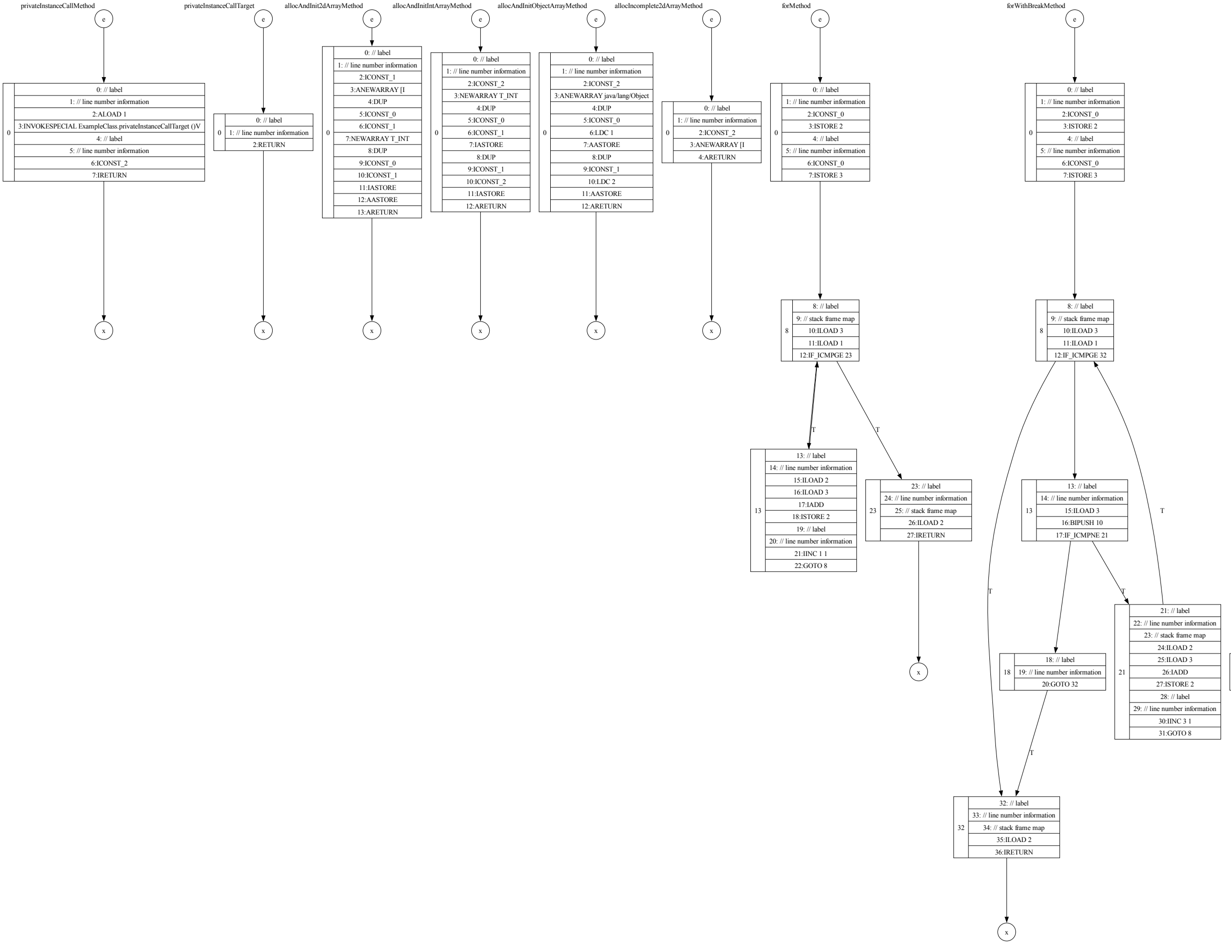


privateInstanceCallMethod
privateInstanceCallTarget
allocAndInit2dArrayMethod
allocAndInitIntArrayMethod
allocAndInitObjectArrayMethod
allocIncomplete2dArrayMethod
forMethod
forWithBreakMethod
e
x
T

