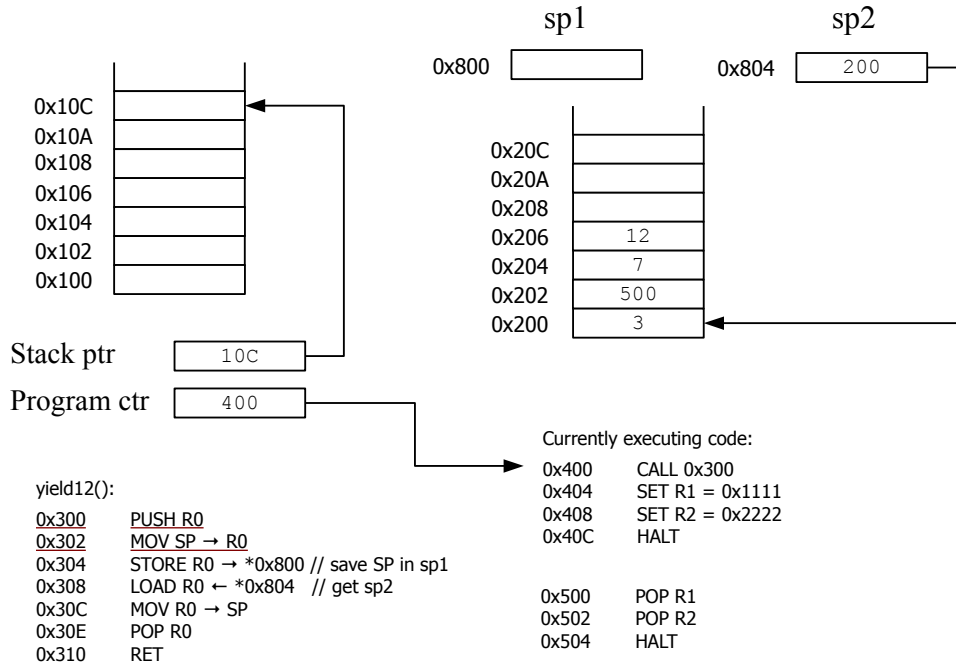


### Short Assignment – Context Switching

The following code has two threads, with stack pointers saved in variables sp1 and sp2, which switch from one to the other via the not-all-that-useful functions yield12 (shown below) and yield21 (not shown). We assume the CPU and instructions used for Lab 1.

The following diagram shows stacks, variables, and code for the two threads and the yield12() function. Assume R0 starts with the value 0.



Starting with the stack pointer and program counter given above, the CPU will execute 11 instructions up to and including the HALT instruction.

### Deliverable

For each of these 11 instructions, give the following information:

1. Instruction address, i.e., the value of the program counter [PC])
2. The instruction at that address, i.e., “MOV SP → R0”)
3. Identify any registers or memory locations (give the specific addresses) that are modified by that instruction, and provide their new contents
4. For any control flow instructions (JMP, CALL, RET) give the destination address, i.e., “0x704, RET: jump to 0x940, SP changes from 0x11FC to 0x1200”

**Submission instructions:** Please submit your answer via Canvas, either in PDF format or via the text entry field.