```
0000:0000
                                            This file is generated by The Interactive Disassembler (IDA) Licensed to: Unknown User \ensuremath{\text{i-}})
0000:0000
0000:0000
                                            Copyright (c) 1999 by DataRescue sa/nv, <ida@datarescue.com>
0000:0000
0000:0000
                                 ; File Name : E:\Projects\NeoKong\arcade\dkong.bin
; Format : Binary File
; Base Address: 0000h Range: 0000h - 4000h Loaded length: 4000h
0000:0000
0000:0000
0000:0000
                                 ; Processor: z80 ; Target assembler: Table Driven Assembler (TASM) by Speech Technology Inc.
0000:0000
                                ; Segment type: Pure code ; segment 'ROM'
0000:0000
0000:0000
0000:0000
0000:0000 3E 00
                                 RESET:
                                                                                                                                ; CODE XREF: 0000:00B2|j; DATA XREF: 0000:0FCD|o
                                                                    a, 0
0000:0000
                                                         ld
0000:0002 32 84 7D
0000:0005 C3 66 02
0000:0008
                                                        ld
                                                                     (nmi_mask), a
INIT
                                                        SUBROUTINE
0000:0008
0000:0008
0000:0008
0000:0008
                                                                                                                                 ; CODE XREF: flash_1UP_or_2UP+7|p
                                return_if_attract_mode:
0000:0008 3A 07 60
0000:0008
0000:000B 0F
0000:000C D0
                                                                                                                                 ; add_bonus_and_update_high_score+1 p ...
                                                        14
                                                                    a, (attract_mode_flag)
                                                         rrca
                                                                                                                                ; no, return
                                                         ret
                                                                    nc
0000:000C B0
0000:000D 33
0000:000E 33
0000:000F C9
                                                         inc
                                                                     sp
sp
                                                                                                                                 ; discard return address
                                                         ret
                                 ; End of function return if attract mode
0000:000F
0000:0010
0000:0010
                                                       SUBROUTINE
0000:0010
0000:0010
0000:0010
0000:0010 3A 00 62
                                 return_if_mario_not_alive:
                                                                                                                                ; CODE XREF: sub_0_3A2+3|p; sub_0_2C03+3|p ...
0000:0010
                                                        14
                                                                    a. (mario alive flag)
0000:0010
0000:0013 0F
0000:0014 D8
0000:0015 33
0000:0016 33
0000:0017 C9
                                                                                                                                ; is mario alive?
; yes, return
                                                         rrca
                                                         ret
                                                         inc
                                                                     sp
                                                         inc
                                                                                                                                 ; discard return address
                                                         ret
                                 ; End of function return_if_mario_not_alive
0000:0017
0000:0017
0000:0018
0000:0018
                                                      SUBROUTINE ...
0000:0018
0000:0018
0000:0018 21 09 60
0000:0018
                                                                                                                                   CODE XREF: return_NOT_16bit_timeout+4|j0000:0A63|p ...
                                 return_NOT_8bit_timeout:
                                                                    hl, eight_bit_countdown (hl)
                                                         ld
0000:0018
0000:001B 35
                                                         dec
0000:001B 33
0000:001C C8
0000:001D 33
0000:001E 33
                                                         ret
inc
                                                                     z
sp
                                                                                                                                ; discard return address
                                                         inc
                                                                     sp
0000:001F C9
0000:001F
0000:001F
                                                         ret
                                 ; End of function return_NOT_8bit_timeout
0000:0020
0000:0020
0000:0020
0000:0020
                                                  SUBROUTINE
                                                                                                                                ; CODE XREF: 0000:0763|p; 0000:084B|p
0000:0020
0000:0020 21 08 60
0000:0020
0000:0023 35
                                 return NOT 16bit timeout:
                                                                     hl, sixteen_bit_countdown_msb
(hl)
                                                         ld
                                                         dec
0000:0023 33
0000:0024 28 F2
0000:0026
0000:0026
0000:0026 E1
                                                         jr
                                                                     z, return_NOT_8bit_timeout
                                                                                                                                 ; CODE XREF: print_message_A+1A|j; sub_0_1783+4|j
                                pop_hl_ret:
0000:0026
0000:0027 C9
0000:0027
                                                                    hl
                                                                                                                                 ; discard return address
                                 ; End of function return_NOT_16bit_timeout
0000:0027
0000:0028
0000:0028
0000:0028
0000:0028
                                           SUBROUTINE
0000:0028
0000:0028
0000:0028 87
0000:0028
                                                                                                                                 ; CODE XREF: 0000:00C9-p
                                 jump_table_go_A:
                                                                                                                                 ; 0000:0701 p ...
; entries are words
                                                         add
                                                                     a, a
0000:0029 E1
0000:002A 5F
0000:002B 16 00
0000:002D C3 32 00
                                                        pop
ld
ld
                                                                    h1
                                                                                                                                 ; return address is table base
                                                                    e, a
d, 0
                                 jp loc_0_32
; End of function jump_table_go_A
                                                                                                                                 ; skip vector address
0000:002D
0000:002D
0000:002D
                                                SUBROUTINE ...
0000:0030
0000:0030
0000:0030
0000:0030
                                 sub 0 30:
                                                                                                                                   CODE XREF: sub 0 3A2+2 p
0000:0030 18 12
                                                                                                                                 ; 0000:1668 p ...
                                                                    return_if_level_bit_not_set
0000:0032
                                                                                                                                ; CODE XREF: jump_table_go_A+5↑j
; get address of entry
                                loc 0 32:
0000:0032
0000:0032 19
0000:0033 55
0000:0034 23
0000:0035 56
0000:0036 EB
0000:0037 E9
                                                                    hl, de
e, (hl)
hl
                                                         add
1d
                                                                    d, (hl)
de, hl
(hl)
                                                         ld
ex
                                                                                                                                ; DE = jump address
; HL - jump address
; go
                                                         jр
0000:0038
0000:0038
```

```
; CODE XREF: animate_kong_and_pauline+F|p; animate_kong_and_pauline+65|p ...
0000:0038
                                      add_c_sprite_register_x10:
0000:0038 11 04 00
                                                                                                                                                        ; every 4th byte
; loop 10 times
0000:0038
0000:0038 06 0A
0000:003D
0000:003D
0000:003D 79
0000:003D
0000:003E 86
                                      loc_0_3D:
                                                                                                                                                        ; CODE XREF: sub_0_30+11|j; 0000:0D9A|p ...
