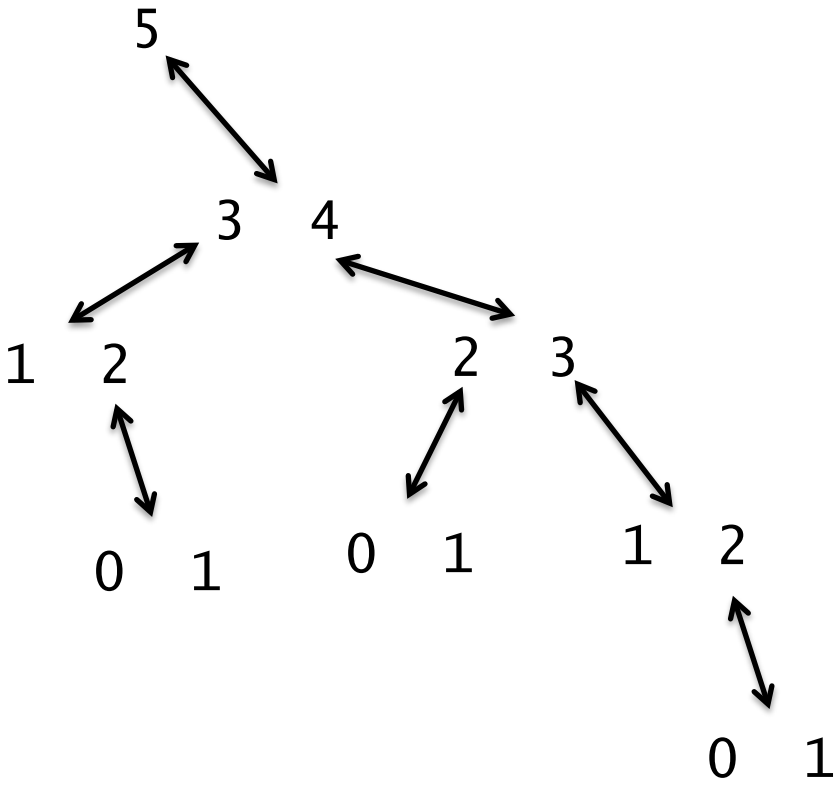
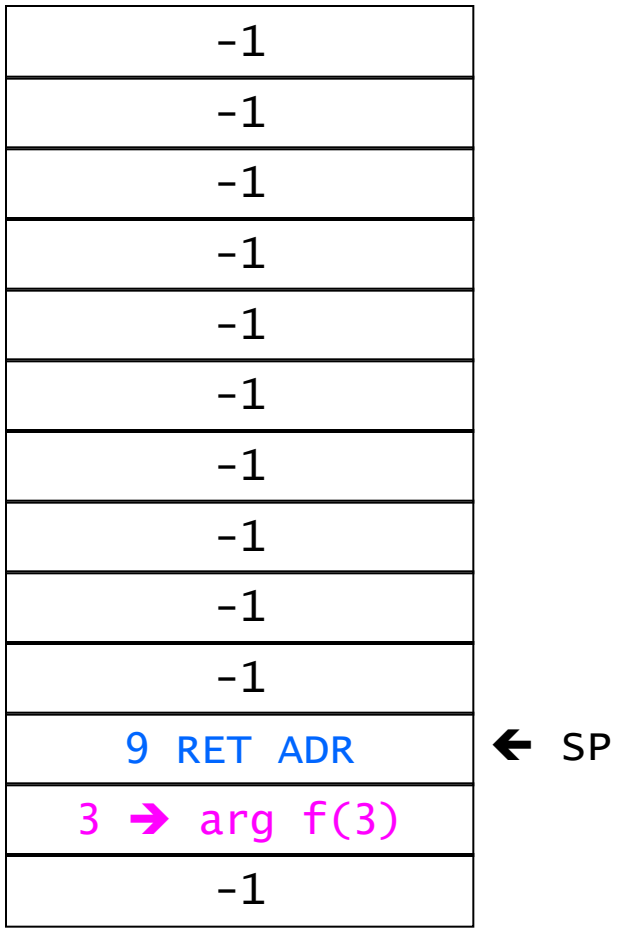
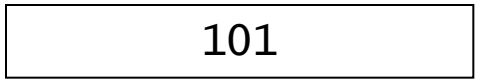
Fibonacci(5)