privateInstanceCallMethod

```
0
0: // label
1: // line number information
2:ALOAD 1
3:INVOKESPECIAL ExampleClass.privateInstanceCallTarget ()V
4: // label
5: // line number information
6:ICONST_2
7:IRETURN
```

privateInstanceCallTarget

```
0
0: // label
1: // line number information
2:RETURN
```

allocAndInit2dArrayMethod

```
0
0: // label
1: // line number information
2:ICONST_1
3:ANEWARRAY [I
4:DUP
5:ICONST_0
6:ICONST_1
7:NEWARRAY T_INT
8:DUP
9:ICONST_0
10:ICONST_1
11:IASTORE
12:AASTORE
13:ARETURN
```

allocAndInitIntArrayMethod

```
0
0: // label
1: // line number information
2:ICONST_2
3:NEWARRAY T_INT
4:DUP
5:ICONST_0
6:ICONST_1
7:IASTORE
8:DUP
9:ICONST_1
10:ICONST_2
11:IASTORE
12:ARETURN
```

allocAndInitObjectArrayMethod

```
0
0: // label
1: // line number information
2:ICONST_2
3:ANEWARRAY java/lang/Object
4:DUP
5:ICONST_0
6:LDC 1
7:AASTORE
8:DUP
9:ICONST_1
10:LDC 2
11:AASTORE
12:ARETURN
```

allocIncomplete2dArrayMethod

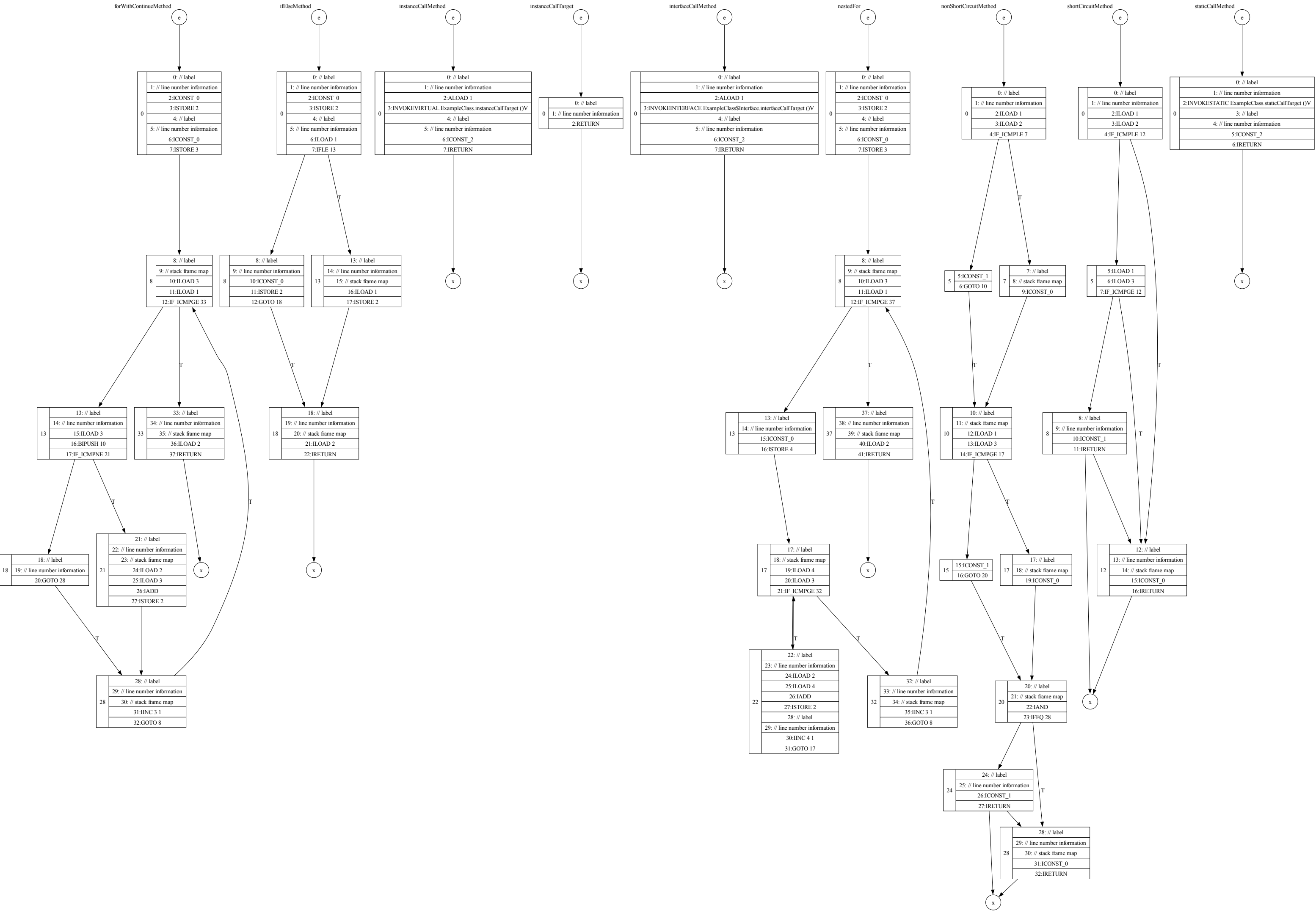
```
0
0: // label
1: // line number information
2:ICONST_2
3:ANEWARRAY [I
4:ARETURN
```

