107034024 游湘穎 ー ppc2

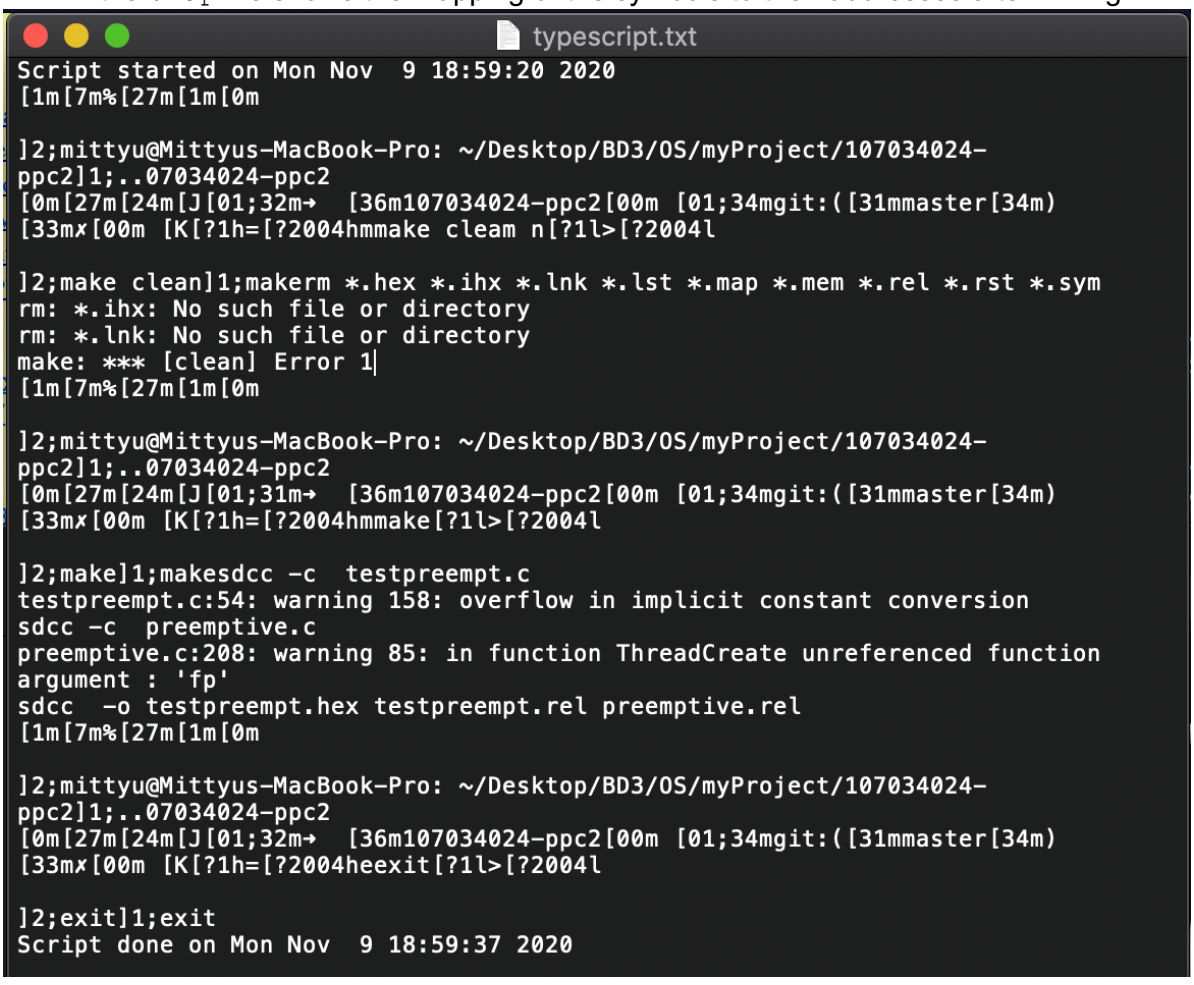
3.1 [2 points] Typescript for compilation

