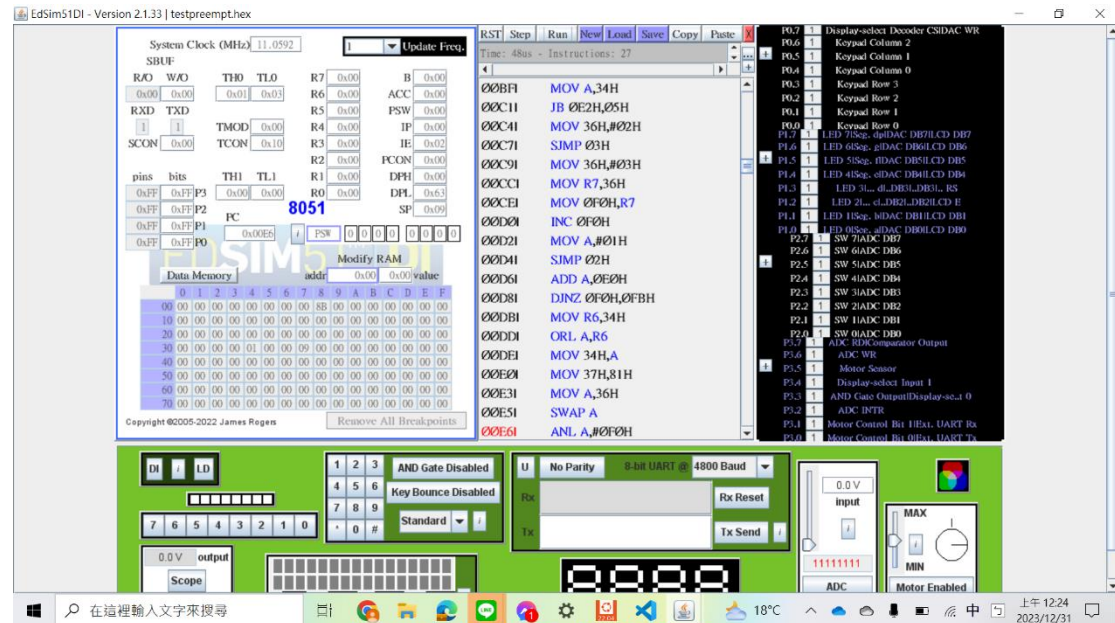


Student ID: 110062132, Student name: 許香羚

Typescript:

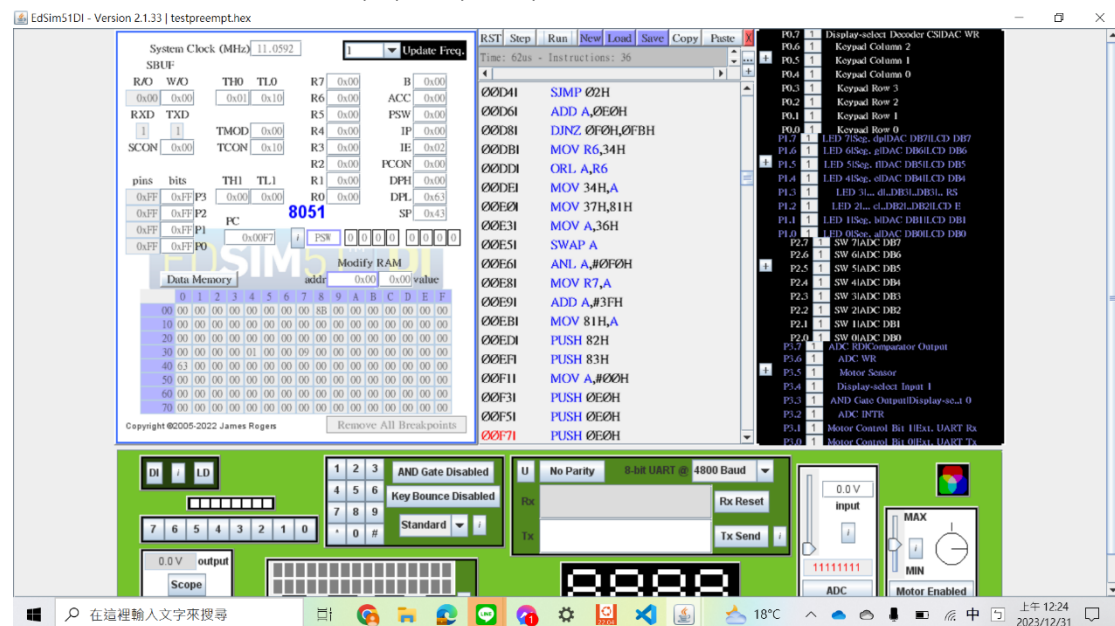
```
cathy@LAPTOP-ENINKNOR:/mnt/c/users/catherine/desktop/project/project2/110062132-ppc2$ make
sdcc -c testpreempt.c
sdcc -c preemptive.c
preemptive.c:133: warning 85: in function ThreadCreate unreferenced function argument : 'fp'
sdcc -o testpreempt.hex testpreempt.rel preemptive.rel
cathy@LAPTOP-ENINKNOR:/mnt/c/users/catherine/desktop/project/project2/110062132-ppc2$ make clean
rm *.hex *.ihx *.lnk *.lst *.map *.mem *.rel *.rst *.sym
rm: cannot remove '*.ihx': No such file or directory
rm: cannot remove '*.lnk': No such file or directory
make: *** [Makefile:25: clean] Error 1
```

