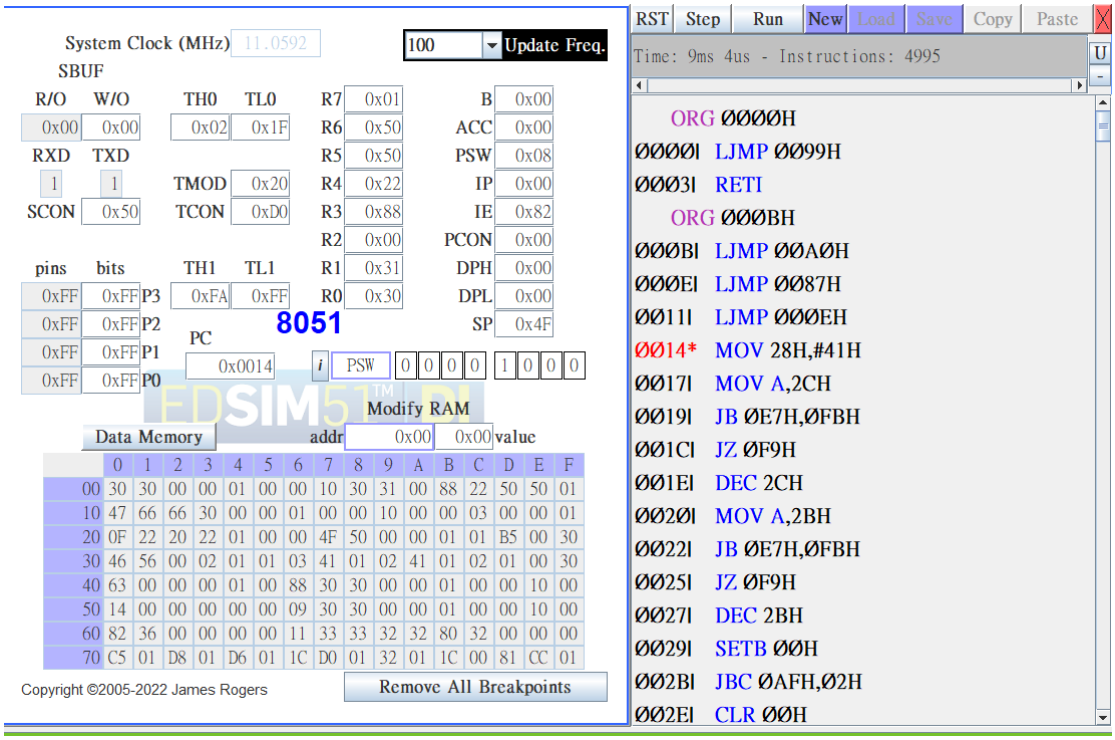
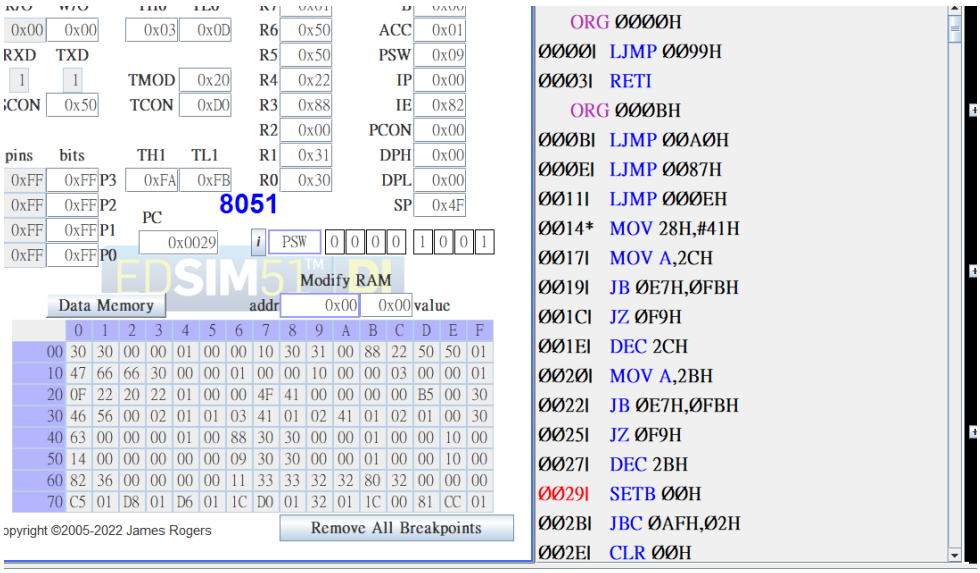
```
PS C:\Users\josh9\OneDrive\桌面\phchou_OS\OS\project\project3> make clean
del *.hex *.ihx *.lnk *.lst *.map *.mem *.rel *.rst *.sym *.asm *.lk
PS C:\Users\josh9\OneDrive\桌面\phchou_OS\OS\project\project3> make
sdcc -c  testpreempt.c
testpreempt.c:35: warning 158: overflow in implicit constant conversion
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>
```