Turn in a typescript showing compilation of your code using a modified Makefile (same as for cooperative except the file names are changed to the preemptive version). You should use the following two commands (Note: $ is the prompt displayed by the shell and is not part of the command that you type.) The first one deletes all the compiled files so it forces a rebuild if you have compiled before. The second one compiles it.

```
$ make clean
$ make
```

It should show actual compilation, warning, or error messages. Note that not all warnings are errors. The compiler should generate several `testpreempt.*` files with different extensions:

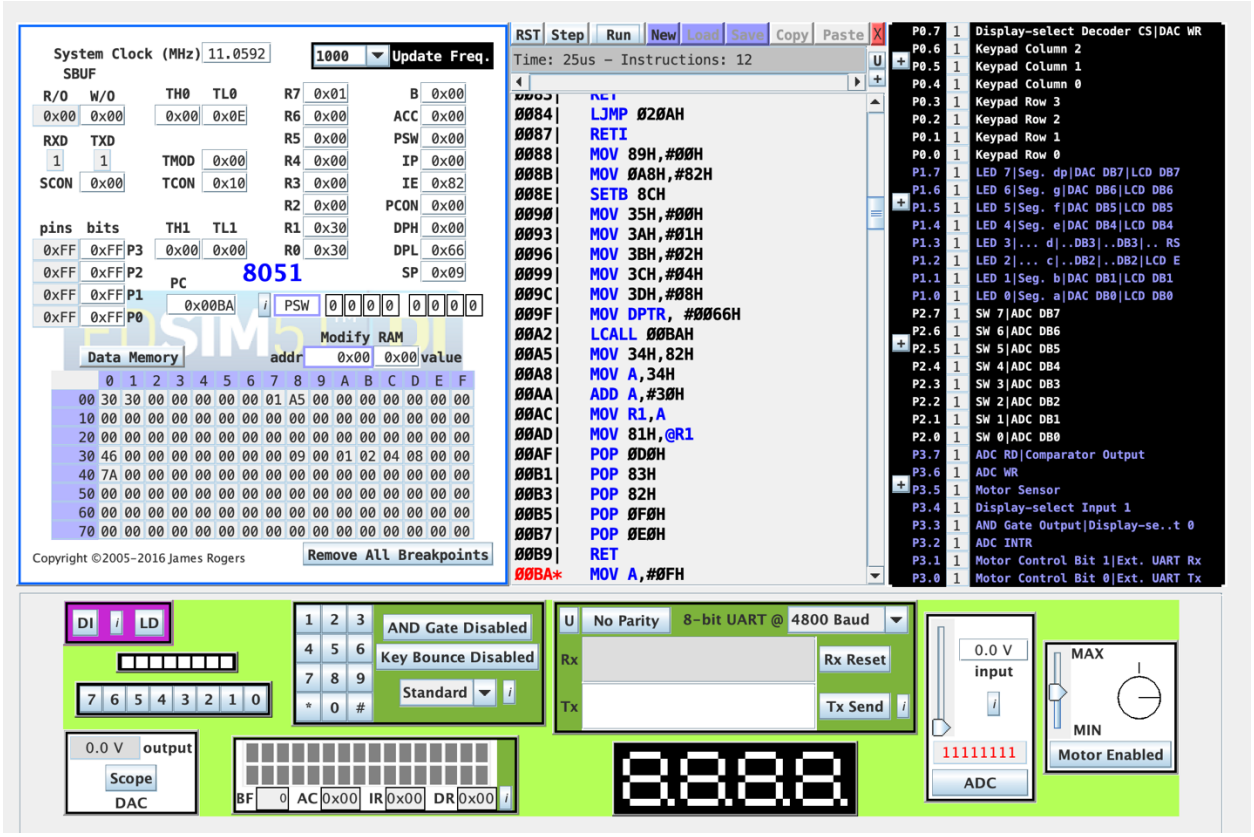
- the `.hex` file can be opened directly in EdSim51
- the `.map` file shows the mapping of the symbols to their addresses after linking