                                                                                a, c
a, (h1)
(h1), a
h1, de
loc_0_3D
                                                                   add
0000:003F 77
0000:0040 19
0000:0041 10 FA
0000:0043 C9
                                                                   ld
                                                                                                                                                        ; (HL)+=C
                                                                   add
                                                                                                                                                        ; next byte
; loop
                                                                   djnz
                                                                   ret
0000:0044
0000:0044
0000:0044
                                      return_if_level_bit_not_set:
    ld    hl, level_type
    ld    b, (hl)
                                                                                                                                                        ; CODE XREF: sub_0_301j
0000:0044 21 27 62
0000:0044 21
0000:0047 46
0000:0048
0000:0048
                                                                                                                                                       ; get level type
                                       loc_0_48:
                                                                                                                                                        ; CODE XREF: sub_0_30+19|j
0000:0048 OF
                                                                   rrca
0000:0049 0F
0000:0049 10 FD
0000:004B D8
0000:004C E1
                                                                                                                                                       ; get bit of A for level
; bit set, return
; discard return address
                                                                   djnz
ret
                                                                                 loc_0_48
                                                                                 hl
                                                                  gog
0000:004D C9
                                                                   ret
0000:004D
0000:004D
0000:004E
                                       ; End of function sub_0_30
                                                       SUBROUTINE
0000:004E
0000:004E
0000:004E
0000:004E
0000:004E
                                      copy_sprites_2_11_data:
                                                                                                                                                        ; CODE XREF: animate_kong_and_pauline+4D|p
0000:004E 11 08 69
                                                                                                                                                        ; animate kong_and_pauline+77|p ...; ptr sprite #2; 10 4-byte sprites to copy; copy 40 bytes of sprite data
0000:004E 11 08 09
0000:004E
0000:0051 01 28 00
0000:0054 ED B0
                                                                                 de, soft_sprite_ram+8
bc, 40
                                                                   ld
                                                                   ld
                                                                   ldir
0000:0054 ED
0000:0056 C9
0000:0056
                                       ret; End of function copy_sprites_2_11_data
0000:0057
0000:0057
0000:0057
0000:0057
                                       ; SUBROUTINE
0000:0057
0000:0057
0000:0057
3A 18 60
0000:0057
0000:005A 21 1A 60
0000:005D 86
                                                                                                                                                        ; CODE XREF: 0000:00B9 p
                                       rand:
                                                                                                                                                        ; sub_0_2523+22 p ...
                                                                                  a, (random_no)
                                                                   1d
                                                                                 hl, gen_purpose_timer
a, (hl)
                                                                   add
0000:005E
0000:005E
                                       loc_0_5E:
0000:005E 21 19 60
                                                                                hl, random_no+1
a, (hl)
                                                                   ld
0000:0061 86
0000:0062 32 18 60
0000:0065 C9
                                                                   add
                                                                                 (random_no), a
                                                                   ld
                                                                   ret
                                       ; End of function rand
0000:0065
0000:0065
0000:0066
0000:0066
0000:0066
0000:0066 F5
0000:0067 C5
0000:0068 D5
                                      nmi:
                                                                                 de
hl
                                                                   push
0000:0069 E5
0000:006A DD E5
0000:006E PD E5
0000:006E AF
0000:006F 32 84 7D
0000:0077 23 A 00 7D
0000:0077 C2 00 40
0000:0077 C2 00 40
0000:0070 CD 41 01
0000:007D CD 41 01
0000:0088 3A 7
0000:0088 3A 7
0000:0088 66 60
0000:0088 3A 26 60
0000:0088 3A 26 60
0000:0088 3A 26 60
0000:0069 E5
                                                                   push
                                                                   push
                                                                                  ix
iy
                                                                   xor
                                                                                  (nmi mask),
                                                                   ld
                                                                                a, (in2_snd_latch)
                                                                                                                                                        ; disable nmi
                                                                   ld
and
                                                                                                                                                          IN2
bit 0 set?
                                                                                 nz, 4000h
                                                                   jp
ld
call
ld
                                                                                                                                                        ; yes, boom! (not valid code)
                                                                                 hl, dma_reg_tbl
dma_sprite_data_to_hw
a, (attract_mode_flag)
                                                                                                                                                        ; update sprites
                                                                                                                                                       ; in attract mode?
; yes, skip reading inputs
                                                                   and
                                                                   jp
ld
                                                                                 nz, loc_0_B5
a, (upright)
a
0000:008A A7
0000:008B C2 98 00
0000:008E 3A 0E 60
0000:0091 A7
0000:0095 C2 9B 00
0000:0098
0000:0098
                                                                   and
                                                                                 nz, loc_0_98
a, (current_player_E)
                                                                   jp
ld
                                                                                                                                                        ; player 2?
                                                                   and
ld
                                                                                 a, (in1)
                                                                                                                                                        ; (cocktail)
                                                                                 nz, loc_0_9B
                                                                                                                                                        ; yes, skip
                                                                                                                                                       ; CODE XREF: 0000:008B<sup>†</sup>j; (upright)
                                      loc 0 98:
0000:0098 3A 00 7C
                                                                                a, (in0)
                                                                   ld
0000:009B
0000:009B
                                                                                                                                                        ; CODE XREF: 0000:0095<sup>†</sup>j
                                       loc_0_9B:
0000:009B 47
0000:009C E6 0F
                                                                                                                                                        ; store INO/1
; joystick only
                                                                   ld
                                                                                 b, a
0Fh
                                                                   and
0000:009E 4F
0000:009F 3A 11 60
0000:00A2 2F
                                                                   ld
ld
                                                                                 c, a
a, (last_raw_in)
                                                                                                                                                           store
last raw input
                                                                                                                                                        ; negate
                                                                   cpl
0000:00A3 A0
                                                                   and
                                                                                                                                                        ; rising-edge detect
0000:00A3 A0
0000:00A4 E6 10
0000:00A6 17
0000:00A7 17
                                                                                 10h
                                                                   rla
                                                                   rla
0000:00A7 17
0000:00A8 17
0000:00A9 B1
0000:00AA 60
                                                                   rla
or
ld
                                                                                                                                                        ; add joystick bits
; raw controller input
; joystick and button press
                                                                                 c
h, b
0000:00AB 6F
                                                                   ld
0000:00AB 0F
0000:00AC 22 10 60
0000:00AF 78
0000:00B0 CB 77
                                                                   1d
                                                                                 (controller_in), hl
                                                                   ld
                                                                                 a, b
6, a
nz, RESET
                                                                   bit
                                                                                                                                                       ; reset input?
0000:00B2 C2 00 00
                                                                   jp
0000:00B5
0000:00B5
                                                                                                                                                        ; CODE XREF: 0000:0084<sup>†</sup>j
                                       loc_0_B5:
0000:00B5 21 1A 60 0000:00B8 35
                                                                   ld
                                                                                hl, gen_purpose_timer
(hl)
                                                                                                                                                        ; general purpose timer tick
                                                                   dec
0000:00B8 35
0000:00B9 CD 57 00
0000:00BC CD 7B 01
0000:00BF CD E0 00
0000:00C2 21 D2 00
0000:00C5 E5
0000:00C6 3A 05 60
                                                                   call
                                                                                 rand
sub_0_17B
                                                                                 update sounds
                                                                   call
                                                                                 hl, nmi_exit
                                                                   ld
                                                                                                                                                       ; IRQ resume address
                                                                   push
                                                                                      (nmi_sequencer)
                                                                   ld
                                                                                 a,
28h
0000:00C9 EF
                                                                   rst.
                                                                                                                                                        ; qo!
