

Rami Bitar Lab 2 answers

4.2

The stack pointer before and after the creation of resume is the same however its content was different. The stack pointer and content for app1 before func1 and after func1 returned were the same. The stack pointer inside func1 was the same as in app1 but its content was different. 0 inside func1 and 200 inside app1.

4.3

When the process switches from one to another it is stored in prstkptr. Neither before or after the creation of app1 is the stack pointer from the asm and prstkptr equal.

asm: efd8fc0 prstkptr: efd8e44

The esp of app1() was not equal either asm: fdefbe8 prstkptr: fdefa5c

In neither case are the stack pointer values the same.

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1. The shares are roughly equal since all of the processes have equal priority because Main runs only very briefly before returning to sleep it doesn't make notable appearances however I found all the mains and the MAINS every few lines. From what I can tell the process with the highest priority is selected first to run whenever possible and then processes with equal priority switch off in regular intervals. The priority of the main process is 20 and the null process has a priority of 0.
2. After setting the priority of looper(100) to 5 I never saw it, looper(300) appeared later on after looper(200) had a head start but then would print out roughly equally. Main still appeared as before
3. Now looper(300) is the only thing that appeared, two of the main's appeared but none of the MAIN's showed so it must have a priority lower than 30.
4. Once looper(100) began nothing ever got a chance to start one main was printed but then just the code of looper with val 100.
5. The code was commented out to do the rest of the lab uncomment if you need to run it.