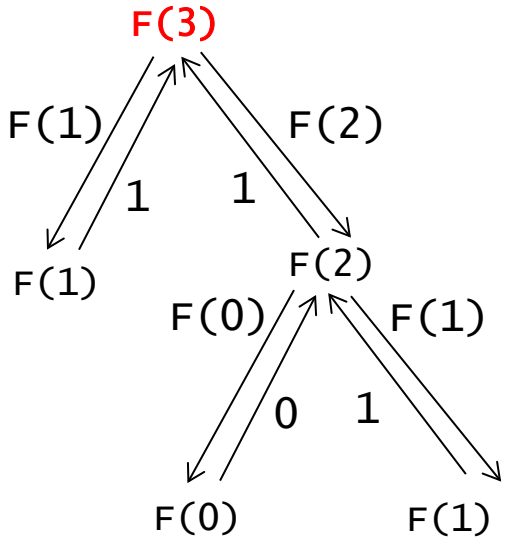
```
 0 LOOP: LODD PassCnt:
 1       JZER DONE:
 2       SUBD c1:
 3       STOD PassCnt:
 4       LODD daddr:
 5       PSHI
 6       ADDD c1:
 7       STOD daddr:
 8       CALL FIB:
 9       INSP 1
10       PUSH
11       LODD faddr:
12       POPI
13       ADDD c1:
14       STOD faddr:
15       JUMP LOOP:
```

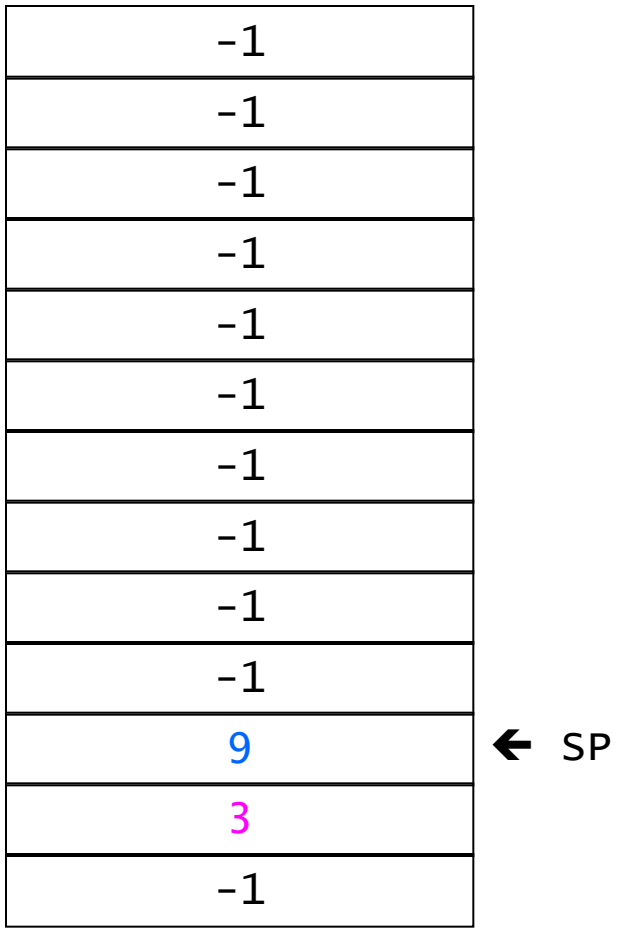





```
16 FIB: LODL 1
17      JZER FIBZER:
18      SUBD c1:
19      JZER FIBONE:
20      PUSH
21      CALL FIB:
22      PUSH
        .
        .
        .
        RETN
   FIBZER: LODD c0:
        RETN
   FIBONE: LODD c1:
        RETN
```

```
.LOC 100
100 d0:  3
101      9
102     18
103     23
104     25
105 f0:  0
; 5 locations of 0
110 daddr:  d0: 100 ➔ 101
111 faddr:  f0:
112 c0: 0
113 c1: 1
114 PassCnt: 5 ➔ 4
```