0000:0009
```

```
0000:00CA C3 01
                                                                    .dw init_machine_settings
                                                                                                                                                         ; Jump table (nmi sequencer)
                                                                    .dw chk_credits_and_vector_on_attrac
.dw vector_on_credit_sequencer
.dw vector_on_ingame_sequencer
0000:00CC
0000:00CE B2 08
0000:00D2
0000:00D2
0000:00D2 FD E1
0000:00D4 DD E1
0000:00D6 E1
                                       nmi_exit:
                                                                                                                                                         ; DATA XREF: 0000:00C210
                                                                                 iy
ix
hl
                                                                    pop
                                                                    pop
                                                                    pop
0000:00D6 E1
0000:00D7 D1
0000:00D8 C1
0000:00D9 3E 01
0000:00DB 3Z 84 7D
0000:00DE F1
0000:00DF C9
                                                                                 de
bc
                                                                    pop
ld
                                                                                  a,
                                                                    1d
                                                                                  (nmi_mask), a
                                                                                                                                                         ; enable nmi
                                                                    ret
0000:00E0
0000:00E0
                                                                    SUBROUTINE
                                                                                                                                                         ; CODE XREF: 0000:00BF1p
0000:00E0
                                       update_sounds:
0000:00E0 21 80 60
0000:00E3 11 00 7D
0000:00E6 3A 07 60
0000:00E9 A7
                                                                                 hl, digital_snd_tmr_walk
de, in2_snd_latch
a, (attract_mode_flag)
a
                                                                    1d
                                                                                                                                                         ; base of digital sound triggers
                                                                    ld
                                                                                                                                                         ; in attract mode?
                                                                    and
0000:00E9 A7
0000:00EA C0
0000:00EB 06 08
0000:00ED
                                                                                                                                                         ; yes, return
; 8 digital sound triggers
                                                                                 nz
b, 8
                                                                                                                                                         ; CODE XREF: update_sounds+18-j
0000:00ED
                                       loc 0 ED:
0000:00ED 7E
0000:00EE A7
0000:00EF CA F5 00
                                                                                                                                                         ; timer for this sound
; done?
; yes, skip
; decrement timer
                                                                    ld
                                                                                  a, (hl)
                                                                    and
jp
dec
                                                                                  a
z, loc_0_F5
0000:00F2 35
0000:00F3 3E 01
0000:00F5
0000:00F5
                                                                                 (hl)
                                                                    ld
                                                                                                                                                         ; enable
                                                                                                                                                        ; CODE XREF: update_sounds+F<sup>†</sup> j
; set trigger state for this sound
; next latch
; next timer
; loop for 8 sounds
                                       loc 0 F5:
0000:00F5 12 0000:00F6 1C 0000:00F6 1C 0000:00F7 2C 0000:00F8 10 F3 0000:00FA 21 8B 60 0000:00FD 7E 0000:00FE A7 0000:00FF C2 08 01
                                                                   ld
inc
inc
                                                                                  (de), a
                                                                    dinz
                                                                                  loc 0 ED
                                                                    ld
ld
                                                                                 hl, unk_0_608B
a, (hl)
                                                                    and
                                                                    jp
dec
                                                                                  nz, loc_0_108
0000:0102 2D
0000:0103 2D
0000:0104
                                                                    ld
                                                                                       (h1)
0000:0105 C3 0B 01
0000:0108
0000:0108
                                                                    jр
                                                                                  set_bg_sound_music
                                       loc_0_108:
                                                                                                                                                         ; CODE XREF: update sounds+1F1j
0000:0108
0000:0108 35
0000:0109 2D
0000:010A 7E
                                                                   dec
                                                                                  (hl)
1
                                                                   dec
                                                                                 a, (hl)
                                                                                                                                                         ; get background sound/music
0000:010B
0000:010B
0000:010B 32 00 7C
0000:010E 21 88 60
                                       set_bg_sound_music:
                                                                                                                                                         ; CODE XREF: update_sounds+25| j
; background sound/music select
                                                                                 (in0), a
hl, unk_0_6088
                                                                    ld
ld
0000:0111 AF
0000:0112 BE
0000:0113 CA 18 01
0000:0116 35
0000:0117 3C
                                                                    xor
                                                                                 (hl)
z, loc_0_118
(hl)
                                                                    cp
jp
                                                                    inc
0000:0118
0000:0118
                                                                                                                                                        ; CODE XREF: update_sounds+33<sup>†</sup>j; digital sound - dead
                                       loc_0_118:
0000:0118 32 80 7D
0000:011B C9
0000:011B
0000:011B
                                                                    ld
                                                                                 (dsw_audio_irq), a
                                                                    ret
                                       ; End of function update_sounds
0000:0110
0000:011C
0000:011C
0000:011C
                                                                 SUBROUTINE
0000:011C
0000:011C 06 08
0000:011C
0000:011E AF
                                                                                                                                                         ; CODE XREF: sub_0_17B+1A \nmid p; 0000:02B5 \nmid p ...
                                       stop_sound:
                                                                    ld
                                                                                 b, 8
                                                                    xor
0000:011F 21 00 7D
0000:0122 11 80 60
0000:0125
0000:0125
                                                                                 hl, in2_snd_latch
de, digital_snd_tmr_walk
                                                                    1d
                                                                                                                                                         ; sound latch
                                                                                                                                                         ; CODE XREF: stop sound+D-i
                                       loc 0 125:
0000:0125 77
0000:0126 12
0000:0127 2C
0000:0128 1C
                                                                                 (hl), a (de), a
                                                                                                                                                         ; kill latch
; kill timer
                                                                    1d
                                                                    ld
                                                                    inc
                                                                    inc
0000:0129 10 FA
0000:012B 06 04
                                                                                 loc_0_125
b, 4
                                                                                                                                                         ; write 8 bytes
0000:012B 06 04

0000:012D

0000:012D 12

0000:012D 12

0000:012E 1C

0000:012F 10 FC

0000:0131 32 80 7D

0000:0134 32 00 7C

0000:0137 C9

0000:0137
                                       loc 0 12D:
                                                                                                                                                         ; CODE XREF: stop sound+13-
                                                                    ld
                                                                                  (de), a
                                                                   inc
djnz
                                                                                 e
loc_0_12D
                                                                                                                                                         ; another 4 copies
                                                                   ld
ld
                                                                                  (dsw_audio_irq), a (in0), a
                                                                                                                                                         ; audio IRQ
; background music = NONE
                                                                    ret
                                       ; End of function stop sound
0000:0137
0000:0137
0000:0137
0000:0138 53
0000:0138
                                                                                                                                                           DATA XREF: 0000:007A o DMA mode (TC stop, CH0,1)
                                       dma_reg_tbl:
                                                                    .db 53h
0000:0138
0000:0139 00 69
0000:013B 80 41
0000:013D 00 70
0000:013F 80 81
0000:0141
0000:0141
                                                                                                                                                           CHO address
CHO terminal count (RD 0x180 bytes)
                                                                    .dw soft_sprite_ram
                                                                    .dw SPRAM start
                                                                                                                                                         ; CH1 Address
; CH1 terminal count (WR 0x180 bytes)
                                                                    .dw 8180h
                                                                    SUBROUTINE
0000:0141
                                       dma_sprite_data_to_hw:
                                                                                                                                                         ; CODE XREF: 0000:007D↑p
                                                                    xor
0000:0141 AF

0000:0142 32 85 7D

0000:0145 7E

0000:0146 32 08 78

0000:0149 23
                                                                                  (p8257_drq), a
                                                                                                                                                         ; deassert DROO&1
                                                                    ld
                                                                    ld
                                                                                                                                                         : 0x53
                                                                                  a, (III)
(i8257_io+8), a
                                                                    ld
                                                                                                                                                         ; mode set
                                                                                 hl