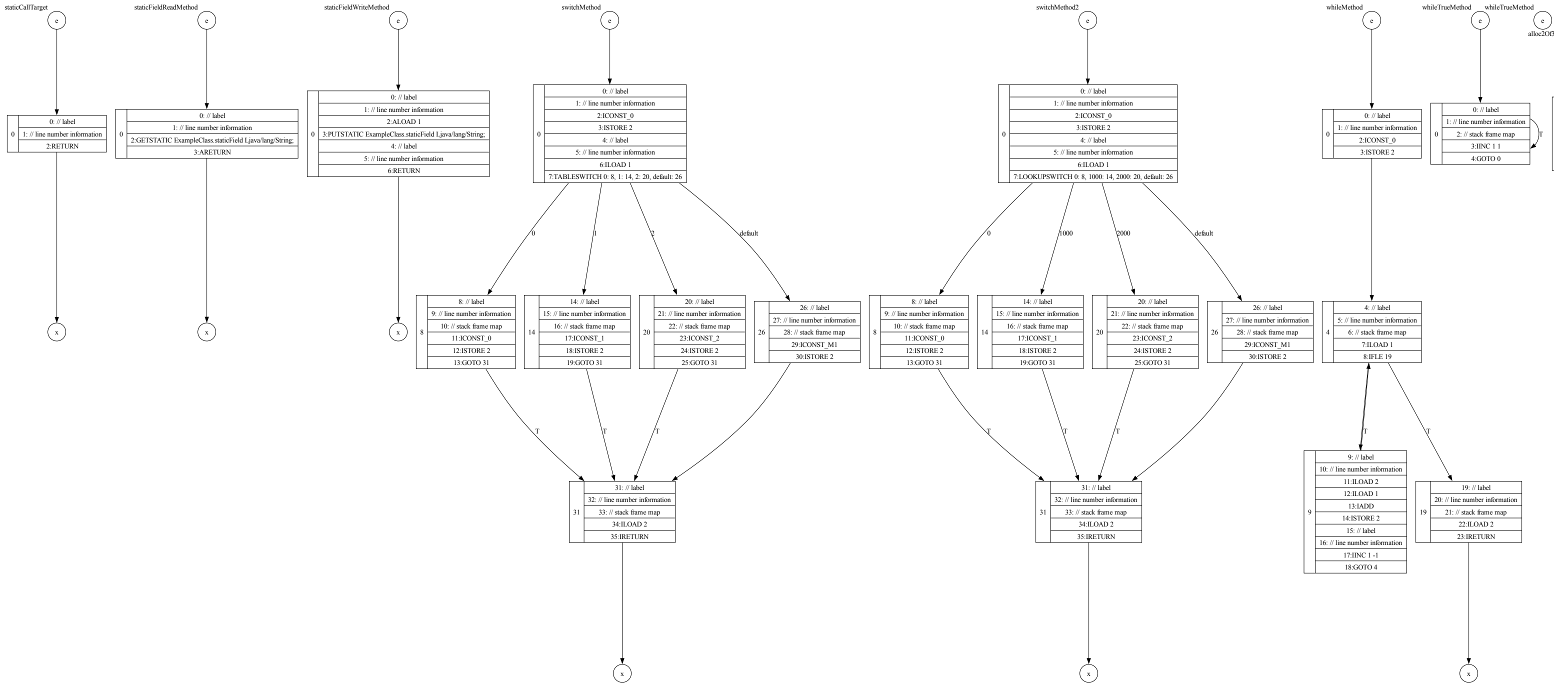
forMethod

```
0
0: // label
1: // line number information
2:ICONST_0
3:ISTORE 2
4: // label
5: // line number information
6:ICONST_0
7:ISTORE 3

8
8: // label
9: // stack frame map
10:ILOAD 3
11:ILOAD 1
12:IF_ICMPGE 23

13
13: // label
14: // line number information
15:ILOAD 2
16:ILOAD 3
17:IADD
18:ISTORE 2
19: // label
20: // line number information
21:IINC 1 1
22:GOTO 8

23
23: // label
24: // line number information
25: // stack frame map
26:ILOAD 2
27:IRETURN
```

