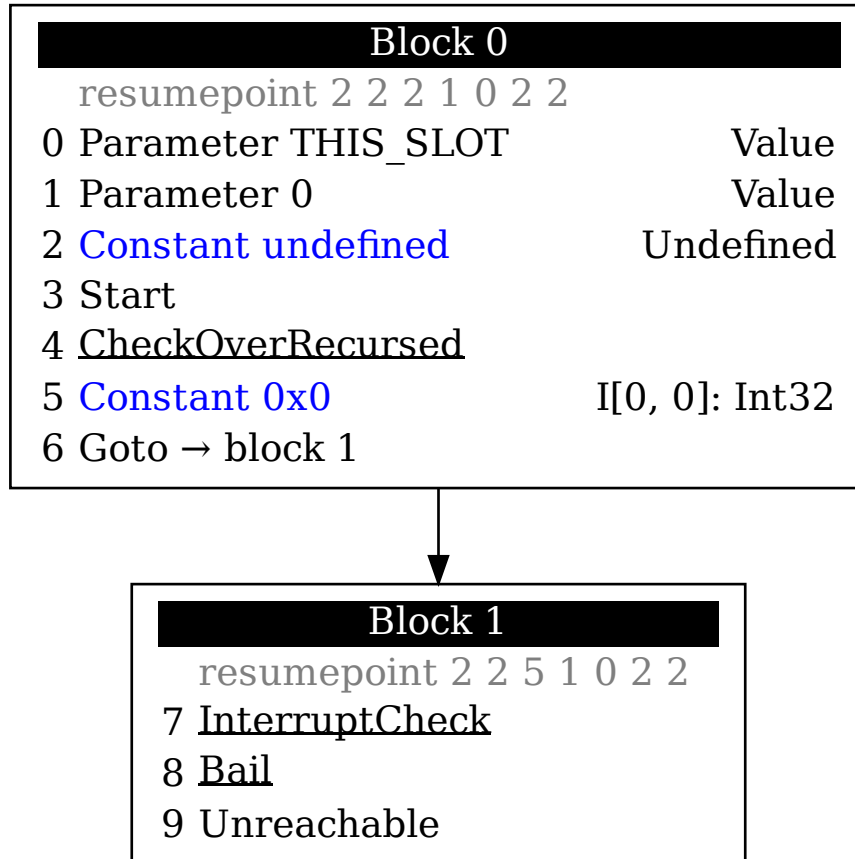
## ./Benchmarkers/prop\_access.js:2 - Bounds Check Elimination

**movable**, **guard**, **in worklist**, recovered on bailout



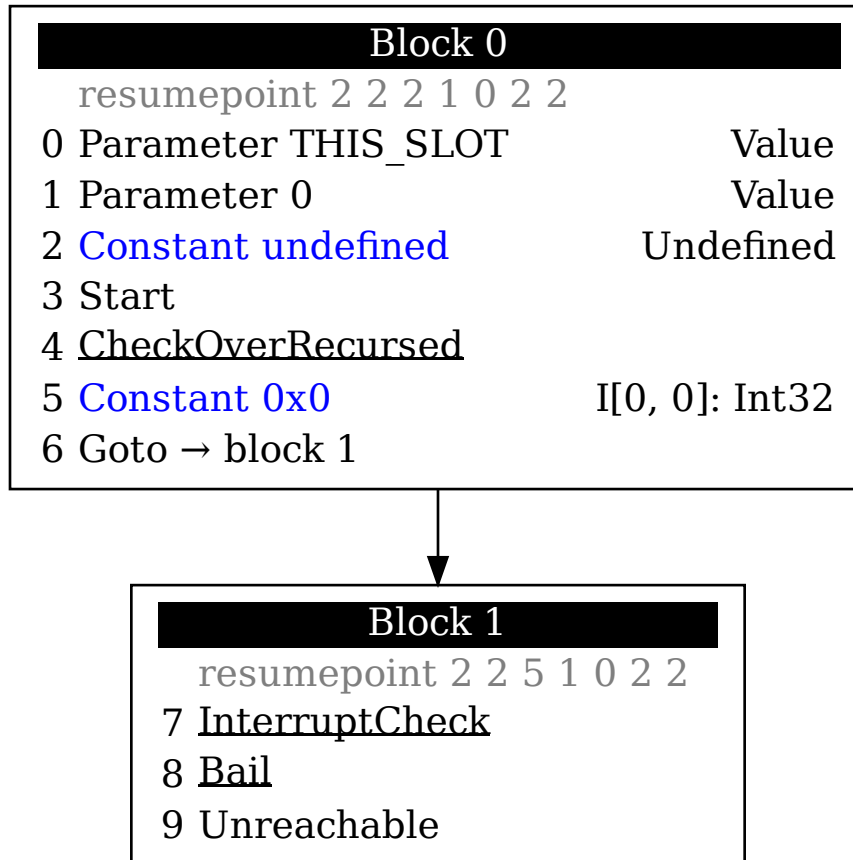
## ./Benchmarkers/prop\_access.js:2 - Shape Guard Elimination