a. (hl)
                                                                                                                                                         ; 0x00
0000:014A 7E
                                                                    1d
                                                                                  a, (hl)
(i8257_io), a
0000:014B 32 00 78
                                                                    ld
                                                                                                                                                         ; CHO DMA address LSB
```

```
hl
0000:014E 23

0000:014F 7E

0000:0150 32 00 78

0000:0153 23

0000:0154 7E

0000:0155 32 01 78

0000:0158 23

0000:0158 32 01 78

0000:0158 32 01 78
                                                                                       a, (hl)
(i8257_io), a
                                                                         1d
                                                                                                                                                                    ; 0x69
                                                                        ld
inc
                                                                                                                                                                    ; CHO DMA address MSB
                                                                                      (10
hl
a, (hl)
                                                                                                                                                                    ; 0x80 ; terminal count LSB
                                                                                       a, (hl)
(i8257_io+1), a
                                                                        ld
inc
ld
ld
                                                                                       (10
hl
a, (hl)
                                                                                                                                                                    ; 0x41 ; terminal count MSB
                                                                                       a, (h1)
(i8257_io+1), a
                                                                         inc
ld
ld
0000:015D 23
                                                                                       hl
                                                                                             (hl)
0000:015E 7E
0000:015F 32 02 78
0000:0162 23
                                                                                       a, (hl)
(i8257_io+2), a
                                                                                                                                                                    ; 0x00
                                                                                                                                                                    ; CH1 DMA address LSB
                                                                                       hl
a, (hl)
(i8257_io+2), a
                                                                         inc
0000:0163 7E
0000:0164 32 02 78
0000:0167 23
0000:0168 7E
                                                                                                                                                                    ; 0x70
; CH1 DMA address MSB
                                                                        ld
ld
                                                                                       hl
a, (hl)
(i8257_io+3), a
                                                                         inc
ld
                                                                                                                                                                    ; 0x80
; CH1 terminal count LSB
0000:0168 7E
0000:0169 32 03 78
0000:016C 23
0000:016D 7E
0000:016E 32 03 78
0000:0171 3E 01
0000:0171 3E 01
0000:0176 AF
0000:0177 A C9
0000:017A
0000:017A
                                                                        ld
inc
ld
                                                                                       hl
a, (hl)
                                                                                                                                                                    ; 0x81
; CH1 terminal count MSB
                                                                                       a, (hl)
(i8257_io+3), a
                                                                         ld
                                                                         ld
                                                                         ld
                                                                                        (p8257_drq), a
                                                                                                                                                                    ; assert DRQ0&1
                                                                         xor
ld
                                                                                       (p8257_drq), a
                                                                                                                                                                    ; deassert DROO&1
                                          ret
; End of function dma_sprite_data_to_hw
 0000:017B
0000:017B
0000:017B
0000:017B
0000:017B
                                                                       SUBROUTINE |
0000:017B
0000:017B 3A 00 7D
0000:017E CB 7F
0000:0180 21 03 60
0000:0183 C2 89 01
0000:0186 36 01
0000:0188 C9
                                                                                                                                                                    ; CODE XREF: 0000:00BC\p
; read IN2
; coin?
                                          sub_0_17B:
                                                                                       a, (in2_snd_latch)
7, a
h1, unk_0_6003
nz, loc_0_189
(h1), 1
                                                                         1d
                                                                        bit
ld
                                                                         jp
ld
                                                                                                                                                                    ; yes, skip
                                                                         ret
0000:0189

0000:0189

0000:0189 7E

0000:0188 A7

0000:0188 C8

0000:0180 E5

0000:0180 E5

0000:0190 FE 03

0000:0192 CA 9D 01

0000:0195 CD 1C 01

0000:0195 CD 1C 01

0000:0194 32 83 60

0000:019D

0000:019D
0000:0189
                                          loc_0_189:
                                                                                                                                                                    ; CODE XREF: sub_0_17B+8<sup>†</sup>j
                                                                                       a, (hl)
                                                                         1d
                                                                         and
                                                                         ret
push
ld
                                                                                       hl
                                                                                       a, (nmi_sequencer)
                                                                        cp
jp
call
                                                                                                                                                                    ; in credit sequence?
; yes, skip
                                                                                        z, loc_0_19D
                                                                                       stop_sound
                                                                                                                                                                    ; tmr = 3
                                                                         ld
                                                                         ld
                                                                                        (digital_snd_tmr_coin_spring), a
                                          loc_0_19D:
                                                                                                                                                                    ; CODE XREF: sub_0_17B+17<sup>†</sup>j
                                                                        pop
ld
dec
inc
0000:019D E1
0000:019B E1
0000:019E 36 00
0000:01AO 2B
0000:01A1 34
                                                                                        (hl), 0
                                                                                       hl
(hl)
0000:01A1 34
0000:01A2 11 24 60
0000:01A5 1A
0000:01A6 96
0000:01A8 77
0000:01A9 13
0000:01AA 2B
0000:01AB EB
0000:01AB EB
0000:01AB FE 90
0000:01AF DO
0000:01AF DO
                                                                        ld
ld
sub
                                                                                       de, coinage+2
a, (de)
(hl)
                                                                         ret
ld
                                                                                       nz (hl), a
                                                                                       de, hl
a, (de)
90h; 'É'
                                                                         ex
ld
                                                                         ср
                                                                         ret
                                                                                       nc
                                                                                       a, (hl)
0000:01B0 86
                                                                         add
0000:01B1 27
0000:01B2 12
0000:01B3 11 00 04
                                                                        daa
ld
                                                                                       (de), a de, 400h
                                                                         ld
0000:01B6 CD 9F 30
0000:01B9 C9
0000:01B9
0000:01B9
                                                                         call
                                                                                       sub_0_309F
                                          ret; End of function sub_0_17B
0000:01B9
0000:01BA 00 37 00
0000:01BA
                                                                                                                                                                    ; DATA XREF: 0000:01C6-o
                                          inital_scores_and_high_score:.db 0, 37h, 0
                                                                                                                                                                    ; Initial score and high score on bootup
; DATA XREF: 0000:159D+o
0000:01BD AA AA AA
0000:01C0 50 76 00
0000:01C3
0000:01C3
                                         byte_0_1BD:
                                                                       .db 0AAh, 0AAh, 0AAh
.db 50h, 76h, 0
                                                                                                                                                                    ; DATA XREF: 0000:00CA o
                                          init machine settings:
0000:01C3
0000:01C3

0000:01C3 CD 74 08

0000:01C6 21 BA 01

0000:01C9 11 B2 60

0000:01CC 01 09 00

0000:01CF ED B0

0000:01D1 3E 01

0000:01D3 32 07 60
                                                                                       clear_visible_area_and_sprites
hl, inital_scores_and_high_score
                                                                        call
ld
                                                                                                                                                                    ; copy in ROM
; RAM location
; 9 bytes to copy
; copy scores to RAM
                                                                         ld
ld
                                                                                        de, pl_score
bc, 9
                                                                        ldir
ld
ld
                                                                                        (attract_mode_flag), a
                                                                                                                                                                    ; set attract mode flag
0000:01D6 32 29 62
0000:01D9 32 28 62
0000:01DC CD B8 06
0000:01DF CD 07 02
                                                                        ld
ld
call
                                                                                       (level), a
(lives_left), a
display_lives_and_level
                                                                                       read_dips_and_high_score_tbl
                                                                         call
ld
ld
ld
                                                                                       a, 1
(flipscreen), a
(nmi_sequencer), a
(level_type), a
                                                                                                                                                                   ; next sequence
                                                                         1d
                                                                         xor
ld
                                                                                       (main_sequencer), a display_1UP
                                                                                                                                                                    ; game screen sequencer
                                                                         call
ld
                                                                                       de.