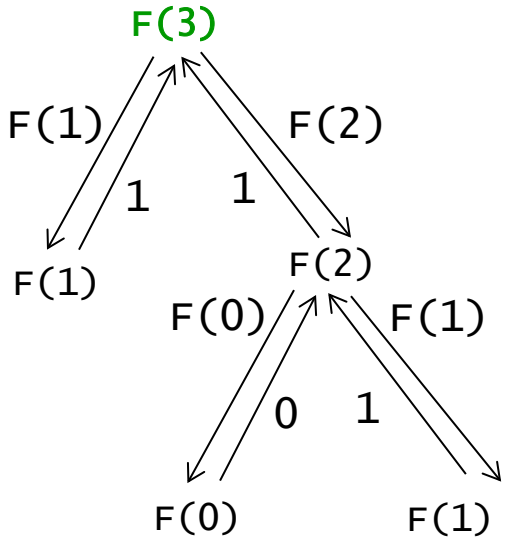


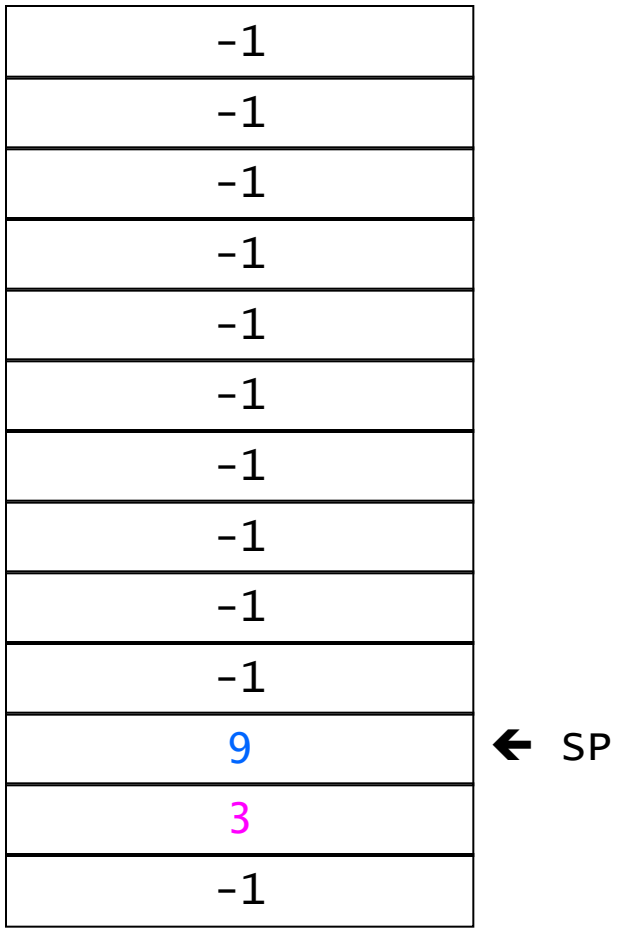
← SP

AC

```
16 FIB: LODL 1
17      JZER FIBZER:
18      SUBD c1:
19      JZER FIBONE:
20      PUSH
21      CALL FIB:
22      PUSH
        .
        .
        .
      RETN
FIBZER: LODD c0:
      RETN
FIBONE: LODD c1:
       RETN
```

```
.LOC 100
100 d0:  3
101      9
102     18
103     23
104     25
105 f0:  0
; 5 locations of 0
110 daddr:  d0: 100 ➔ 101
111 faddr:  f0:
112 c0: 0
113 c1: 1
114 PassCnt: 5 ➔ 4
```