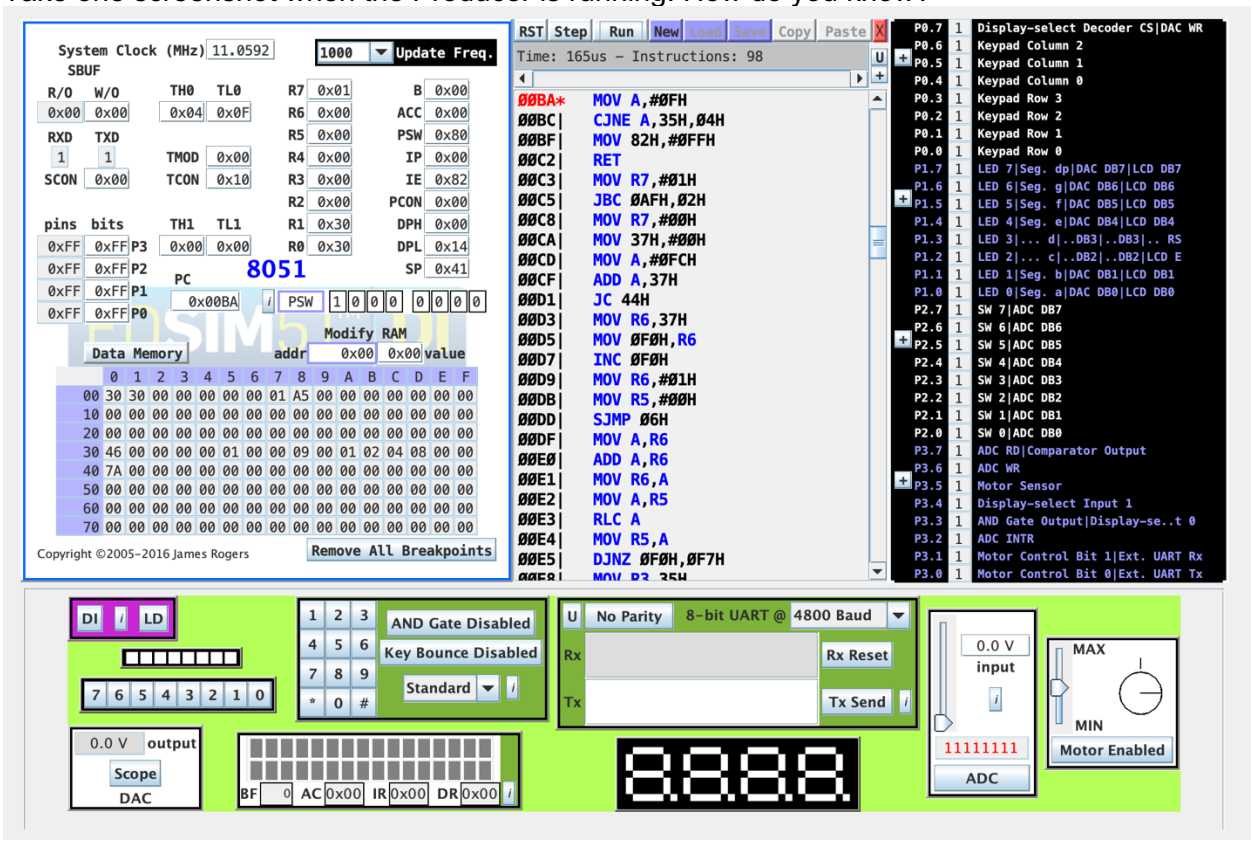
3.2 [18 points] Screenshots and explanation

Look up the addresses for your symbols (i.e., functions, variables, etc) in the file `testpreempt.map`. Set one or more breakpoints in EdSim51's assembly code window after you have assembled it.