                                                                                                304h
                                                                        call
ld
call
ld
                                                                                       sub_0_309F
de, 202h
sub_0_309F
0000:0200 11 00 02
0000:0203 CD 9F 30
0000:0206 C9
                                                                                        de
                                                                        call
                                                                                       sub_0_309F
 0000:0207
                                                         SUBROUTINE
 0000:0207
0000:0207
0000:0207
                                          ; CODE XREF: 0000:01DF<sup>†</sup>p
; read DIPSW
0000:0207 3A 80 7D
                                                                                       a, (dsw_audio_irq)
```

```
0000:020A 4F
                                                                                                                                                               ; store
                                                                                    c, a
hl, lives_per_game
0000:020B 21 20 60
                                                                      ld
0000:020E 21 20
0000:020E E6 03
0000:0210 C6 03
0000:0212 77
0000:0213 23
0000:0214 79
                                                                      and
add
ld
                                                                                                                                                               ; lives setting
; init no. of lives
; store no. of lives
                                                                                     a, 3
(hl), a
                                                                      inc
                                                                                    hl
                                                                      ld
                                                                                                                                                               ; DIPSW
0000:0214 79
0000:0215 OF
0000:0216 OF
                                                                      rrca
0000:0216 0F
0000:0217 B6 03
0000:0219 47
0000:021A 3E 07
0000:021E 3E 05
0000:0221
0000:0221
0000:0221 C6 05
0000:0221
0000:0221 C7
0000:0224 10 FB
0000:0226
                                                                      rrca
                                                                      and
ld
ld
                                                                                                                                                              ; bonus life setting
                                                                                    b, a
                                                                                                                                                               ; 7,000?
                                                                                                                                                              ; yes, skip
; 5,000?
                                                                                     z, loc_0_226
                                                                      jp
ld
                                        loc_0_221:
                                                                                                                                                               ; CODE XREF: read_dips_and_high_score_tbl+1D|j
                                                                      add
                                                                                    a. 5
                                                                      daa
                                                                                    loc_0_221
                                                                                                                                                               ; calculate 10/15/20K points
                                                                                                                                                               ; CODE XREF: read_dips_and_high_score_tbl+15<sup>†</sup> j
0000:0226
0000:0226 77
0000:0227 23
0000:0228 79
                                        loc_0_226:
                                                                      ld
inc
                                                                                     (hl), a
                                                                                                                                                               ; bonus_setting
                                                                                    hl
                                                                                    a, c
bc, 101h
de, 102h
70h; 'p
                                                                                                                                                               ; DIPSW
0000:0228 79
0000:0229 01 01 01
0000:022C 11 02 01
0000:022F E6 70
                                                                                                                                                               ; 1C P1
; 1C P2
; coinage setting
                                                                      ld
                                                                      ld
and
0000:022F E6 70
0000:0231 17
0000:0232 17
0000:0233 17
0000:0234 17
0000:0235 CA 47 02
                                                                      rla
rla
                                                                      rla
rla
                                                                                                                                                               ; coinage 0-7
; 1C1C
                                                                      jp
jp
inc
                                                                                    z, loc_0_247
                                                                                    c, loc_0_247
a
0000:0238 DA 41 02
0000:023B 3C
0000:023C 4F
0000:023D 5A
                                                                                                                                                               ; 2-5 coins
; no. credits
; C = credits
; D = coins
                                                                                    c, a
e, d
                                                                      ld
0000:023E C3 47 02
0000:0241
0000:0241
                                                                      jp
                                                                                     loc 0 247
                                                                                                                                                               ; CODE XREF: read_dips_and_high_score_tbl+31<sup>†</sup> j
0000:0241
                                         loc 0 241:
0000:0241 C6 02
0000:0241 47
0000:0244 57
                                                                      add
ld
ld
                                                                                                                                                               ; no. coins
; B = coins
                                                                                    d, a
a, a
e, a
                                                                                                                                                               ; D = coins
0000:0245 87
0000:0246 5F
0000:0247
                                                                      add
                                                                      ld
                                                                                                                                                               ; E = coins x2
                                                                                                                                                              ; CODE XREF: read_dips_and_high_score_tbl+2Efj
; read_dips_and_high_score_tbl+37fj
0000:0247
                                        loc 0 247:
0000:0247

0000:0247

0000:0247

0000:0248

23

0000:0248

23

0000:024A

23

0000:024C

23

0000:024D

23
                                                                                     (hl), d
                                                                                    hl
(hl), e
                                                                      inc
ld
                                                                                    hl
(hl), b
                                                                      ld
                                                                       inc
                                                                                    hl
                                                                                     (hl), c
0000:024D 71
                                                                      1d
0000:024D 71
0000:024E 23
0000:024F 3A 80 7D
0000:0252 07
0000:0253 3E 01
0000:0255 DA 59 02
0000:0258 3D
                                                                      inc
ld
                                                                                    a, (dsw_audio_irq)
                                                                                                                                                              ; read DIPSW
; upright?