Before the thread of main() has been created. Only Bootstrap in bank1(08H – 0FH).

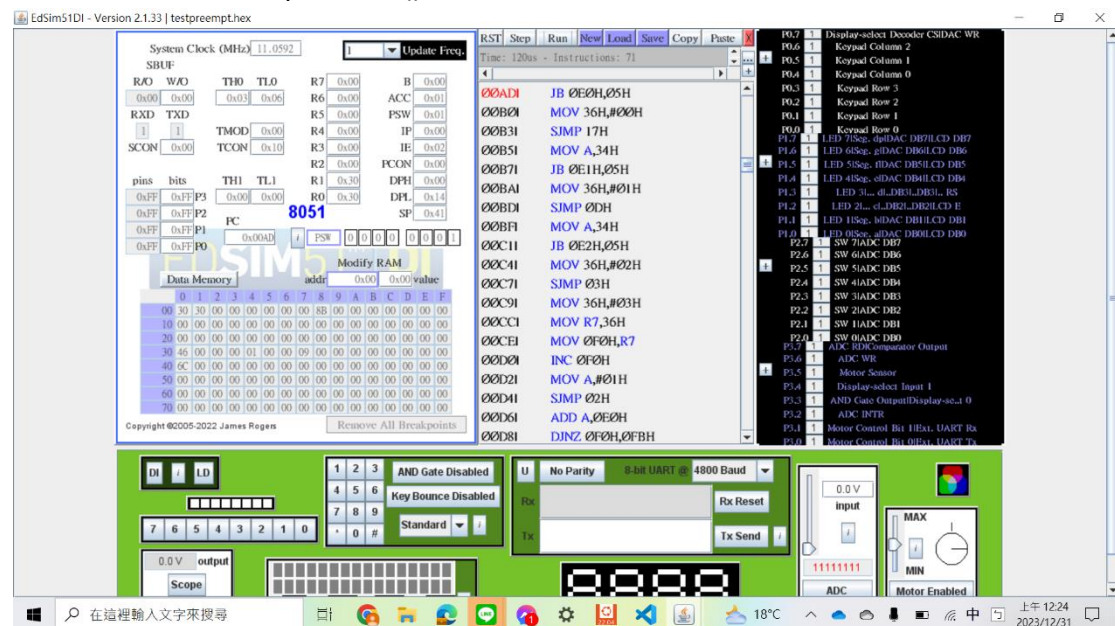


After the thread of main() has been created. 40H and 41H are for main()'s address.