forWithBreakMethod

```
0
0: // label
1: // line number information
2:ICONST_0
3:ISTORE 2
4: // label
5: // line number information
6:ICONST_0
7:ISTORE 3

8
8: // label
9: // stack frame map
10:ILOAD 3
11:ILOAD 1
12:IF_ICMPGE 32

13
13: // label
14: // line number information
15:ILOAD 3
16:BIPUSH 10
17:IF_ICMPNE 21

18
18: // label
19: // line number information
20:GOTO 32

21
21: // label
22: // line number information
23: // stack frame map
24:ILOAD 2
25:ILOAD 3
26:IADD
27:ISTORE 2
28: // label
29: // line number information
30:IINC 3 1
31:GOTO 8

32
32: // label
33: // line number information
34: // stack frame map
35:ILOAD 2
36:IRETURN
```


forWithContinueMethod
e
0
0: // label
1: // line number information
2:ICONST_0
3:ISTORE 2
4: // label
5: // line number information
6:ICONST_0
7:ISTORE 3
8
8: // label
9: // stack frame map
10:ILOAD 3
11:ILOAD 1
12:IF_ICMPGE 33
T
13
13: // label
14: // line number information
15:ILOAD 3
16:BIPUSH 10
17:IF_ICMPNE 21
33
33: // label
34: // line number information
35: // stack frame map
36:ILOAD 2
37:IRETURN
T
18
18: // label
19: // line number information
20:GOTO 28
21
21: // label
22: // line number information
23: // stack frame map
24:ILOAD 2
25:ILOAD 3
26:IADD
27:ISTORE 2
x
T
T
28
28: // label
29: // line number information
30: // stack frame map
31:IINC 3 1
32:GOTO 8
ifElseMethod
e
0
0: // label
1: // line number information
2:ICONST_0
3:ISTORE 2
4: // label
5: // line number information
6:ILOAD 1
7:IFLE 13
T
8
8: // label
9: // line number information
10:ICONST_0
11:ISTORE 2
12:GOTO 18
13
13: // label
14: // line number information
15: // stack frame map
16:ILOAD 1
17:ISTORE 2
T
18
18: // label
19: // line number information
20: // stack frame map
21:ILOAD 2
22:IRETURN
x
instanceCallMethod
e
0
0: // label
1: // line number information
2:ALOAD 1
3:INVOKEVIRTUAL ExampleClass.instanceCallTarget ()V
4: // label
5: // line number information
6:ICONST_2
7:IRETURN
x
instanceCallTarget
e
0
0: // label
1: // line number information
2:RETURN
x
interfaceCallMethod
e
0
0: // label
1: // line number information
2:ALOAD 1
3:INVOKEINTERFACE ExampleClass$Interface.interfaceCallTarget ()V
4: // label
5: // line number information
6:ICONST_2
7:IRETURN
x
nestedFor
e
0
0: // label
1: // line number information
2:ICONST_0
3:ISTORE 2
4: // label
5: // line number information
6:ICONST_0
7:ISTORE 3
8
8: // label
9: // stack frame map
10:ILOAD 3
11:ILOAD 1
12:IF_ICMPGE 37
T
13
13: // label
14: // line number information
15:ICONST_0
16:ISTORE 4
37
37: // label
38: // line number information
39: // stack frame map
40:ILOAD 2
41:IRETURN
T
x
17
17: // label
18: // stack frame map
19:ILOAD 4
20:ILOAD 3
21:IF_ICMPGE 32
T
T
22
22: // label
23: // line number information
24:ILOAD 2
25:ILOAD 4
26:IADD
27:ISTORE 2
28: // label
29: // line number information
30:IINC 4 1
31:GOTO 17
32
32: // label
33: // line number information
34: // stack frame map