                                                                      rlca
                                                                                    a, 1
c, loc_0_259
a
                                                                      ld
                                                                      jp
dec
0000:0259
                                        loc 0 259:
                                                                                                                                                               ; CODE XREF: read_dips_and_high_score_tbl+4E^j
0000:0259 77
0000:025A 21 65 35
0000:025D 11 00 61
0000:0260 01 AA 00
0000:0263 ED BO
0000:0265 C9
                                                                                    (hl), a
hl, high_score_tbl
de, high_score_tbl_ram
bc, OAAh; '¬'
                                                                      ld
ld
                                                                                                                                                               ; store cocktail/upright
                                                                                                                                                               ; destination in RAM
; length of table
; copy to ram
                                                                      ld
                                                                      14
                                                                      ldir
                                                                      ret
0000:0265
                                         ; End of function read_dips_and_high_score_tbl
0000:0265
0000:0266
0000:0266
0000:0266
0000:0266 06 10
0000:0268 21 00 60
0000:026B AF
                                                                                                                                                               ; CODE XREF: 0000:00051 i
                                         TNTT:
                                                                      ld
ld
                                                                                    b, <mark>16</mark>
hl, RAM_start
                                                                                                                                                              ; start of RAM ; zero byte
                                                                      xor
0000:026C
                                         loc_0_26C:
                                                                                                                                                               ; CODE XREF: 0000:0272/j
                                                                      ld
                                                                                    c, a
0000:026D
0000:026D
0000:026D 77
0000:026E 23
                                         loc_0_26D:
                                                                                                                                                               ; CODE XREF: 0000:0270 j
                                                                      ld
                                                                                      (hl), a
                                                                                                                                                               ; zero memory
; next location
                                                                      inc
dec
                                                                                    hl
0000:026F 23

0000:026F 0D

0000:0277 20 FB

0000:0272 10 F8

0000:0274 06 04

0000:0276 21 00 70

0000:0279

0000:0279 4F
                                                                      jr
djnz
                                                                                     nz, loc_0_26D
loc_0_26C
                                                                                                                                                               ; clear 256 bytes
; clear 4K bytes
                                                                      ld
ld
                                                                                    b, 4
hl, SPRAM_start
                                                                                                                                                               ; start of sprite RAM
                                         loc_0_279:
                                                                                                                                                               ; CODE XREF: 0000:027F|j
                                                                      ld
                                                                                    c, a
0000:027A
0000:027A
0000:027A
0000:027A
77
0000:027B 23
                                         loc_0_27A:
                                                                                                                                                               ; CODE XREF: 0000:027D-j
                                                                      ld
                                                                                     (hl), a
                                                                                                                                                               ; zero memory
; next location
                                                                      inc
                                                                                    hl
0000:027C 0D
0000:027D 20 FB
0000:027F 10 F8
0000:0281 06 04
                                                                      dec
                                                                                     nz, loc_0
loc_0_279
                                                                                                                                                               ; clear 256 bytes
; clear 1K bytes
                                                                                                   _0_27A
                                                                      djnz
                                                                      ld
                                                                                    b, 4
0000:0281 00 04
0000:0283 3E 10
0000:0285 21 00 74
0000:0288
                                                                                          10h
                                                                      1d
                                                                                     hl, VRAM_start
                                                                                                                                                              ; CODE XREF: 0000:028F-i
0000:0288
                                         loc_0_288:
0000:0288 0E 00
0000:028A
0000:028A
                                                                                    c, 0
                                                                      ld
                                                                                                                                                               ; CODE XREF: 0000:028D-j
                                        loc 0 28A:
0000:028A 77
                                                                      ld
                                                                                     (hl), a
                                                                                                                                                               ; clear
0000:028B 23
0000:028C 0D
                                                                      inc
dec
                                                                                    hl
                                                                                                                                                               ; next location
0000:028D 20 FB
                                                                                    nz, loc_0_28A
                                                                                                                                                               ; clear 256 bytes
                                                                      jr
0000:028F 10 F7
0000:0291 21 C0 60
0000:0294 06 40
                                                                      djnz
ld
ld
                                                                                    loc_0_288
hl, fg_vector_fn_params
b, 64
                                                                                                                                                               ; clear 1K bytes
                                                                                                                                                              ; fill 64 bytes ; fill byte
                                                                                    a. OFFh
0000:0296 3E FE
                                                                      1d
0000:0298
```

```
; CODE XREF: 0000:029A|j; set to $FF; next location; set 64 bytes
0000:0298
                                              loc_0_298:
0000:0298 77
0000:0299 10 FC
0000:0295 3E CO
0000:029C 3E CO
0000:029A 32 B0 60
0000:02AA 32 B1 60
0000:02AA 32 83 7D
0000:02AB 32 86 7D
0000:02AB 32 87 7D
0000:02AB 32 87 7D
0000:02AB 32 82 7D
0000:0298 77
                                                                                1d
                                                                                                 (hl), a
                                                                                                hl
loc_0_298
                                                                                djnz
ld
                                                                                                 a, 0C0h; 'L'
(unk_0_60B0), a
(unk_0_60B1), a
                                                                                ld
ld
xor
ld
                                                                                                 (spritebank), a
                                                                                                (palette_bank), a (palette_bank+1), a
                                                                                ld
                                                                                                                                                                                      ; b0=0
                                                                                ld
                                                                                                                                                                                      ; b1=0
                                                                                inc
ld
                                                                                                 a (flipscreen), a
                                                                                ld
                                                                                                sp, 6C00h
stop_sound
                                                                                call
ld
                                                                                                 (nmi mask), a
                                                                                                                                                                                     ; enable interrupts
                                                                                ld
0000:02BD
0000:02BD
0000:02BD 26 60
                                                                                                                                                                                     ; CODE XREF: 0000:02D8|j; 0000:02E1|j; DATA XREF: ...
                                              main_loop:
0000:02BD
0000:02BD
0000:02BF 3A B1 60
0000:02C2 6F
                                                                                                h, 60h; () a, (unk_0_60B1) 1, a
                                                                                                                                                                                      ; MSB of parameter table in RAM
                                                                                ld
ld
                                                                                                a, (hl)
0000:02C3 7E
0000:02C3 7E
0000:02C4 87
0000:02C5 30 1C
0000:02C7 CD 15 03
0000:02CA CD 50 03
0000:02CD 21 19 60
0000:02D0 34
0000:02D1 21 83 63
                                                                                                a, (fil)
a, a
nc, loc_0_2E3
flash_lUP_or_2UP
check_and_award_bonus
hl, random_no+1
(hl)
hl, unk_0_6383
a, (gen_purpose_timer)
(hl)
                                                                                add
jr
call
                                                                                call
ld
                                                                                                                                                                                      ; random LSB; INC
                                                                                inc
ld
0000:02D4 3A 1A 60
0000:02D7 BE
0000:02D8 28 E3
0000:02DA 77
                                                                                1d
                                                                                cp
jr
ld
                                                                                                                                                                                     ; same?