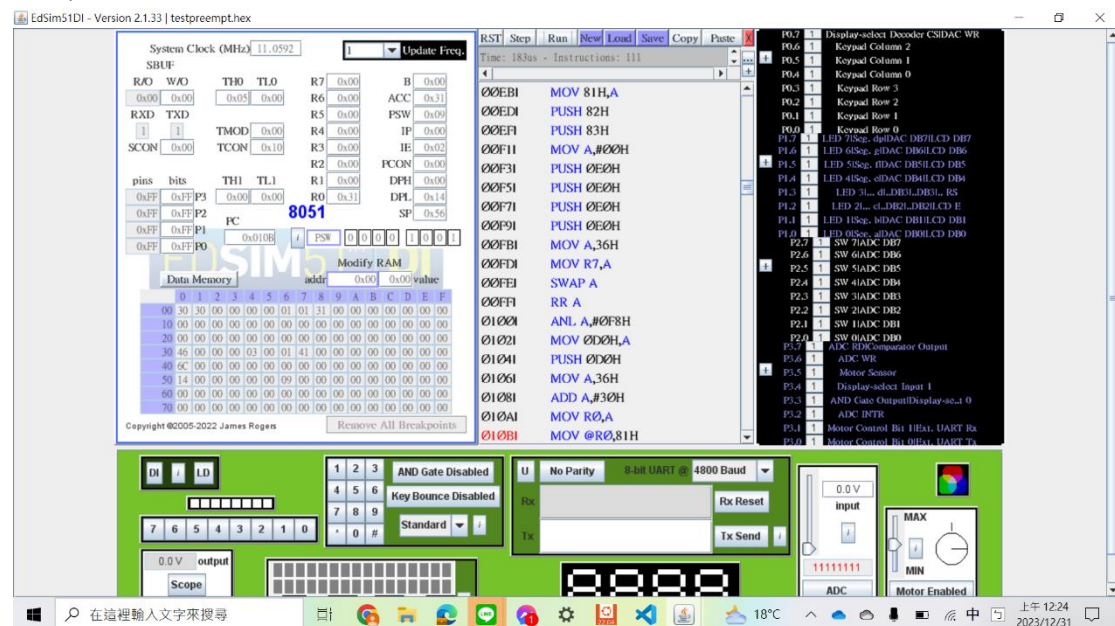
As for 42H-46H are for ACC, B, DPL, DPH, PSW. All value of them are 0.



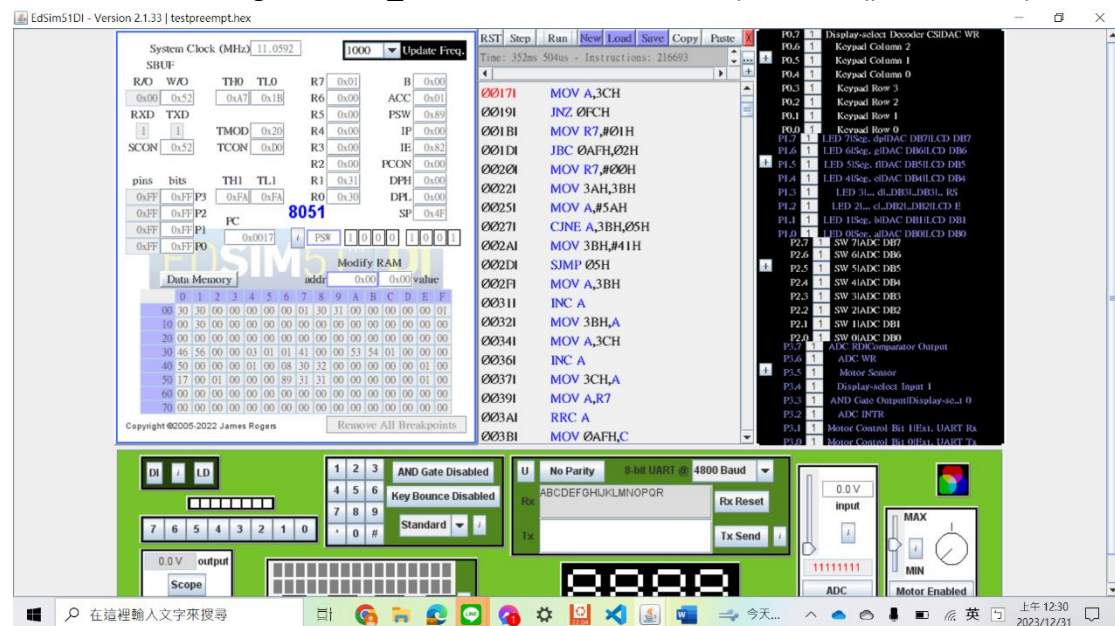
Before the thread of producer() has been created. 50H-5FH are all 0.