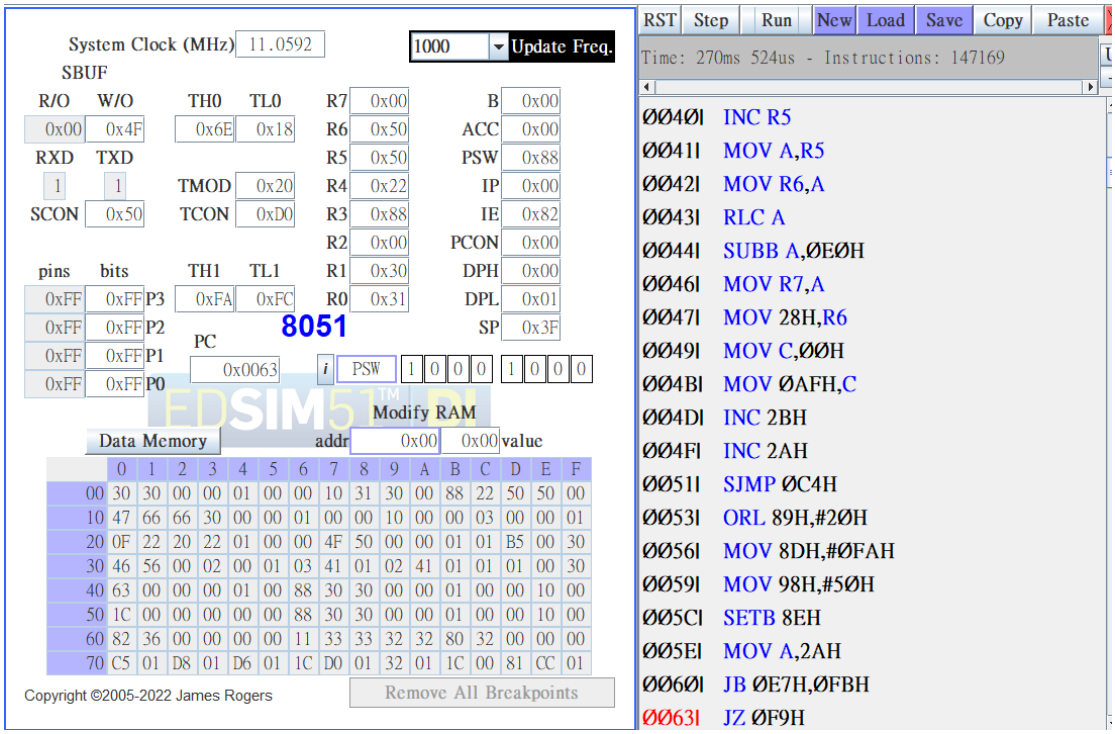




002C is for empty. At the beginning, the empty is 1 and after wait , empty becomes 0. It means the semaphore changes, and 0029 is the producer code.

Data Memory addr 0x00 0x00 value

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
00	30	30	00	00	01	00	00	10	30	31	00	88	22	4D	4D	00
10	47	66	66	30	00	00	01	00	00	10	00	00	03	00	00	01
20	0F	22	20	22	01	00	00	4C	4D	00	01	01	00	B5	00	30
30	46	56	00	02	01	01	03	41	01	02	41	01	02	01	00	30
40	60	00	00	00	01	00	88	30	30	00	00	01	00	00	10	00
50	1C	00	00	00	00	00	88	30	30	00	00	01	00	00	10	00
60	82	36	00	00	00	00	11	33	33	32	32	80	32	00	00	00
70	C5	01	D8	01	D6	01	1C	D0	01	32	01	1C	00	81	CC	01



	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
00	30	30	00	00	01	00	00	10	31	30	00	88	22	50	50	00
10	47	66	66	30	00	00	01	00	00	10	00	00	03	00	00	01
20	0F	22	20	22	01	00	00	4F	50	00	00	01	01	B5	00	30
30	46	56	00	02	00	01	03	41	01	02	41	01	01	01	00	30
40	63	00	00	00	01	00	88	30	30	00	00	01	00	00	10	00
50	1C	00	00	00	00	00	88	30	30	00	00	01	00	00	10	00
60	82	36	00	00	00	00	11	33	33	32	32	80	32	00	00	00
70	C5	01	D8	01	D6	01	1C	D0	01	32	01	1C	00	81	CC	01

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.

```
C:   00000014  _Producer                        testpreempt
C:   00000053  _Consumer                        testpreempt
C:   00000087  _main                            testpreempt
C:   00000099  __sdcc_gsinit_startup            testpreempt
C:   0000009D  __mcs51_genRAMCLEAR              testpreempt
C:   0000009E  __mcs51_genXINIT                 testpreempt
C:   0000009F  __mcs51_genXRAMCLEAR             testpreempt
C:   000000A0  _timer0_ISR                      testpreempt
C:   000000A4  _Bootstrap                       preemptive
C:   000000CA  _ThreadCreate                    preemptive
C:   00000176  _ThreadYield                     preemptive
C:   000001DE  _ThreadExit                      preemptive
C:   0000024D  _myTimer0Handler                 preemptive
```