; yes, loop
; generate LSB from timer
                                                                                                z, main_loop
(h1), a
sub_0_37F
sub_0_3A2
0000:02DA 77
0000:02DB CD 7F 03
0000:02DE CD A2 03
0000:02E1 18 DA
                                                                                call
call
                                                                                                                                                                                      ; do something with a sprite
                                                                                                main_loop
                                                                                jr
0000:02E3
0000:02E3
0000:02E3
0000:02E3 E6 1F
                                                                                                                                                                                      ; CODE XREF: 0000:02C5<sup>†</sup>j
                                              loc_0_2E3:
                                                                                                1Fh
                                                                                and
0000:02E5 5F
0000:02E6 16 00
0000:02E8 36 FF
                                                                                                e, a
d, 0
(hl), OFFh
                                                                                ld
                                                                                ld
ld
0000:02EA 2C
                                                                                inc
0000:02EB 4E
0000:02EC 36 FF
0000:02EE 2C
0000:02EF 7D
                                                                                                       (h1)
                                                                                14
                                                                                ld
                                                                                                 (hl), OFFh
                                                                                                a, 1

0C0h; 'L'

nc, loc_0_2F6
                                                                                ld
0000:02F0 FE C0
0000:02F2 30 02
0000:02F4 3E C0
                                                                                cp
jr
ld
0000:02F6
0000:02F6
0000:02F6
0000:02F6 32 B1 60
0000:02F9 79
                                              loc_0_2F6:
                                                                                                                                                                                     ; CODE XREF: 0000:02F21j
                                                                                ld
                                                                                                 (unk_0_60B1), a
                                                                                                                                                                                     ; parameter for vector function call
                                                                                ld
0000:02FA 21 BD 02
0000:02FD E5
0000:02FE 21 07 03
0000:0301 19
                                                                                ld
                                                                                                hl, main_loop
                                                                                                hl hl, foreground_vector_table
                                                                                                                                                                                     ; $02BD is the return address; jump table; entry index
                                                                                push
1d
                                                                                add
1d
                                                                                                e, (hl)
hl
d, (hl)
0000:0302 5E
0000:0302 5E
0000:0303 23
0000:0304 56
0000:0305 EB
0000:0306 E9
0000:0307 1C 05
0000:0307 1C 05
                                                                                inc
ld
                                                                                                                                                                                     ; get entry
                                                                                ex
                                                                                                de
                                                                                                        hl
                                                                                jр
                                                                                                 (h1)
                                                                                                                                                                                      ; jump
                                              foreground_vector_table:.dw add_bonus_and_update_high_score
                                                                                                                                                                                     ; DATA XREF: 0000:02FE↑o
                                                                                                                                                                                      ; jump table
                                                                                .dw zero_score_or_high_score
.dw display_score_or_high_score
.dw print_message_A
.dw display_credits_if_attract_mode
.dw update_bonus_timer
.dw display_lives_and_level
0000:0309 9B 05
0000:030B C6 05
0000:030D E9 05
0000:030F 11 06
0000:0311 2A 06
0000:0313 B8 06
0000:0315
0000:0315
                                                                              SUBROUTINE
0000:0315
0000:0315 3A 1A 60
0000:0318 47
0000:0319 E6 0F
                                                                                                                                                                                      ; CODE XREF: 0000:02C71p
                                              flash_1UP_or_2UP:
                                                                                                a, (gen_purpose_timer)
b, a
0Fh
                                                                                1d
                                                                                ld
                                                                                and
0000:031B C0
                                                                                ret
                                                                                                nz
0000:031B CO
0000:031C CF
0000:031D 3A 0D 60
0000:0320 CD 47 03
0000:0323 11 EO FF
0000:0326 CB 60
0000:0328 28 14
0000:032A 3E 10
                                                                                                a, (current_player_D)
                                                                                rst
ld
                                                                                                                                                                                      ; return if attract mode
                                                                                                get_1UP_or_2UP_screen_location
de, OFFEOh
4, b
z, loc_0_33E
                                                                                call
ld
                                                                                                                                                                                      ; column address offset
; unhide 1UP/2UP?
                                                                                bit
jr
ld
                                                                                                                                                                                        yes, skip
                                                                                                        10h
                                                                                                                                                                                     ; " "
; wipe "1" or "2"
; next column
; wipe "U"
; next column
                                                                                                (hl), a
hl, de
(hl), a
hl, de
0000:032C 77
0000:032D 19
0000:032E 77
0000:032F 19
                                                                                1d
                                                                                add
ld
                                                                                add
0000:0330 77
0000:0331 3A 0F 60
0000:0334 A7
                                                                                ld
ld
                                                                                                 (h1)
                                                                                                                                                                                      ; wipe "P"
                                                                                                 a, (two_players)
                                                                                                                                                                                      ; 1 player?
0000:0334 A7
0000:0335 C8
0000:0336 3A 0D 60
0000:0339 EE 01
0000:033B CD 47 03
0000:033E 0000:033E 0000:033F 77
0000:0341 36 25
0000:0341 36 25
0000:0344 36 20
0000:0344 36 20
                                                                                and
                                                                                ret
                                                                                                                                                                                      ; yes, return
                                                                                                 a, (current_player_D)
1
                                                                                1d
                                                                                                get_1UP_or_2UP_screen_location
                                                                                call
                                              loc_0_33E:
                                                                                                                                                                                      ; CODE XREF: flash_1UP_or_2UP+13 i
                                                                                                a (h1), a h1, de (h1), 25h; '%' h1, de (h1), 20h; ''
                                                                                                                                                                                     ; "1" or "2"
                                                                                1d
                                                                                                                                                                                     ; next column
; "U"
; next column
; "P"
                                                                                add
                                                                                ld
add
                                                                                ld
0000:0346 C9
0000:0346
0000:0346
                                              ret; End of function flash_1UP_or_2UP
0000:0347
0000:0347
                                                                  SUBROUTINE
```

```
0000:0347
                                                                                                                                                       ; CODE XREF: flash_1UP_or_2UP+B\rangle p
; flash_1UP_or_2UP+26\rangle p
; ptr "1UP" screen loaction
; player 1?
; yes, return
; ptr "2UP" screen location
0000:0347
0000:0347
0000:0347 21 40 77
0000:0347
                                      get_1UP_or_2UP_screen_location:
                                                                                 hl, VRAM_start+340h
0000:034A A7
                                                                   and
0000:034B C8
0000:034C 21 E0 74
0000:034F C9
                                                                   ret
                                                                                 hl, VRAM_start+0E0h
                                                                   ret
                                       ; End of function get 1UP or 2UP screen location
0000:034F
0000:034F
0000:034P
0000:0350
0000:0350
                                                  SUBROUTINE
0000:0350
0000:0350
0000:0350
0000:0350 3A 2D 62
                                       check_and_award_bonus:
                                                                                                                                                       ; CODE XREF: 0000:02CA1p
                                                                                 a. (awarded bonus life)
                                                                   1d
0000:0350 3A 2D 62
0000:0353 A7
0000:0354 CD
0000:0355 21 B3 60
0000:0358 A7
0000:0358 A7
0000:0356 28 03
0000:035E 21 B6 60
                                                                                                                                                       ; already got bonus life?
; yes, return
                                                                   and
                                                                   ret
ld
                                                                                 hl, pl_score+1
                                                                   1d
                                                                                 a, (current_player_D)
                                                                   and
jr
ld
                                                                                                                                                       ; player 1?
