EE 315 Lab Assignment for Week 10

Important Note: The problem below is to be solved individually by each student.

- You will write a code that will POP two numbers (0xFEDCBA98 and 0xABC12345) **that you previously written** from Stack (**You should not PUSH these numbers into the stack. Use manual memory manipulation techniques that we performed**) into the R1 and R0 registers. (R1=0xFEDCBA98), (R0=0xABC12345).

  NOTE: DO THIS POP OPERATION IN A SINGLE LINE
  THERE SHOULD BE NO INSTRUCTIONS BEFORE THIS POP OPERATION

- You will subtract these numbers (0xFEDCBA98-0xABC12345) (the result will be 0x531B9753) and put the result into the R2 register. (R2=0x531B9753)

- Then update the Stack Pointer (**not by manual register manipulation, just write the necessary codes in order to update the Stack Pointer**) in order to prepare Stack Pointer to write this result between 0x20000408 and 0x2000040B memory address regions.

- Then you will use "PUSH {R2}" instruction in order to write this result to that desired memory region.

HINTS:

- Initial Stack Pointer shows the address region 0x20000400. So, consider to write these first two numbers accordingly.
- Please consider and take care of Big Endian and Little Endian issues!
- Before writing your code, you may test your manual memory manipulation technique using PUSH operation before the POP operation and see the result.