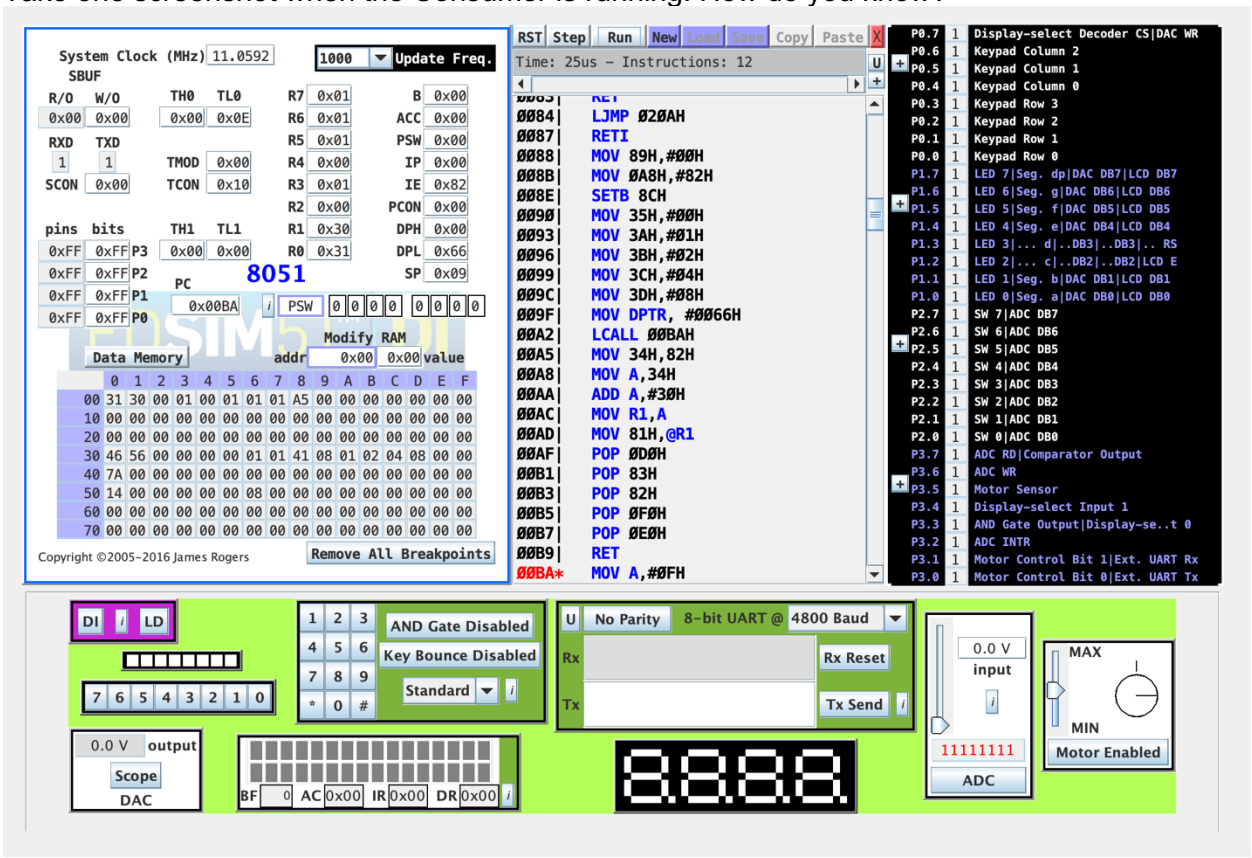
- Take one screenshot before each `ThreadCreate` call. Explain how the stack changes.



- Take one screenshot when the Producer is running. How do you know?



- Take one screenshot when the Consumer is running. How do you know?



- How can you tell that the interrupt is triggering on a regular basis?