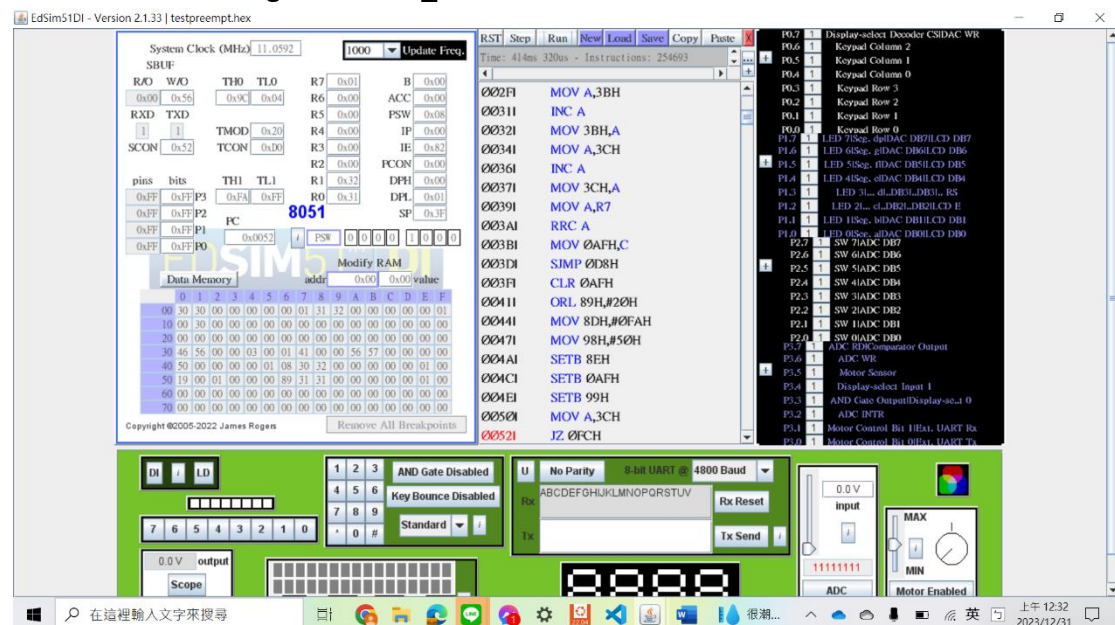
After the thread of producer() has been created. 50H and 51H are for producer()'s address. As for 52H-55H are for ACC, B, DPL, DPH. All value of them are 0. 56H is for PSW, which bit 3 and 4 are 01.



