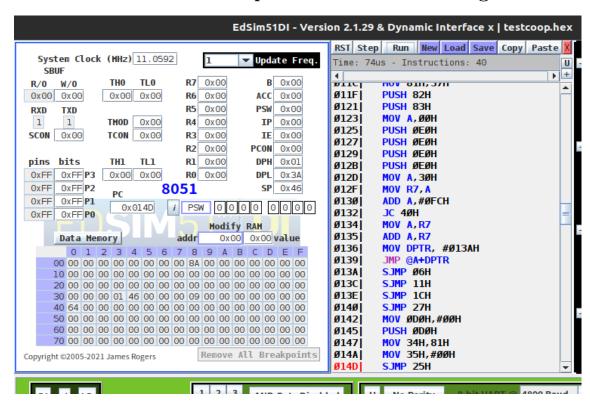
checkpoint1

October 2021

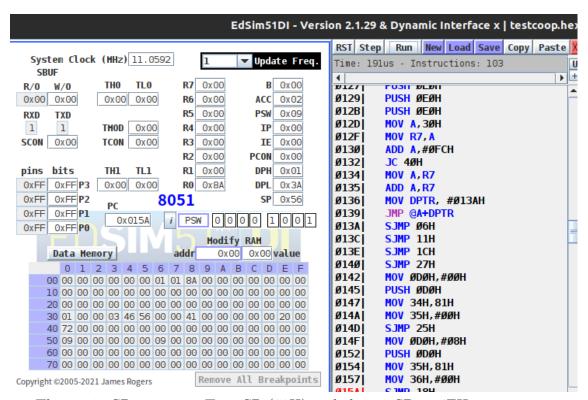
1 Question 1: Take one screenshot before each ThreadCreate call. Explain how the stack changes.



- 1 . The origin SP is save in TempSP (38H) and change SP to 3FH (Thread0 stack)
- 2 .Push DPL DPH (Thread0's initial address) in Thread0 stack

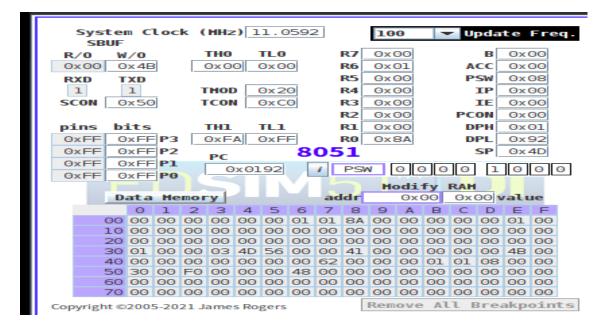
and Initialize ACC , B , DPL , DPH , PSW value and push those in Thread0 stack, such that SP is point to $46\mathrm{H}$

3. Restore Original SP from TempSP and Save Thread0SP in the 34H



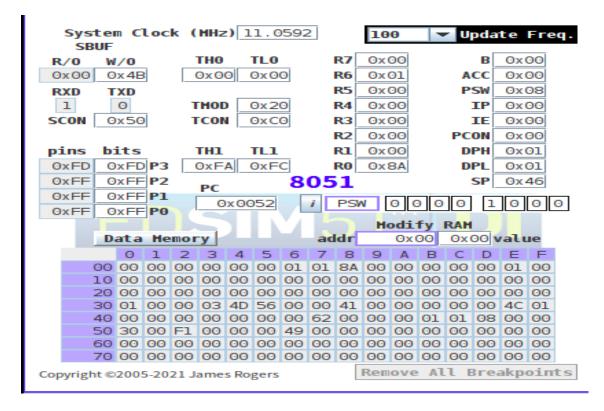
- 1 . The origin SP is save in TempSP (38H) and change SP to 4FH (Thread1 stack)
- 2 . Push DPL DPH (Thread1's initial address) in Thread1 stack and Initialize <code>ACC</code> , <code>B</code> , <code>DPL</code> , <code>DPH</code> , <code>PSW</code> value and push those in Thread1 stack, such that <code>SP</code> is point to $56\mathrm{H}$
- 3. Restore Original SP from TempSP and Save Thread1SP in the $35\mathrm{H}$

2 Question 2: Take one screenshot when the Producer is running. How do you know?



- 1. It's PC is 0x0192 can know begin execute Producer
- 2. After Producer execute the value of 3EH will increase

3 Question 3: Take one screenshot when the Consumer is running. How do you know?



- 1. It's PC is 0x0052 can know Consumer is running
- 2. After it execute will print the new word in uart