35:IINC 3 1
36:GOTO 8
nonShortCircuitMethod
e
0
0: // label
1: // line number information
2:ILOAD 1
3:ILOAD 2
4:IF_ICMPLE 7
T
5
5:ICONST_1
6:GOTO 10
7
7: // label
8: // stack frame map
9:ICONST_0
T
10
10: // label
11: // stack frame map
12:ILOAD 1
13:ILOAD 3
14:IF_ICMPGE 17
T
15
15:ICONST_1
16:GOTO 20
17
17: // label
18: // stack frame map
19:ICONST_0
T
20
20: // label
21: // stack frame map
22:IAND
23:IFEQ 28
T
24
24: // label
25: // line number information
26:ICONST_1
27:IRETURN
28
28: // label
29: // line number information
30: // stack frame map
31:ICONST_0
32:IRETURN
x
shortCircuitMethod
e
0
0: // label
1: // line number information
2:ILOAD 1
3:ILOAD 2
4:IF_ICMPLE 12
T
5
5:ILOAD 1
6:ILOAD 3
7:IF_ICMPGE 12
T
8
8: // label
9: // line number information
10:ICONST_1
11:IRETURN
12
12: // label
13: // line number information
14: // stack frame map
15:ICONST_0
16:IRETURN
x
staticCallMethod
e
0
0: // label
1: // line number information
2:INVOKESTATIC ExampleClass.staticCallTarget ()V
3: // label
4: // line number information
5:ICONST_2
6:IRETURN
x


e
x
0
1
2
default
1000
2000
T
alloc2Of3

staticCallTarget

```
0
0: // label
1: // line number information
2:RETURN
```

staticFieldReadMethod

```
0
0: // label
1: // line number information
2:GETSTATIC ExampleClass.staticField Ljava/lang/String;
3:ARETURN
```

staticFieldWriteMethod

```
0
0: // label
1: // line number information
2:ALOAD 1
3:PUTSTATIC ExampleClass.staticField Ljava/lang/String;
4: // label
5: // line number information
6:RETURN
```

switchMethod

```
0
0: // label
1: // line number information
2:ICONST_0
3:ISTORE 2
4: // label
5: // line number information
6:ILOAD 1
7:TABLESWITCH 0: 8, 1: 14, 2: 20, default: 26

8
8: // label
9: // line number information
10: // stack frame map
11:ICONST_0
12:ISTORE 2
13:GOTO 31

14
14: // label
15: // line number information
16: // stack frame map
17:ICONST_1
18:ISTORE 2
19:GOTO 31

20
20: // label
21: // line number information
22: // stack frame map
23:ICONST_2
24:ISTORE 2
25:GOTO 31

26
26: // label
27: // line number information
28: // stack frame map
29:ICONST_M1
30:ISTORE 2

31
31: // label
32: // line number information
33: // stack frame map
34:ILOAD 2
35:IRETURN
```

switchMethod2

```
0
0: // label
1: // line number information
2:ICONST_0
3:ISTORE 2
4: // label
5: // line number information
6:ILOAD 1
7:LOOKUPSWITCH 0: 8, 1000: 14, 2000: 20, default: 26

8
8: // label
9: // line number information
10: // stack frame map
11:ICONST_0
12:ISTORE 2
13:GOTO 31

14
14: // label
15: // line number information
16: // stack frame map
17:ICONST_1
18:ISTORE 2
19:GOTO 31

20
20: // label
21: // line number information
22: // stack frame map
23:ICONST_2
24:ISTORE 2
25:GOTO 31

26
26: // label
27: // line number information
28: // stack frame map
29:ICONST_M1
30:ISTORE 2

31
31: // label
32: // line number information
33: // stack frame map
34:ILOAD 2
35:IRETURN
```