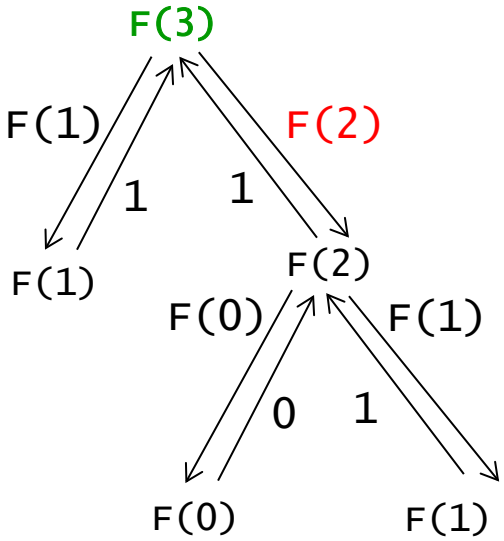


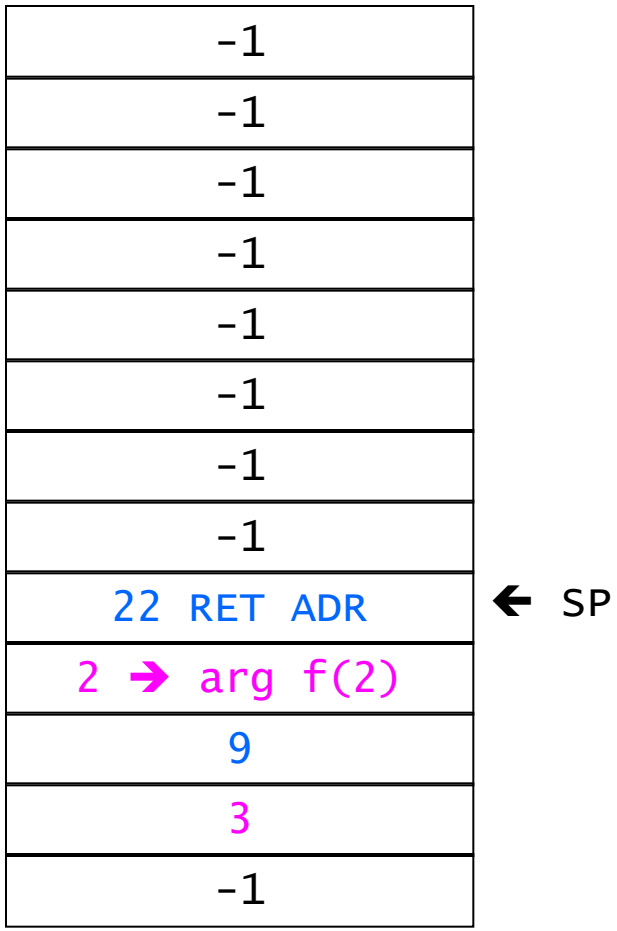
← SP

3 - C1 → 2 AC

```
16 FIB: LODL 1
17      JZER FIBZER:
18      SUBD c1:
19      JZER FIBONE:
20      PUSH
21      CALL FIB:
22      PUSH
        .
        .
        .
        RETN
   FIBZER: LODD c0:
        RETN
   FIBONE: LODD c1:
         RETN
```

```
.LOC 100
100 d0:  3
101      9
102     18
103     23
104     25
105 f0:  0
; 5 locations of 0
110 daddr:  d0: 100 → 101
111 faddr:  f0:
112 c0: 0
113 c1: 1
114 PassCnt: 5 → 4
```

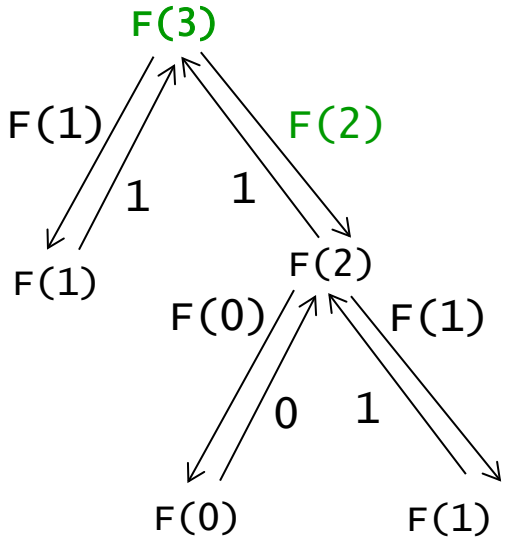


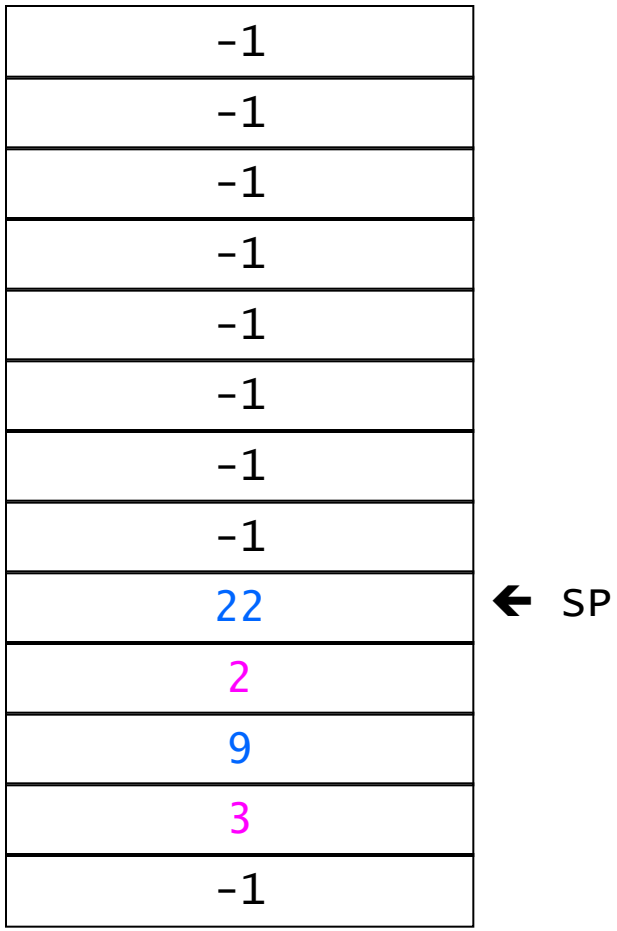


← SP

2 ➔ (n-1), f(3) AC

```
16 FIB:  LODL 1
17       JZER FIBZER:
18       SUBD c1:
19       JZER FIBONE:
20       PUSH
21       CALL FIB:
22       PUSH
         .
         .
         .
         RETN
FIBZER:  LODD c0:
         RETN
FIBONE:  LODD c1:
         RETN
```

