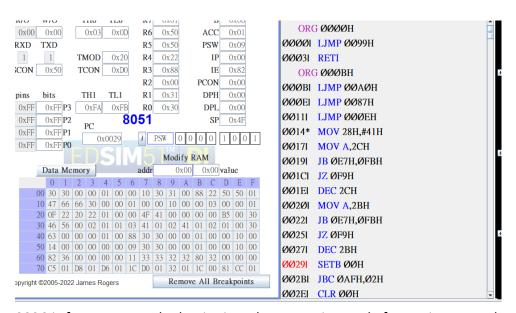
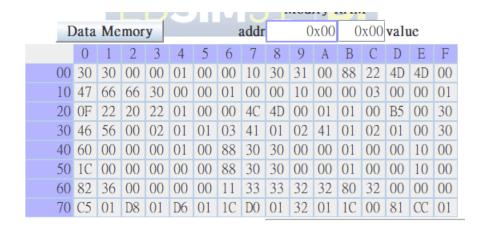
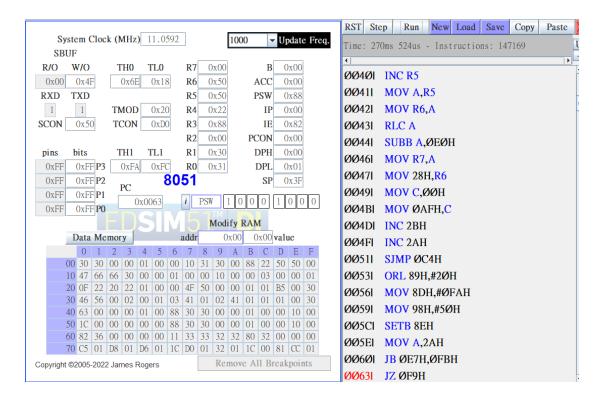
```
PS C:\Users\josh9\OneDrive\桌面\phchou OS\OS\project\project3> make clean
del *.hex *.ihx *.lnk *.lst *.map *.mem *.rel *.rst *.sym *.asm *.lk
PS C:\Users\josh9\OneDrive\桌面\phchou_OS\OS\project\project3> make
sdcc -c testpreempt.c
testpreempt.c:35: warning 158: overflow in implicit constant conversion
sdcc -c preemptive.c
preemptive.c:180: warning 85: in function ThreadCreate unreferenced function argument : 'fp'
preemptive.c:222: warning 158: overflow in implicit constant conversion
sdcc -o testpreempt.hex testpreempt.rel preemptive.rel
PS C:\Users\josh9\OneDrive\桌面\phchou_OS\OS\project\project3> ■
                                                          RST Step Run New Load Save
     System Clock (MHz)
                                    100
                                            ▼ Update Freq.
                                                                                                    U
                                                          Time: 9ms 4us - Instructions: 4995
    SBUF
                                                                                                     -
  R/O
       W/O
                TH0
                      TL0
                             R7
                                 0x01
                                           В
                                               0x00
                                                             ORG ØØØØH
   0x00 0x00
                 0x02
                      0x1F
                             R6
                                 0x50
                                         ACC
                                               0x00
                                                          ØØØØI LJMP ØØ99H
  RXD
       TXD
                             R5
                                 0x50
                                         PSW
                                               0x08
   1
         1
               TMOD
                                 0x22
                                           ΙP
                                               0x00
                                                          ØØØ3I RETI
                      0x20
                             R4
  SCON
               TCON
                      0xD0
                             R3
                                           ΙE
                                               0x82
        0x50
                                 0x88
                                                             ORG ØØØBH
                             R2
                                 0x00
                                        PCON
                                               0x00
                                                          ØØØBL LJMP ØØAØH
                TH1
                      TL1
                             R1
                                 0x31
                                         DPH
                                               0x00
  pins
                                                          ØØØEI LJMP ØØ87H
                      0xFF
                                          DPL.
                                               0x00
        0xFF P3
                 0xFA
                             R<sub>0</sub>
                                 0x30
                                                          8051
   0xFF
        0xFF P2
                                           SP
                                              0x4F
                                                          ØØ14* MOV 28H,#41H
         0xFFP1
                   0x0014
                            i PSW 0 0 0 0 1 0 0 0
   0xFF
        0xFF P0
                                                          ØØ17I MOV A,2CH
                                 Modify RAM
                                                          ØØ19I JB ØE7H,ØFBH
                                   0x00 0x00 value
                            addr
       Data Memory
                                                          ØØ1Cl JZ ØF9H
                    4
                       5 6 7 8
                                   9 A B C D E
                                                          ØØ1EI DEC 2CH
       00 30 30 00 00 01 00 00 10 30 31 00 88 22 50 50 01
       10 47 66 66 30 00 00 01 00 00 10 00 00 03 00 00 01
                                                          ØØ2ØI MOV A,2BH
       20 OF 22 20 22 01 00 00 4F 50 00 00 01 01 B5 00 30
                                                          ØØ22I JB ØE7H,ØFBH
       30 46 56 00 02 01 01 03 41 01 02 41 01 02 01 00 30
       40 63 00 00 00 01 00 88 30 30 00 00 01 00 00 10 00
                                                          ØØ25I JZ ØF9H
       50 14 00 00 00 00 00 09 30 30 00 00 01 00 00 10 00
                                                          ØØ27I DEC 2BH
       60 82 36 00 00 00 00 11 33 33 32 32 80 32 00 00 00
                                                          ØØ29I SETB ØØH
       70 C5 01 D8 01 D6 01 1C D0 01 32 01 1C 00 81 CC 01
                                                          ØØ2BI JBC ØAFH,Ø2H
 Copyright @2005-2022 James Rogers
                                  Remove All Breakpoints
                                                          ØØ2EI CLR ØØH
```



002C is for empty. At the beginning, the empty is 1 and after wait, empty becomes 0. It means the semaphore changes, and 0029 is the producer code.





002C is for empty. At the beginning, the empty is 0 and after signal, empty becomes 1. It means the semaphore changes, and 0063 is the consumer code.

```
00000014
                                               testpreempt
                                               testpreempt
00000099
           _sdcc_gsinit_startup
                                              testpreempt
0000009D
            mcs51 genRAMCLEAR
                                               testpreempt
0000009E
            mcs51 genXINIT
                                               testpreempt
            mcs51 genXRAMCLEAR
                                               testpreempt
000000A0
           timer0 ISR
                                               testpreempt
000000A4
AAAAAAACA
           ThreadCreate
                                              preemptive
00000176
000001DE
           ThreadExit
0000024D
```