

```

/* setjumpexamplecode.c */
/*-----*/
#include <stdio.h>
#include <setjmp.h>

jmp_buf buf;
int count = 0;
int main(void)
{
    int x = setjmp(buf);
    if (x == 0) {
        printf ( "First time through: x = %d, count = %d\n", x, count);
        count++;
    }
    else {
        printf ( "back in main() again: x = %d, count = %d\n", x, count);
        if (count == 7 ) exit(0);
        count++;
    }

    f1();
}

f1()
{
    f2();
}

f2()
{
    if (count == 3) {
        printf("In F2: count = %d, val = 1\n\n", count);
        longjmp(buf, 1);
    } else if (count == 4) {
        printf("In F2: count = %d, val = 10\n\n", count);
        longjmp(buf, 10);
    } else {
        printf("In F2: count = %d, val = 0\n\n", count);
        longjmp(buf, 0);
    }
}

```

output of the above code: setjumpexamplecode.c

First time through: x = 0, count = 0

In F2: count = 1, val = 0

back in main() again: x = 1, count = 1

In F2: count = 2, val = 0

back in main() again: x = 1, count = 2

In F2: count = 3, val = 1

back in main() again: x = 1, count = 3

In F2: count = 4, val = 10

back in main() again: x = 10, count = 4

In F2: count = 5, val = 0

back in main() again: x = 1, count = 5

In F2: count = 6, val = 0

back in main() again: x = 1, count = 6

In F2: count = 7, val = 0

back in main() again: x = 1, count = 7

Function	x	count	count	val
main()	0		0	
f2()		1		0
main()	1		1	
f2()		2		0
main()	1		2	
f2()		3		1
main()	1		3	
f2()		4		10
main()	10		4	
f2()		5		0
main()	1		5	
f2()		6		0
main()	1		6	
f2()		7		0