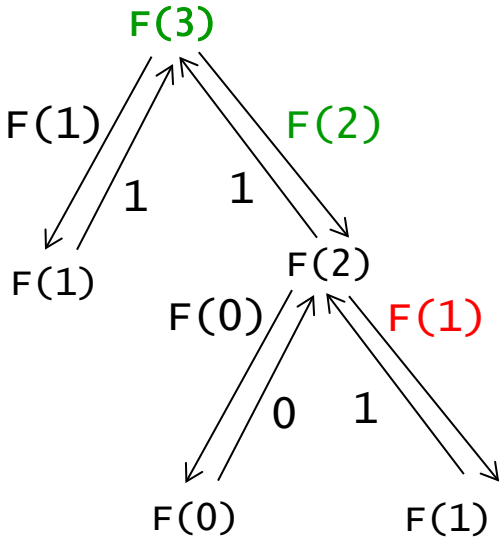


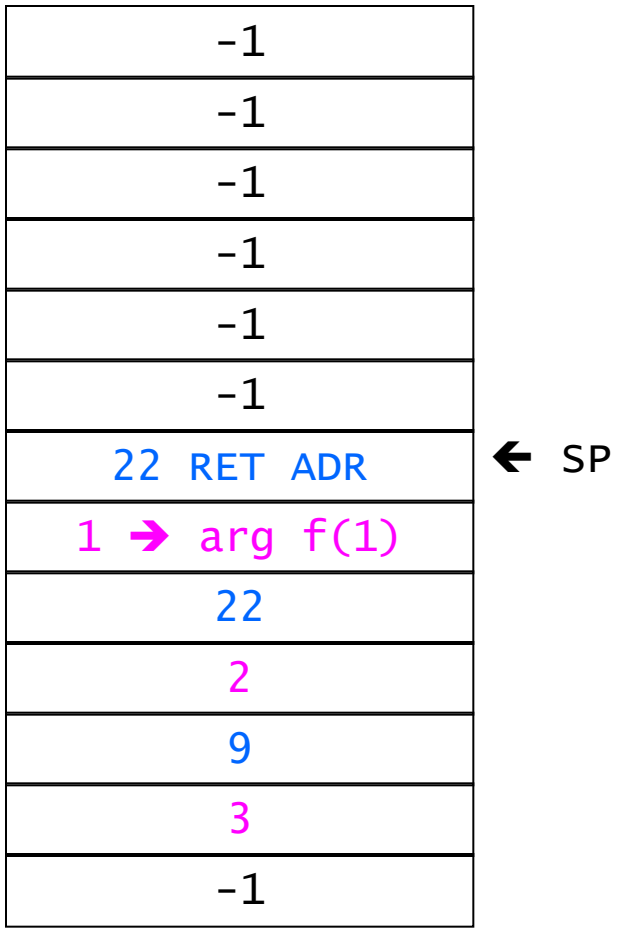


SP

2	AC

```
16 FIB:  LODL 1
17       JZER FIBZER:
18       SUBD c1:
19       JZER FIBONE:
20       PUSH
21       CALL FIB:
22       PUSH
           .
           .
           .
         RETN
FIBZER:  LODD c0:
         RETN
FIBONE:  LODD c1:
          RETN
```

