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i>_00010078    START:
00010078      lis      r2,0x00000000@HI    #
0001007C      no-op                                #
00010080      lis      r13,0x00000000@HI    #
00010084      no-op                                #
00010088      lis      r11,0x00010000@HI    # construct 0x00018df8
0001008C      ori      r1,r11,0x8DF8      # set up initial stack pointer
00010090      li       r0,0                  #
00010094      stwu     r0,-0x38(r1)         #
00010098      bl       __init                #
0001009C      lis      r3,0x00010000@HI    #
000100A0      ori      r3,r3,0x4BA4        #
000100A4      bl       atexit                #
000100A8      bl       main                  #
000100AC      bl       _exit                 #
000100B0      b        0x000100B0          #
##### C:\sds74\tuthcpcp\t1.c
#1
#2      int dox();
#3      int doy();
#4
#5
#6      void main() {
000100B4      main:
000100B4      mfspr     r0,LR                  # get old link register value
000100B8      stw       r0,4(r1)              # save old link register value on stack
000100BC      stwu     r1,-0x10(r1)            # create new stack frame and save stack pointer
000100C0      addi     r11,r1,0x10              # r11 points to old stack frame
000100C4      stw       r31,0xC(r1)             # save r31 in this stack frame
000100C8      stw       r30,8(r1)              # save r30 in this stack frame
000100CC      ori      r30,r11,0                # hold saved stack pointer in r30
#7
#8      int x;
#9      x = dox(1);
000100D0      li       r3,1                  # put immediate 1 into first parameter register
000100D4      bl       dox                      # call function
#10
#11      }
000100D8      ori      r11,r30,0              # move saved stack pointer to r11
000100DC      lwz      r30,8(r1)              # restore r30 from this stack frame
000100E0      lwz      r31,0xC(r1)             # restore r31 from this stack frame
000100E4      lwz      r0,0x14(r1)             # get old link register value from stack
000100E8      mtspr     LR,r0                    # restore link register
000100EC      ori      r1,r11,0              # restore stack pointer
000100F0      blr                          # return from function

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#12      int dox(int x) {
000100F4  dox:
000100F4      mfspr    r0,LR          # get old link register value
000100F8      stw      r0,4(r1)      # save old link register value on stack
000100FC      stwu     r1,-0x10(r1)   # create new stack frame and save stack pointer
00010100      addi     r11,r1,0x10    # r11 points to old stack frame
00010104      stw      r31,0xC(r1)   # r31 saved in new stack frame
00010108      stw      r30,8(r1)    # r30 saved in new stack frame
0001010C      ori      r30,r11,0    # copy r11 to r30 (r30 -> old stack frame)
00010110      ori      r31,r3,0      # save parameter x in r31
#13      dox(x);
00010114      ori      r3,r31,0      # (redundant) copy of x to be dox parameter
00010118      bl       dox          # call function
#14      return(x);
0001011C      ori      r3,r31,0      # put saved x value back as our return value
#15      }
00010120      ori      r11,r30,0     # move stack pointer (saved in r30) back to r11
00010124      lwz      r30,8(r1)     # restore r30 from this stack frame
00010128      lwz      r31,0xC(r1)   # restore r31 from this stack frame
0001012C      lwz      r0,0x14(r1)   # get old link register value from stack
00010130      mtspr    LR,r0         # restore link register
00010134      ori      r1,r11,0      # restore stack pointer
00010138      blr                     # return from function
#16      int doy(int x) {
0001013C  doy:
0001013C      mfspr    r0,LR          # Get old link register value
00010140      stw      r0,4(r1)      # Save old link register value on stack
00010144      stwu     r1,-0x10(r1)   # Create new stack frame and save stack pointer
00010148      addi     r11,r1,0x10    # r11 points to old stack frame
0001014C      stw      r31,0xC(r1)   # r31 saved in new stack frame
00010150      stw      r30,8(r1)    # r30 saved in new stack frame
00010154      ori      r30,r11,0     # copy r11 to r30 (r30 -> old stack frame)
#17      x = x + 1;
00010158      addi     r3,r3,1        # x = x + 1
#18      return(x);
#19      }
0001015C      ori      r11,r30,0     # put old stack frame pointer back in r11
00010160      lwz      r30,8(r1)     # restore r30 from this stack frame
00010164      lwz      r31,0xC(r1)   # restore r31 from this stack frame
00010168      ori      r1,r11,0      # restore stack pointer
0001016C      blr                     # return from function

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