Inclass – October 22, 2020

```
; figure out what this program does
; what do the registers contain when the program halts.
.ORIG x3000
        LD R0, place1
        LDR R2, R0, #0
        BRnz exit
        LD R1, place2
        LDR R3, R1, #0
        BRzp skip
        JSR call1
skip    JSR call2
        STR R4, R0, #0
        STR R5, R1, #0
exit    HALT
place1 .FILL x4000
place2 .FILL x4002
; what does function call1 do ?
; how are arguments passed to and fro from this subroutine ?
call1   NOT R3, R3
        ADD R3, R3, #1
        RET
; what does call2 do ?
; how are arguments passed to and fro from this subroutine ?
call2   ADD R6, R3, #0
        NOT R6, R6
        ADD R6, R6, #1
        ADD R6, R2, R6
        BRn flip
        ADD R4, R2, #0
        ADD R5, R3, #0
        RET
flip    ADD R4, R3, #0
        ADD R5, R2, #0
        RET
   .END
```