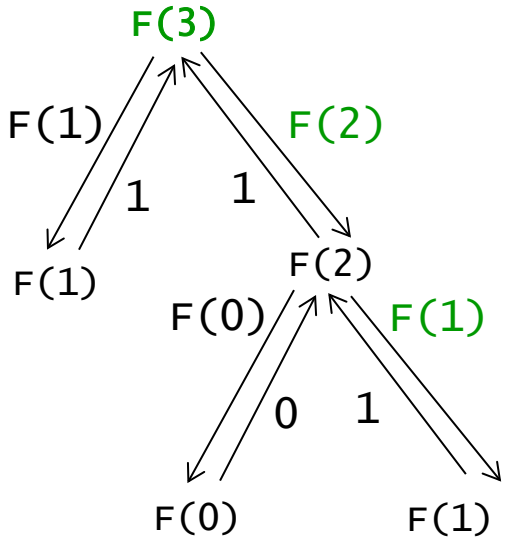


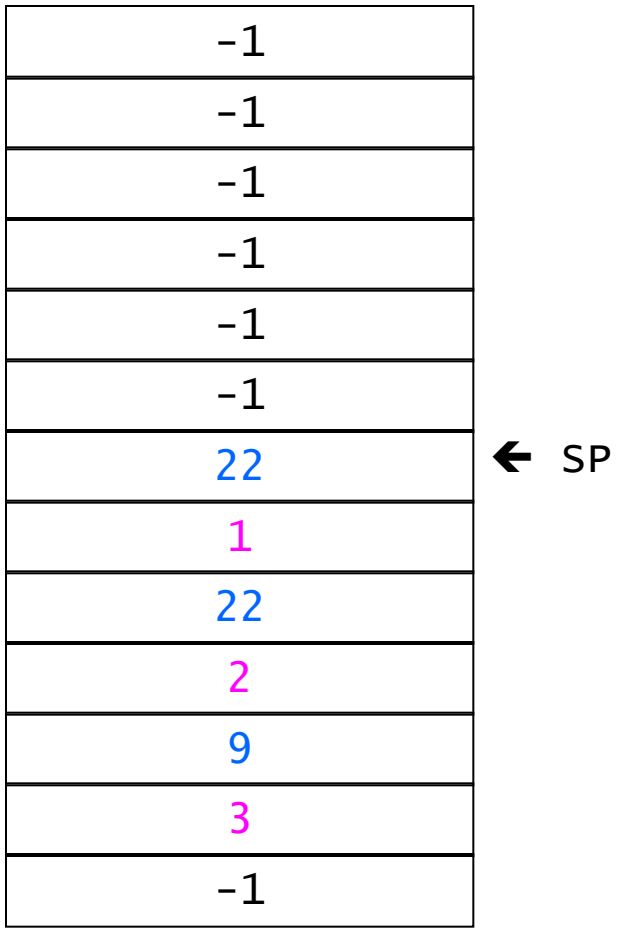


SP

1➔(n-1), f(2) AC

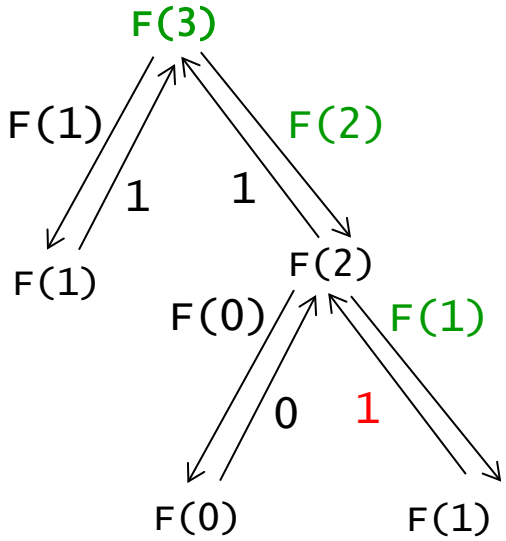
```
16 FIB:  LODL 1
17       JZER FIBZER:
18       SUBD c1:
19       JZER FIBONE:
20       PUSH
21       CALL FIB:
22       PUSH
           .
           .
           .
         RETN
    FIBZER: LODD c0:
         RETN
    FIBONE: LODD c1:
          RETN
```

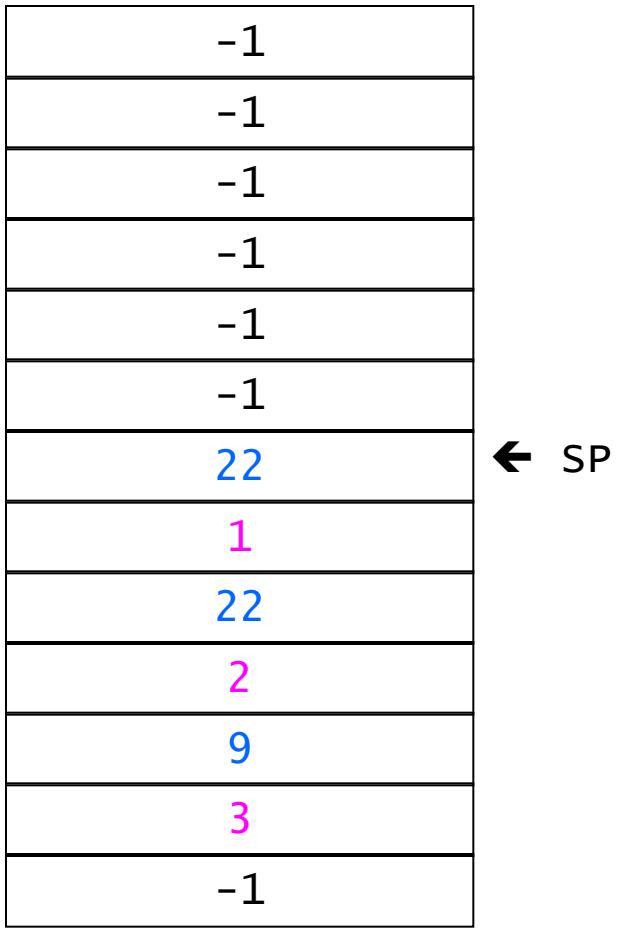




0 → get f(1) AC

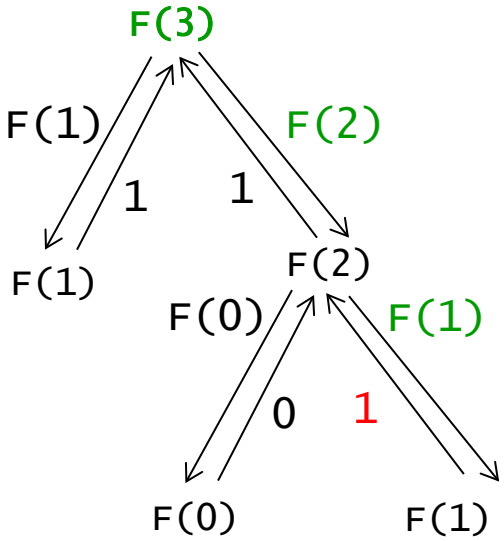
```
16 FIB:  LODL 1
17       JZER FIBZER:
18       SUBD c1:
19       JZER FIBONE:
20       PUSH
21       CALL FIB:
22       PUSH
           .
           .
           .
         RETN
FIBZER:  LODD c0:
         RETN
FIBONE:  LODD c1:
          RETN
```

