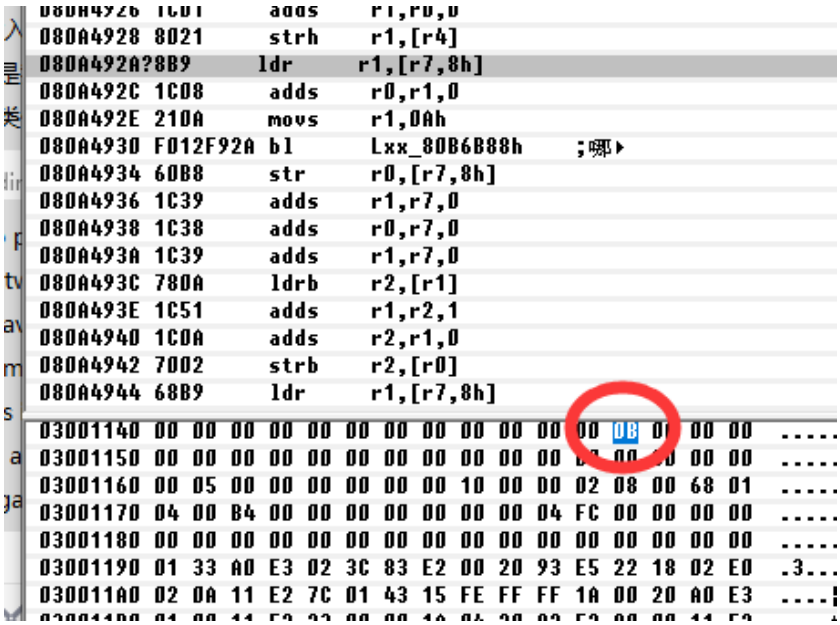
Let us use 0025 Super Mario Advance EU for example.

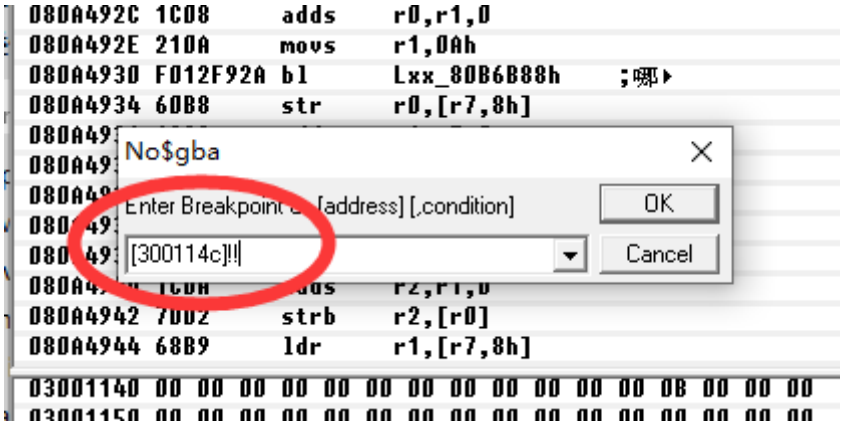
1. Open the corresponding CHT file. Find the Score option, address is 4114C, convert to normal address 0x300114C

[SM分数99999990]
ON=4114C,7F,96,98

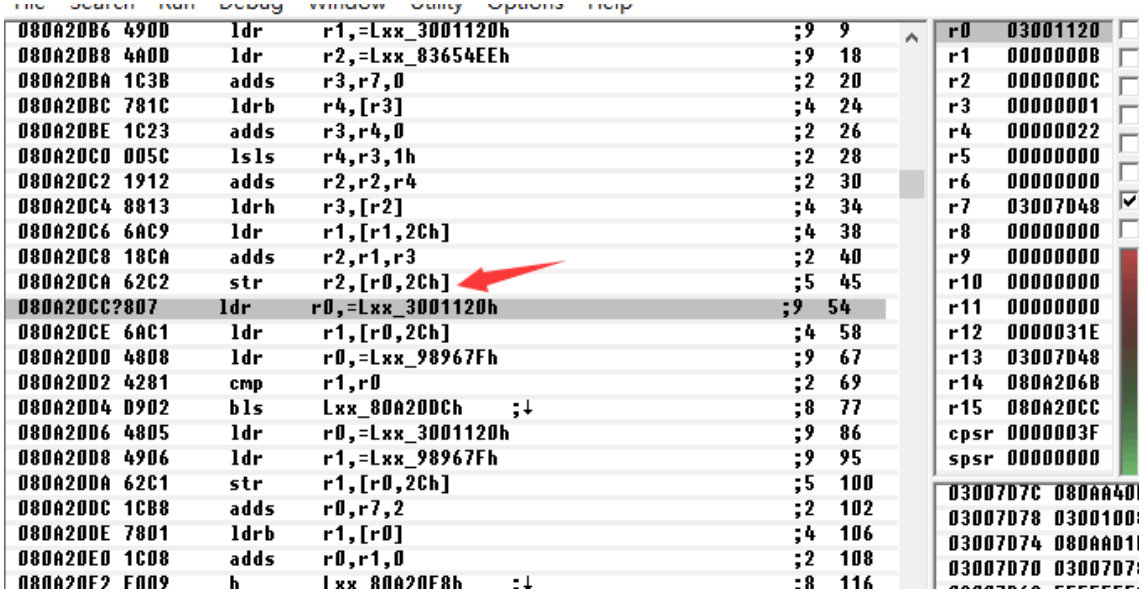
1、Use NO$GBA open the game，locate to the address



