

```
int a = 12, b, c = 8
```

```
main()
```

```
{    d(a)=1, d(b)=1, d(c)=0, d(d)=0, d(fun1)=0, d(fun2)=1  
    int c, d = 9
```

```
    print fun2()  
    print fun1()
```

```
    int fun1()  
    {    d(a)=2, d(d)=1  
        return a + d  
    }
```

```
}
```

```
int fun2()
```

```
{    d(a)=1, d(b)=1, d(c)=1, d(e)=0, d(f)=0, d(fun3)=0  
    int e, f = 11  
    fun3()
```

```
    void fun3()  
    {    d(a)=2, d(b)=0, d(c)=2, d(d)=0, d(e)=1, d(f)=1, d(fun2)=2  
        int b = 7, d = 1  
        a = b + c + f  
        f = fun2()  
    }
```

```
    return f
```

```
}
```

Nr.	Code	Comment
0	SET 0, 5	Current
1	SET 1, 10	Free
2	SET 2, 12	A
3	SET 4, 8	C
4	SET 9, 9	D
5	SET 1, D[1]+1	Calling sequence for fun2(.) starts, RV
6	SET D[1], 12	RP
7	SET D[1]+1, D[0]	DL
8	SET D[1]+2, FP(1)	SL
9	SET 0, D[1]	
10	SET 1, D[1]+5	
11	JUMP 26	
12	SET WRITE, D[D[1]]	
13	SET 1, D[1]+1	Calling sequence for fun1(.) starts, RV
14	SET D[1], 20	RP
15	SET D[1]+1, D[0]	DL
16	SET D[1]+2, FP(0)	SL
17	SET 0, D[1]	
18	SET 1, D[1]+3	
19	JUMP 22	
20	SET WRITE, D[D[1]]	
21	HALT	
22	SET D[0]-1, D[FP(2)+2] + D[FP(1)+4]	Function fun1(.), return sequence only
23	SET 1, D[0]-1	
24	SET 0, D[D[0]+1]	
25	JUMP D[D[1]+1]	
26	SET FP(0)+4, 11	Function fun2(.), F
27	SET D[1], 33	Calling sequence for fun3(.) starts, RP
28	SET D[1]+1, D[0]	DL
29	SET D[1]+2, FP(0)	SL
30	SET 0, D[1]	Current
31	SET 1, D[1]+6	Free
32	JUMP 37	Calling sequence ends
33	SET D[0]-1, D[FP(0)+4]	Return sequence
34	SET 1, D[0]-1	
35	SET 0, D[D[0]+1]	
36	JUMP D[D[1]+1]	
37	SET FP(0)+3, 7	Function fun3(.), no return value, init B
38	SET FP(0)+4, 11	D
39	SET FP(2)+2, D[FP(0)+3] + D[FP(2)+3] + D[FP(1)+4]	A = ...
40	SET 1, D[1]+1	Calling sequence for fun2(.) starts, RV
41	SET D[1], 47	RP
42	SET D[1]+1, D[0]	DL
43	SET D[1]+2, FP(1)	SL
44	SET 0, D[1]	
45	SET 1, D[1]+5	
46	JUMP 26	
47	SET FP(1)+4, D[D[1]]	F = ...
48	SET 1, D[0]	Return sequence, function w/o RV
49	SET 0, D[D[0]+1]	
50	JUMP D[D[1]]	Note that there's no return value