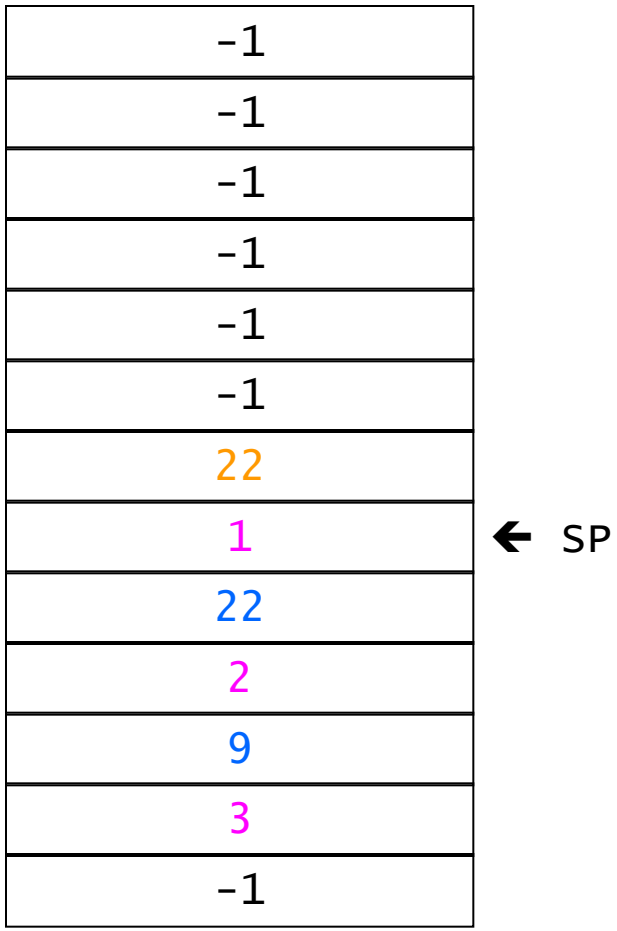




1 = f(1) AC

```
16 FIB:  LODL 1
17       JZER FIBZER:
18       SUBD c1:
19       JZER FIBONE:
20       PUSH
21       CALL FIB:
22       PUSH
         .
         .
         .
         RETN
   FIBZER: LODD c0:
         RETN
   FIBONE: LODD c1:
          RETN
```

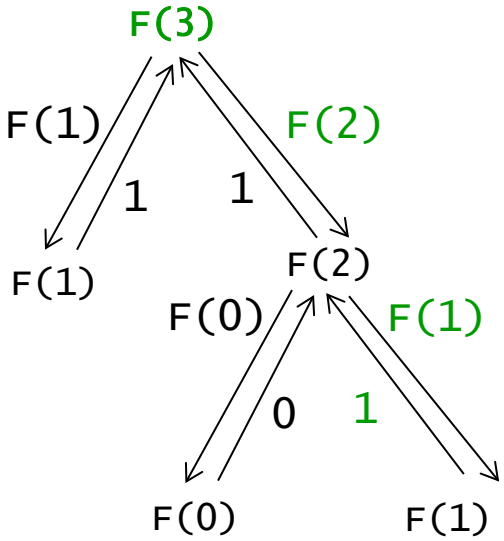




← SP

1➔f(n-1) [2] f(1) AC

```
16 FIB: LODL 1
17      JZER FIBZER:
18      SUBD c1:
19      JZER FIBONE:
20      PUSH
21      CALL FIB:
22      PUSH
        .
        .
        .
        RETN
FIBZER: LODD c0:
        RETN
FIBONE: LODD c1:
        RETN
```



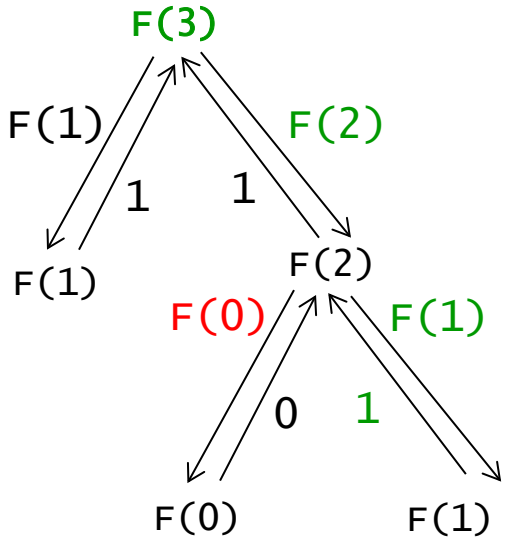
-1
-1
-1
-1
-1
-1
1➔f(n-1) [2] f(1)
1
22
2
9
3
-1