movable, guard, in worklist, recovered on bailout

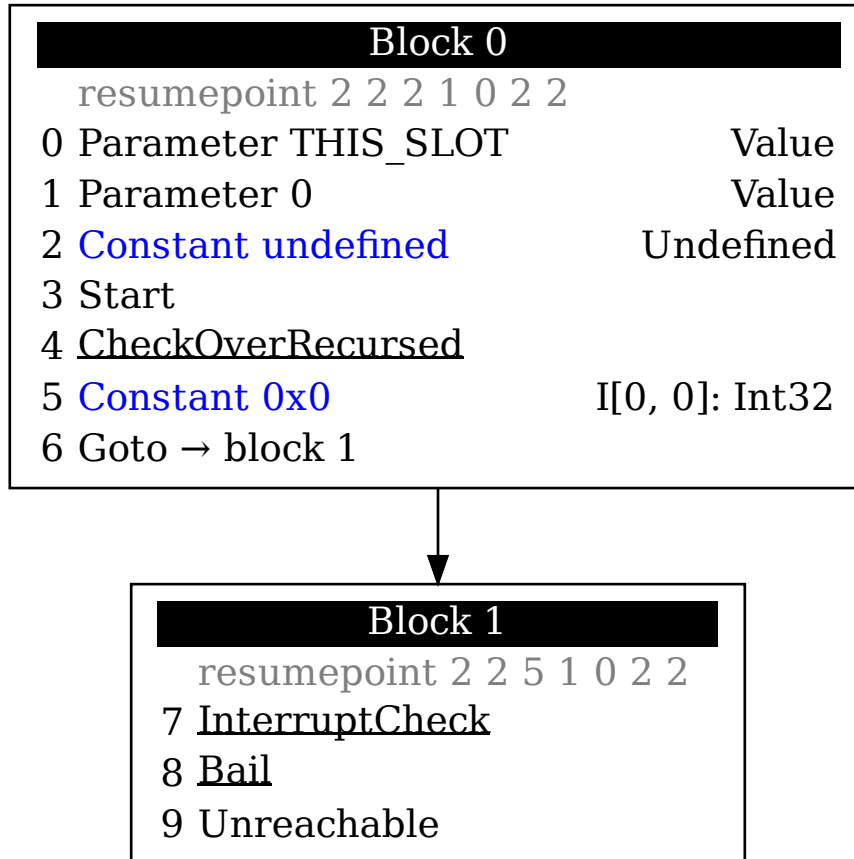


## ./Benchmarkers/prop\_access.js:2 - GC Barrier Elimination

**movable**, **guard**, **in worklist**, recovered on bailout



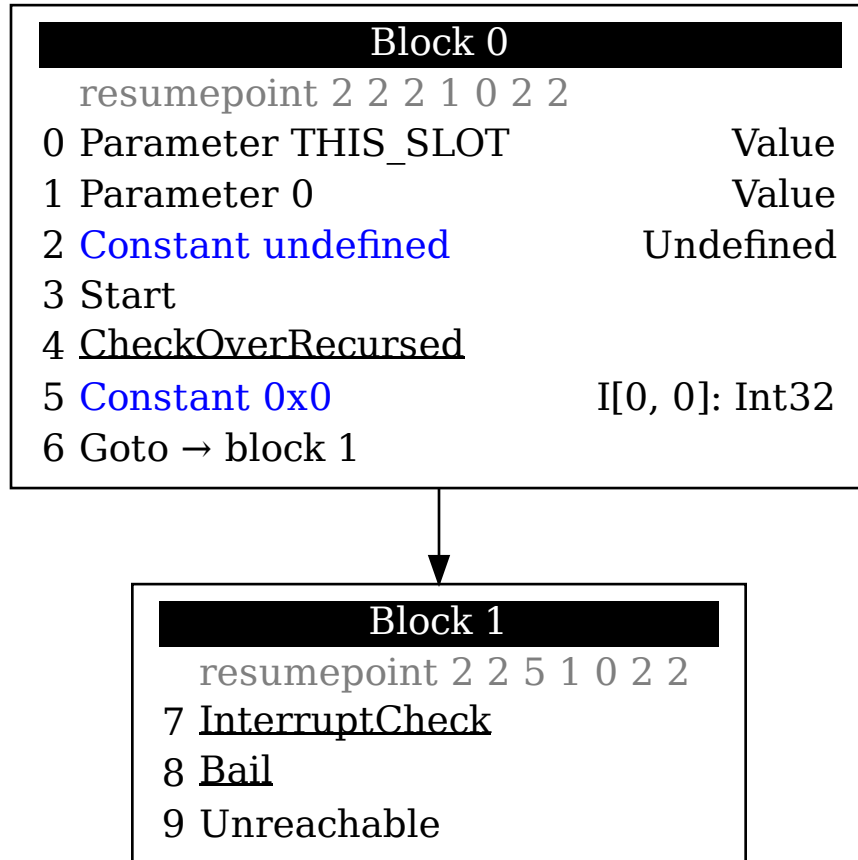
**./Benchmarkers/prop\_access.js:2 - FoldLoadsWithUnbox**  
movable, guard, in worklist, recovered on bailout