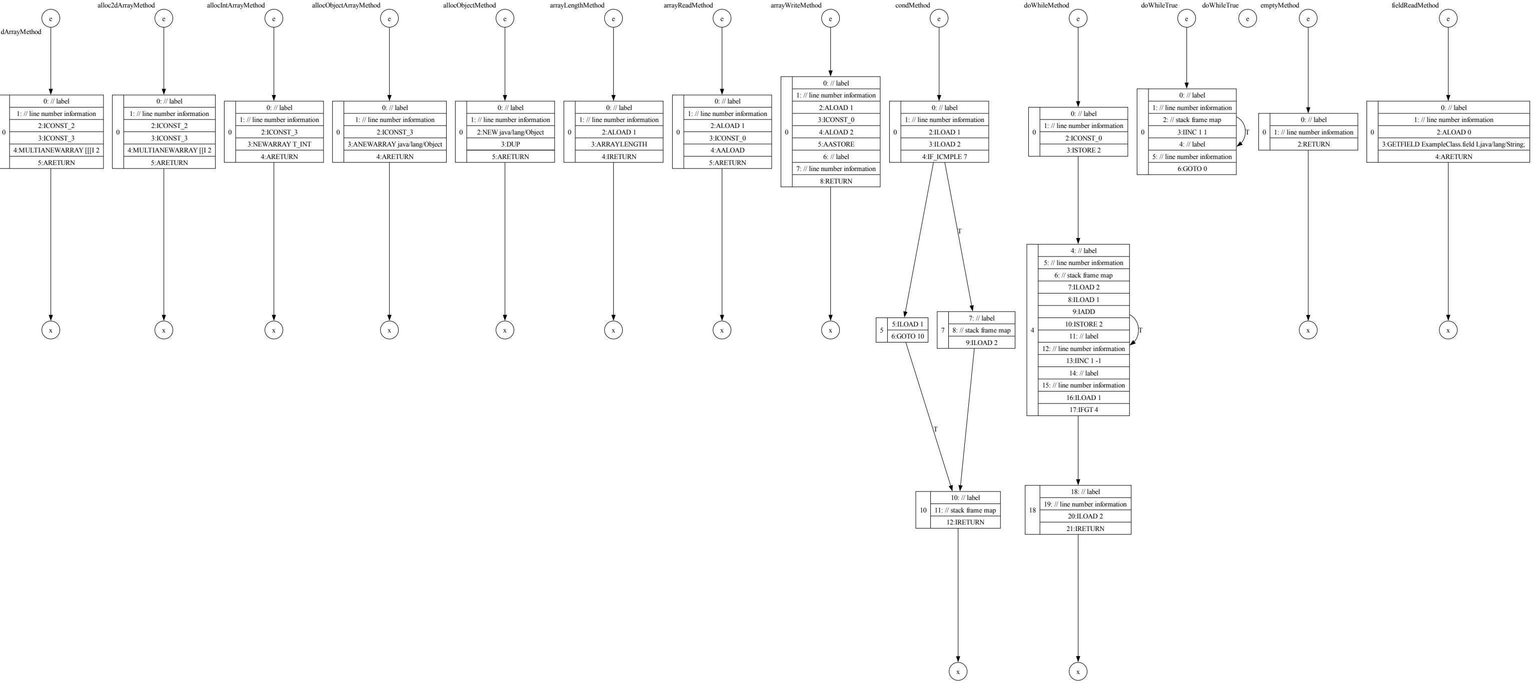
whileMethod

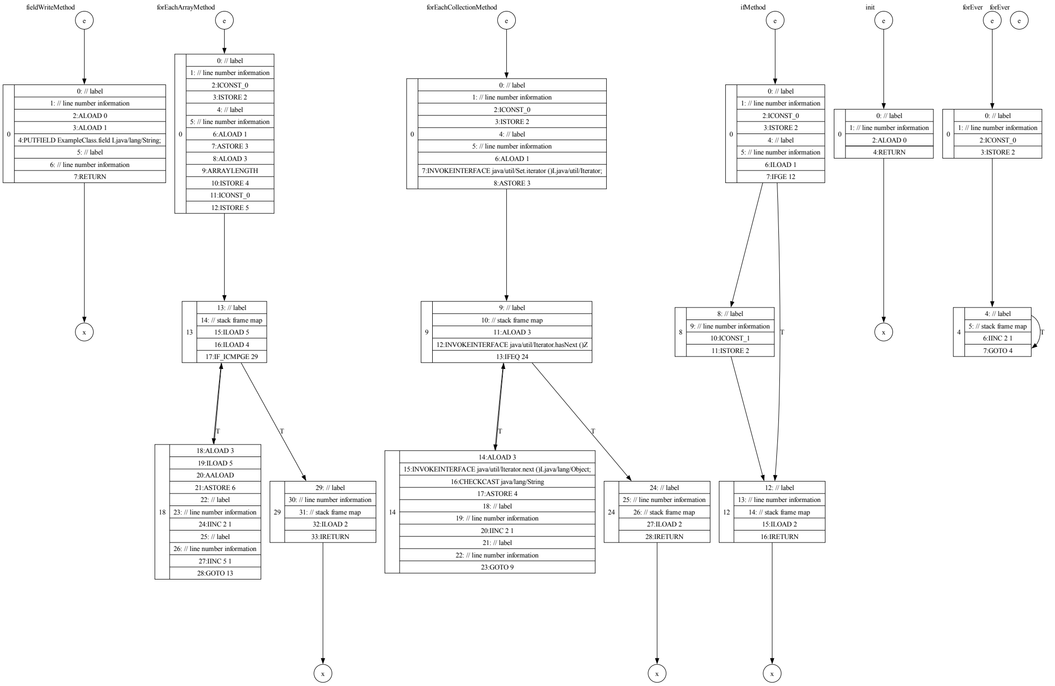
```
0
0: // label
1: // line number information
2:ICONST_0
3:ISTORE 2

4
4: // label
5: // line number information
6: // stack frame map
7:ILOAD 1
8:IFLE 19

9
9: // label
10: // line number information
11:ILOAD 2
12:ILOAD 1
13:IADD
14:ISTORE 2
15: // label
16: // line number information
17:IINC 1 -1
18:GOTO 4

19
19: // label
20: // line number information
21: // stack frame map
22:ILOAD 2
23:IRETURN
```

whileTrueMethod

```
0
0: // label
1: // line number information
2: // stack frame map
3:IINC 1 1
4:GOTO 0
```

