9.8 To see if the number is a prime number(store 1) or not(store 0).

9.13 Linkage for JSR A is overwritten when executing JSR B.

9.16 VALUE .FILL x30000 will cause an assembly error because the number x30000 is too large to store.

10.10 For example, let’s take this program which add 5 numbers stored in the memory started at address represented by label DATA and stored the result in R3.

ORIG. x3000

(3000) LD R1,DATA

(3001) LD R2,COUNT

(3002) AND R3,R3,#0

(3003)LOOP LDR R4,R1,#0

(3004) ADD R3,R4,#0

(3005) ADD R2,R2,#-1

(3006) BRz STOP

(3007) ADD R1,R1,#1

(3008) BR LOOP

(3009)STOP HALT

DATA .BLKW 5

COUNT .FILL #5

In this program, if the interrupt service routine occurred at x3005 and the condition code are not saved. Assume R2 is 4, thus the P bit is set before the interrupt. After the control is returned to the instruction x3006, the NZP is determined by the interrupt service routine. If the Z bit is set, then the BRz instruction is taken so we get incorrect result.

10.23 This program reserves the input string.