← SP

1

AC

```
16 FIB:  LODL 1
17       JZER FIBZER:
18       SUBD c1:
19       JZER FIBONE:
20       PUSH
21       CALL FIB:
22       PUSH
         .
         .
         .
         RETN
FIBZER:  LODD c0:
         RETN
FIBONE:  LODD c1:
         RETN
```



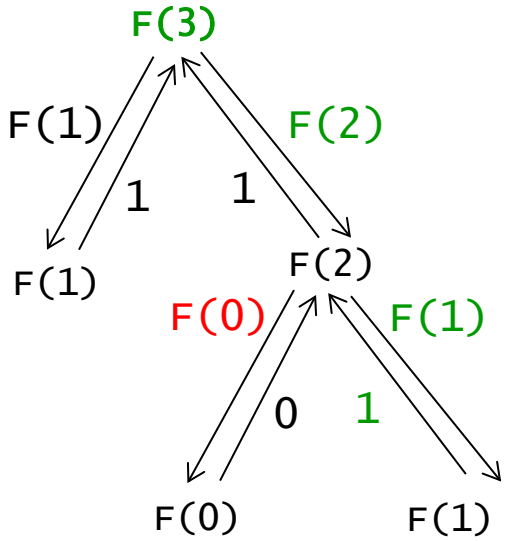
-1
-1
-1
-1
-1
0 ➔ arg f(0)
1➔f(n-1) [2] f(1)
1
22
2
9
3
-1

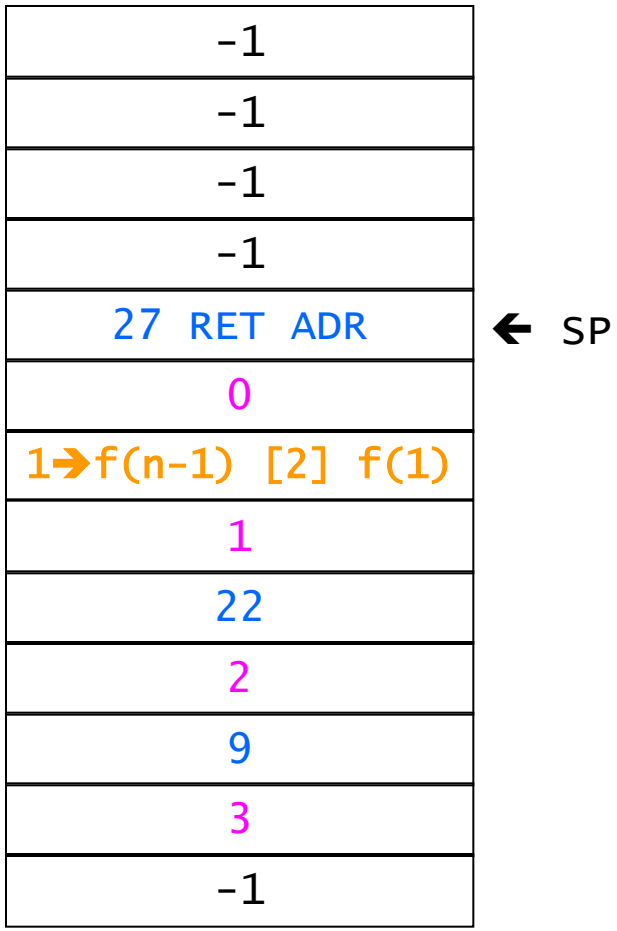
← SP

0➔(n-2) [2] f(0) AC

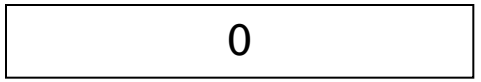
```
16 FIB: LODL 1
17      JZER FIBZER:
18      SUBD c1:
19      JZER FIBONE:
20      PUSH
21      CALL FIB:
22       PUSH
23      LODL 1
24      SUBD c1:
25      PUSH
26      CALL FIB:

        .
        .
        .
        .
FIBZER: LODD c0:
        RETN
FIBONE: LODD c1:
        RETN
```





SP



AC

```
16 FIB:  LODL 1
17       JZER FIBZER:
18       SUBD c1:
19       JZER FIBONE:
20       PUSH
21       CALL FIB:
22       PUSH
23       LODL 1
24       SUBD c1:
25       PUSH
26       CALL FIB:
.
.
.
.
    FIBZER: LODD c0:
         RETN
    FIBONE: LODD c1:
         RETN
```