whileTrueMethod


dArrayMethod
e
0
0: // label
1: // line number information
2:ICONST_2
3:ICONST_3
4:MULTIANEWARRAY [[[I 2
5:ARETURN
x
alloc2dArrayMethod
e
0
0: // label
1: // line number information
2:ICONST_2
3:ICONST_3
4:MULTIANEWARRAY [[I 2
5:ARETURN
x
allocIntArrayMethod
e
0
0: // label
1: // line number information
2:ICONST_3
3:NEWARRAY T_INT
4:ARETURN
x
allocObjectArrayMethod
e
0
0: // label
1: // line number information
2:ICONST_3
3:ANEWARRAY java/lang/Object
4:ARETURN
x
allocObjectMethod
e
0
0: // label
1: // line number information
2:NEW java/lang/Object
3:DUP
5:ARETURN
x
arrayLengthMethod
e
0
0: // label
1: // line number information
2:ALOAD 1
3:ARRAYLENGTH
4:IRETURN
x
arrayReadMethod
e
0
0: // label
1: // line number information
2:ALOAD 1
3:ICONST_0
4:AALOAD
5:ARETURN
x
arrayWriteMethod
e
0
0: // label
1: // line number information
2:ALOAD 1
3:ICONST_0
4:ALOAD 2
5:AASTORE
6: // label
7: // line number information
8:RETURN
x
condMethod
e
0
0: // label
1: // line number information
2:ILOAD 1
3:ILOAD 2
4:IF_ICMPLE 7
T
5
5:ILOAD 1
6:GOTO 10
7
7: // label
8: // stack frame map
9:ILOAD 2
T
10
10: // label
11: // stack frame map
12:IRETURN
x
doWhileMethod
e
0
0: // label
1: // line number information
2:ICONST_0
3:ISTORE 2
4
4: // label
5: // line number information
6: // stack frame map
7:ILOAD 2
8:ILOAD 1
9:IADD
10:ISTORE 2
11: // label
12: // line number information
13:IINC 1 -1
14: // label
15: // line number information
16:ILOAD 1
17:IFGT 4
T
18
18: // label
19: // line number information
20:ILOAD 2
21:IRETURN
x
doWhileTrue
e
0
0: // label
1: // line number information
2: // stack frame map
3:IINC 1 1
4: // label
5: // line number information
6:GOTO 0
T
doWhileTrue
e
emptyMethod
e
0
0: // label
1: // line number information
2:RETURN
x
fieldReadMethod
e
0
0: // label
1: // line number information
2:ALOAD 0
3:GETFIELD ExampleClass.field Ljava/lang/String;
4:ARETURN
x


fieldWriteMethod
e
0
0: // label
1: // line number information
2:ALOAD 0
3:ALOAD 1
4:PUTFIELD ExampleClass.field Ljava/lang/String;
5: // label
6: // line number information
7:RETURN
x
forEachArrayMethod
e
0
0: // label
1: // line number information
2:ICONST_0
3:ISTORE 2
4: // label
5: // line number information
6:ALOAD 1
7:ASTORE 3
8:ALOAD 3
9:ARRAYLENGTH
10:ISTORE 4
11:ICONST_0
12:ISTORE 5
13
13: // label
14: // stack frame map
15:ILOAD 5
16:ILOAD 4
17:IF_ICMPGE 29
T
T
18
18:ALOAD 3
19:ILOAD 5
20:AALOAD
21:ASTORE 6
22: // label
23: // line number information
24:IINC 2 1
25: // label
26: // line number information
27:IINC 5 1
28:GOTO 13
29
29: // label
30: // line number information
31: // stack frame map
32:ILOAD 2
33:IRETURN
x
forEachCollectionMethod
e
0
0: // label
1: // line number information
2:ICONST_0
3:ISTORE 2
4: // label
5: // line number information
6:ALOAD 1
7:INVOKEINTERFACE java/util/Set.iterator ()Ljava/util/Iterator;
8:ASTORE 3
9
9: // label
10: // stack frame map
11:ALOAD 3
12:INVOKEINTERFACE java/util/Iterator.hasNext ()Z
13:IFEQ 24
T
T
14
14:ALOAD 3
15:INVOKEINTERFACE java/util/Iterator.next ()Ljava/lang/Object;
16:CHECKCAST java/lang/String
17:ASTORE 4
18: // label
19: // line number information
20:IINC 2 1
21: // label
22: // line number information
23:GOTO 9
24
24: // label
25: // line number information
26: // stack frame map
27:ILOAD 2
28:IRETURN
x
ifMethod
e
0
0: // label
1: // line number information
2:ICONST_0
3:ISTORE 2
4: // label
5: // line number information
6:ILOAD 1
7:IFGE 12
8
8: // label
9: // line number information
10:ICONST_1
11:ISTORE 2
T
12
12: // label
13: // line number information
14: // stack frame map
15:ILOAD 2
16:IRETURN
x
init
e
0
0: // label
1: // line number information
2:ALOAD 0
4:RETURN
x
forEver
forEver
e
e
0
0: // label
1: // line number information
2:ICONST_0
3:ISTORE 2
4
4: // label
5: // stack frame map
6:IINC 2 1
7:GOTO 4
T