

```
int x = 7, y, z = 8
```

```
main()
```

```
{    d(x)=1, d(y)=1, d(z)=0, d(t)=0, d(f1)=1
    int z, t = 9
    f1()
}
```

```
void f1()
```

```
{    d(x)=1, d(y)=1, d(z)=1, d(t)=0, d(v)=0, d(f2)=0
    int t, v = 11
    f2()
```

```
void f2()
```

```
{    d(x)=0, d(y)=2, d(z)=2, d(t)=1, d(v)=1, d(w)=0, d(f3)=0
    int x, w
    x = y + t + w + z
    f3()
```

```
void f3()
```

```
{    d(x)=1, d(y)=0, d(z)=3, d(t)=0, d(v)=2, d(w)=0, d(f2)=2
    int y, w, t
    f2()
}
```

```
}
```

```
}
```

Nr.	Code	Comment
0	SET 0, 5	Current
1	SET 1, 10	Free
2	SET 2, 7	x
3	SET 4, 8	z
4	SET 9, 9	Code for main(.) starts
5	SET D[1], 12	Calling sequence for f1(.) starts, RP
6	SET D[1]+1, D[0]	DL
7	SET D[1]+2, FP(1)	SL
8	SET 0, D[1]	Current
9	SET 1, D[1] + 5	Free
10	JUMP 12	Calling sequence ends
11	HALT	
12	SET D[0]+4, 11	Code for f1(.) starts
13	SET D[1], 19	Calling sequence for f2(.) starts, RP
14	SET D[1]+1, D[0]	DL
15	SET D[1]+2, FP(0)	SL
16	SET 0, D[1]	Current
17	SET 1, D[1]+5	Free
18	JUMP 22	Calling sequence ends
19	SET 1, D[0]	
20	SET 0, D[D[0]+1]	
21	JUMP D[D[1]]	Note that there's no return value
22	SET FP(0)+3, D[FP(2)+4] + D[FP(1)+3] + D[FP(0)+4] + D[FP(2)+3]	Code for f2(.) starts
23	SET D[1], 29	Calling sequence for f3(.) starts, RP
24	SET D[1]+1, D[0]	DL
25	SET D[1]+2, FP(0)	SL
26	SET 0, D[1]	Current
27	SET 1, D[1]+6	Free
28	JUMP 32	Calling sequence ends
29	SET 1, D[0]	
30	SET 0, D[D[0]+1]	
31	JUMP D[D[1]]	Note that there's no return value
32	SET D[1], 38	Calling sequence for f2(.) starts, RP
33	SET D[1]+1, D[0]	DL
34	SET D[1]+2, FP(2)	SL
35	SET 0, D[1]	Current
36	SET 1, D[1]+5	Free
37	JUMP 22	Calling sequence ends
38	SET 1, D[0]	
39	SET 0, D[D[0]+1]	
40	JUMP D[D[1]]	Note that there's no return value