

C 语言中的浮点数存储原则：

(1) 符合 IEEE 754 标准，

符号位 1 位，阶码 8 位，尾数 23 位（单精度浮点型）

(2) 简单变量的内存采用小端字节序存储，即低位保存在低地址，

高位保存在高地址

例如：如变量 a 取如下值，且 &a 为 0x0019ff28

(1) 0.5

二进制 0.1

(2) 0.1

二进制：0.000 1100 1100 1100（乘出来 0.6 后循环了）

规格化为 1.100110011001100...

阶码为：-4+127 = 123，二进制位 0111 1011

完整表达：0 0111 1011 1001 1001 1001 1001 1001 100

3 D C C C C C C

内存中，（我的猜测）由于后面舍掉了 1100...，有了进位，变成 3D CC CC CD

地址 0x0019ff28 存放的是 CD，29 单元存放 CC，2A 单元存放 CC 2B 单元放 3D

若先后定义 a/b 两个变量，由于自动变量放在栈中，a 地址大，在后面

Memory														
Address:		0x0019ff28												
0019FF1A	CC CC CC CC CC CC CC CC CC CC CC CC CC CC	汤汤汤汤汤汤汤汤												
0019FF28	CD CC CC CC 3D CD CC CC 3D	70 FF 19 00 C9 12	否.=否.=p....											
0019FF36	40 00 01 00 00 00 08 10 56 00 50 1E 56 00	@.....U.P.U.												
0019FF44	E0 11 40 00 E0 11 40 00 00 10 2F 00 00 00	..@...@.../...												
0019FF52	00 00 00 00 00 00 44 FF 19 00 00 00 00 00	.....D.....											
0019FF60	CC FF 19 00 C0 4A 40 00 30 61 42 00 00 00	....缝@.0aB...											
0019FF6E	00 00 00 FF 19 00 29 FA 40 75 00 10 2F 00	.....鶸u../..											
0019FF7C	10 FA 40 75 DC FF 19 00 9E 7A 2F 77 00 10	..鶸u...猪/w...												
0019FF8A	2F 00 40 30 89 F2 00 00 00 00 00 00 00 00	/..00猪.....												
0019FF98	00 10 2F 00 00 00 00 00 00 00 00 00 00 00	../.....												
0019FFA6	00 00 00 00 00 00 00 00 00 00 00 00 00 00	.....											
0019FFB4	00 00 00 00 00 00 00 00 00 00 00 00 00 00	.....											
0019FFC2	00 00 8C FF 19 00 00 00 00 00 E4 FF 19 00	.....											
0019FFD0	40 AD 30 77 FC 07 A9 85 00 00 00 00 EC FF	@.0w.. \												
0019FFDE	19 00 6E 7A 2F 77 FF FF FF FF 40 8A 31 77	..nz/w....@.1w												
0019FFEC	00 00 00 00 00 00 00 00 E0 11 40 00 00 10@...												
0019FFFA	2F 00 00 00 00 00 41 63 74 78 20 00 00 00	/....Actx...												
001A0008	01 00 00 00 18 33 00 00 DC 00 00 00 00 00	.....3.....											
001A0016	00 00 20 00 00 00 00 00 00 00 14 00 00 00	.....											
001A0024	01 00 00 00 07 00 00 00 34 00 00 00 7C 01	.....4...|.												
001A0032	00 00 01 00 00 00 00 00 00 00 00 00 00 00	.....											
001A0040	00 00 00 00 00 00 00 00 00 00 00 00 02 00	.....											
001A004E	00 00 4E EF 26 1A 98 02 00 00 44 00 00 00	..N.&....D...												
001A005C	00 00 00 00 00 00 00 00 00 00 00 00 00 74	.....											
me		Value												
&a		0x0019FF2C												
&b		0x0019FF28												

(3) 0.05（乘以 2 即为 0.1，所以二进制跟 0.1 跟相似）

二进制 0.0000 1100 1100 1100...