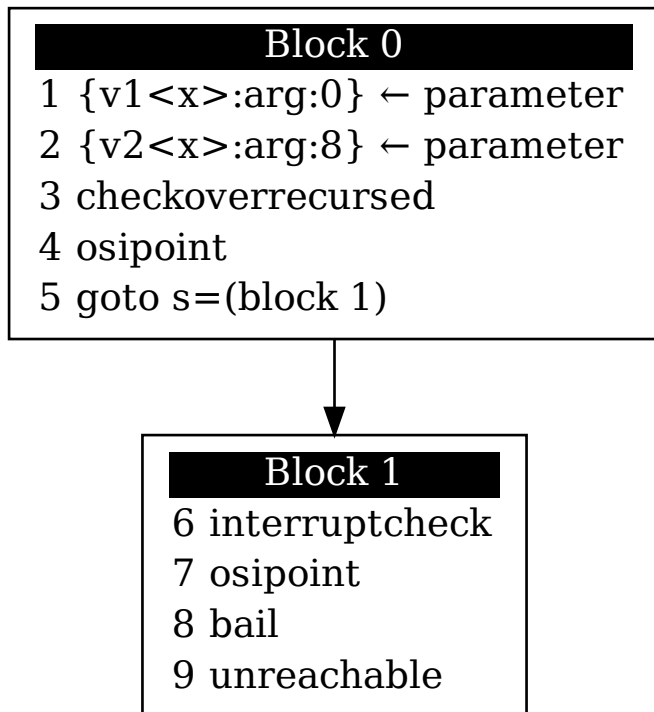
## ./Benchmarkers/prop\_access.js:2 - Add KeepAlive Instructions

**movable**, **guard**, **in worklist**, recovered on bailout



## ./Benchmarkers/prop\_access.js:2 - Generate LIR

movable, guard, in worklist, recovered on bailout



## ./Benchmarkers/prop\_access.js:2 - Allocate Registers [Backtracking]

movable, guard, in worklist, recovered on bailout

