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Q1. (1) AND R₂, R₂, #0

(2) AND R₃, R₃, #0

(3) JSR DLV

(4) ADD R₂, R₀, #0

(5) ADD R₀, R₁, #0

(6) JSR PUSH

(7) P

(8) LD R₄, ASCII-0

(9) JSR POP

(10) n

(11) ADD R₀, R₀, R₄

(12) nzp

Q2 1) In subroutine SUBTR, it call JSR INVERT without saving R₇, which erases value of R₇ to return the main program and causes infinite loop.

Q2 2) before JSR INVERT, insert ST R7 SAVER7-SUBTR
after JSR INVERT, insert LD R7 SAVER7-SUBTR
after RET of SUBTR, insert SAVER7-SUBTR .BLKW #1

Q3 1) False (FILO or LIFO)

2) False (it uses KBSR)