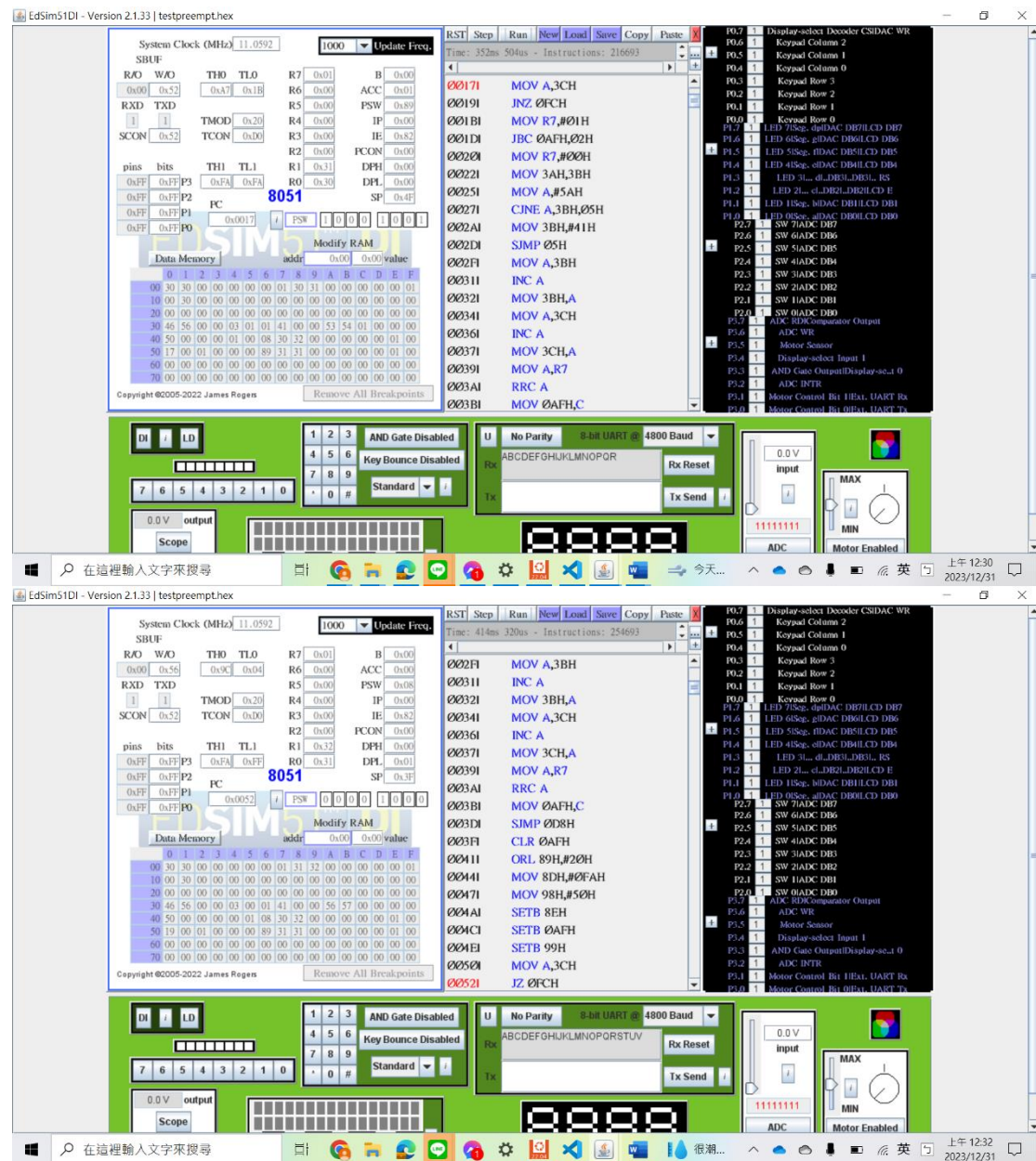
Producer is running. The 'cur_thread' in 35H is 01 now. (Producer() is thread 1)



Consumer is running. Since 'cur_thread' in 35H is 0.



interrupt is triggering on a regular basis since 'cur_thread' changes on a regular basis.



Part of code in myTimer0Handler():

```
do{  
    if ((bitmap & 0b1111) == 0b0000) break; // No thread running  
    cur_thread = (cur_thread < 3 ) ? cur_thread+1 : 0;  
    if(bitmap & ( 1 << cur_thread)) break;  
}  
while (1);
```