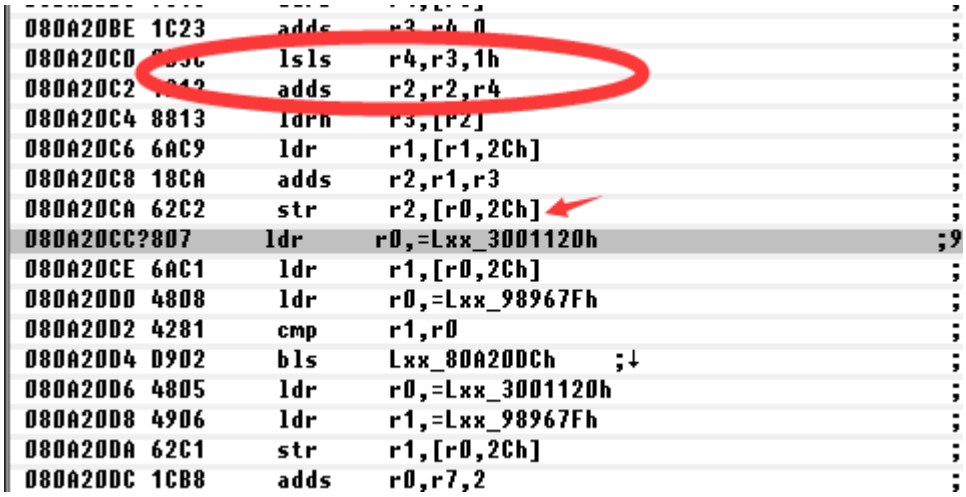
2、 Add a breakpoint, looking for which code write data to this address

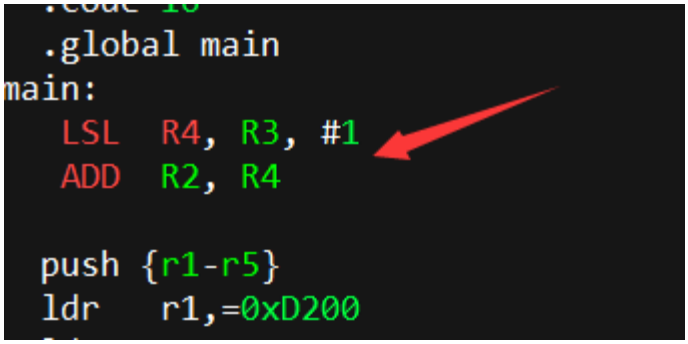


3、 Run the game, change the score, it can trigger the breakpoint.



4、Use the upper breakpoint find the above jump address. Here is 080A20C0. Modify the code in patch.s，replace the code，if you’d downloaded and installed devkitARM before，modify the path in “makebin.bat, double click to run makebin.bat，the patch.bin will be created if everything correct.





5、 Find a suitable empty address in the ROM, here is 3E7900，copy the data in patch.bin to here.

```
003E78B0  FF FF FF FF 00 00 00 00  00 00 00 00 00 00 00 00
003E78C0  00 00 00 00 00 00 00 00  00 00 00 00 00 00 00 00
003E78D0  00 00 00 00 00 00 00 00  00 00 00 00 00 00 00 00
003E78E0  00 00 00 00 FF FF FF FF  FF FF FF FF FF FF FF FF
003E78F0  FF FF FF FF FF FF FF FF  FF FF FF FF FF FF FF FF
003E7900  5C 00 12 19 3E B4 0D 49  0D 4A 0E 4B 19 80 0E 4B
003E7910  1A 80 0E 4B 19 80 0E 4B  1A 80 0E 4B F1 21 19 80
003E7920  0D 4B 1A 80 0D 4C 02 25  25 70 C0 46 C0 46 C0 46
003E7930  C0 46 00 25 25 70 3E BC  70 47 00 00 00 D2 00 00
003E7940  00 15 00 00 00 00 FE 09  00 00 00 08 00 00 02 08
003E7950  00 00 04 08 00 00 E2 09  00 00 FC 09 00 10 00 08
003E7960  FF FF FF FF FF FF FF FF  FF FF FF FF FF FF FF FF
003E7970  FF FF FF FF FF FF FF FF  FF FF FF FF FF FF FF FF
003E7980  FF FF FF FF FF FF FF FF  FF FF FF FF FF FF FF FF
```

6、Calculate the jump address. From 0xA20C0 to 0x3E7900. Here it is important to distinguish between arm32bit code or thumb16bit code. This game is 16bit.

0x3E7900-0xA20C0=0x345840

0x345840-4=0x34583C

High=0x34583C>>12=0x345

Low=(0x34583C&0xFFF)/2=0xC1E

machineCode = ((0xFF00 | low) << 16) | (0xF000 | high)= 0xFC1EF345

```
000A20C0  45 F3 1E FC 13 88 C9 6A  CA 18 C2 62 07
000A20D0  08 48 81 42 02 D9 05 48  06 49 C1 62 B8
000A20E0  08 1C 09 E0 E8 5C 00 03  A3 03 00 00 20
000A20F0  EE 54 36 08 7F 96 98 00  01 B0 90 BC 02
000A2100  90 B5 81 B0 6F 46 39 1C  08 70 78 1C 0A
000A2110  3A 1C 13 78 1C 1C 62 00  0B 1C 08 4B C9
000A2120  11 88 0A 1C 02 70 78 1C  01 78 11 29 08
```

7、Load the modified game and check the result.

```
080A20BC 781C      ldrb    r4,[r3]
080A20BE 1C23      adds    r3,r4,0
080A20C0 F345FC1E  bl      Lxx_83E7900h    ;哪▸
080A20C4 8813      ldrh    r3,[r2]
080A20C6 6AC9      ldr     r1,[r1,2Ch]
```

The result is when score changes, will send a rumble signal.