; yes, skip
                                                                                     loc_0_361
                                                                                 hl, p2_score+1
0000:0361
0000:0361
0000:0361 7E
                                                                                                                                                       ; CODE XREF: check_and_award_bonus+C<sup>†</sup>j
; get hundreds from score
                                       loc_0_361:
                                                                                 a, (hl)
0F0h; '-'
                                                                   ld
0000:0361 7E
0000:0362 E6 F0
0000:0364 47
0000:0365 23
0000:0366 7E
0000:0367 E6 0F
                                                                   and
ld
                                                                                                                                                          only thousands
                                                                                 b, a
hl
                                                                                                                                                          save
                                                                   inc
ld
                                                                                                                                                          next score byte
get tens of thousands
only tens of thousands
                                                                                 a, (hl)
OFh
                                                                   and
                                                                   or
rrca
0000:0369 B0
                                                                                 h
                                                                                                                                                        ; B = thousands (and tens of)
0000:036A OF
0000:036B OF
                                                                   rrca
0000:036C 0F
0000:036D 0F
0000:036E 21 21 60
0000:0371 BE
0000:0373 3E 01
0000:0373 32 2D 62
0000:0378 21 28 62
0000:0378 34
0000:0376 C3 B8 06
0000:037C C0000:037F
0000:036C
                                                                   rrca
                                                                   rrca
ld
                                                                                                                                                       ; swap nibbles
                                                                                 hl, bonus_setting (hl)
                                                                                                                                                       ; reached bonus score?
                                                                   ср
                                                                   ret
                                                                                                                                                        ; no, return
                                                                   ld
ld
                                                                                  (awarded_bonus_life), a
                                                                                                                                                       ; flag that we've got the bonus
                                                                   ld
                                                                                 hl, lives_left (hl)
                                                                                                                                                       ; extra life
                                                                   inc
                                       jp display_lives_a
; End of function check_and_award_bonus
                                                                                 display_lives_and_level
0000:037F
0000:037F
0000:037F
                                                               SUBROUTINE
0000:037F
0000:037F
0000:037F 21 84 63
0000:0382 7E
0000:0383 34
0000:0384 A7
0000:0385 C0
0000:0386 21 81 63
                                       sub_0_37F:
                                                                                                                                                       ; CODE XREF: 0000:02DB1p
                                                                                 hl, unk_0_6384
                                                                   ld
                                                                                 a, (hl) (hl)
                                                                   inc
and
                                                                   ret
ld
                                                                                 hl, unk_0_6381
0000:0389 7E
0000:038A 47
0000:038B 34
0000:038C E6 07
                                                                   ld
ld
inc
                                                                                 a, (hl)
b, a
(hl)
                                                                   and
0000:038E C0
                                                                   ret
                                                                                 nz
0000:038F 78
0000:0390 0F
                                                                   ld
rrca
                                                                                 a, b
0000:0391 OF
                                                                   rrca
0000:0392 OF
0000:0393 47
0000:0394 3A 29 62
                                                                   ld
ld
                                                                                b, a a, (level)
0000:0397 80
                                                                   add
                                                                                 a, b
5
0000:0398 FE 05
0000:039A 38 02
0000:039C 3E 05
                                                                   cp
jr
ld
                                                                                 c, loc_0_39E
0000:039E
0000:039E
0000:039E 32 80 63
0000:03A1 C9
                                       loc_0_39E:
                                                                                                                                                       ; CODE XREF: sub_0_37F+1B<sup>†</sup>j
                                                                   ld
                                                                                 (unk_0_6380), a
                                                                   ret
0000:03A1
0000:03A1
0000:03A2
0000:03A2
                                       ; End of function sub_0_37F
                                                                 SUBROUTINE
0000:03A2
0000:03A2
0000:03A2
                                      sub_0_3A2:
                                                                                                                                                       ; CODE XREF: 0000:02DETp
0000:03A2
0000:03A2 3E 03
0000:03A4 F7
0000:03A5 D7
0000:03A5 07
0000:03A6 3A 50 63
0000:03A9 0F
0000:03AB 21 B8 62
0000:03AB 35
                                                                                 a, 3
30h
10h
                                                                   ld
                                                                                     3
                                                                                                                                                       ; return if level bit not set
; return if mario not alive
                                                                                 a, (unk_0_6350)
                                                                   ld
                                                                   rrca
                                                                   ret
ld
                                                                                 hl, unk_0_62B8
(hl)
                                                                   dec
0000:03AF C0
0000:03BO 36 04
0000:03B2 3A B9 62
0000:03B5 0F
                                                                   ret
ld
ld
                                                                                 (hl), 4
                                                                                 a, (unk_0_62B9)
                                                                   rrca
0000:03B6 D0
0000:03B7 21 29 6A
0000:03BA 06 40
                                                                   ret
ld
ld
                                                                                 hl, soft_sprite_ram+129h
                                                                                                                                                     ; sprite #173, flipy & code
                                                                                 b, 40h; '@' ix, unk_0_66A0
0000:03BC DD 21 A0 66
0000:03C0 0F
                                                                   1d
                                                                   rrca
jp
ld
0000:03C1 D2 E4 03
0000:03C4 DD 36 09 02
0000:03C8 DD 36 0A 02
                                                                                 nc, loc_0_3E4
                                                                                 (ix+9), 2
(ix+0Ah), 2
                                                                   ld
0000:03CE CD F2 03
0000:03D1 21 BA 62
0000:03D4 35
                                                                   call
ld
                                                                                 sub 0 3F2
                                                                                 hl,
(hl)
                                                                                        unk 0 62BA
0000:03D4 35
0000:03D5 C0
                                                                   dec
0000:03D6 3E 01
0000:03D8 32 B9 62
0000:03DB 32 A0 63
0000:03DE
                                                                   ld
                                                                                 (unk_0_62B9), a
(unk_0_63A0), a
                                                                   14
0000:03DE
                                      loc 0 3DE:
                                                                                                                                                       ; CODE XREF: sub 0 3A2+4D-1
0000:03DE 3E 10
                                                                  ld
                                                                                 a, 10h
```

```
0000:03E0 32 BA 62
                                                                           (unk_0_62BA), a
                                                               ld
0000:03E3 C9
0000:03E3
0000:03E4
0000:03E4
                                    loc_0_3E4:
                                                                                                                                              ; CODE XREF: sub_0_3A2+1F^j
0000:03E4 DD 36 09 02
0000:03E8 DD 36 0A 00
0000:03EC CD F2 03
0000:03EF C3 DE 03
                                                                           (ix+9), 2
(ix+0Ah),
                                                               ld
                                                                           sub_0_3F2
                                                               14
                                                               call
                                                                            loc_0_3DE
                                                               qį
                                    ; End of function sub_0_3A2
0000:03EF
0000:03EF
0000:03EF
0000:03F2
0000:03F2
                                                            SUBROUTINE
0000:03F2
0000:03F2
0000:03F2
0000:03F2 70
                                                                                                                                              ; CODE XREF: sub_0_3A2+2C<sup>†</sup>p
; sub_0_3A2+4A<sup>†</sup>p
                                    sub_0_3F2:
0000:03F2 70
0000:03F2 70
0000:03F3 3A 19 60
0000:03F6 0F
0000:03F7 D8
                                                               1d
                                                                           (hl), b
                                                                           a, (random_no+1)
                                                               ld
                                                               rrca
                                                               ret
0000:03F7 D8
0000:03F8 04
0000:03F9 70
0000:03FA C9
                                                               ld
                                                                            (hl), b
                                                               ret
                                    ; End of function sub 0 3F2
0000:03FA
0000:03FA
0000:03FB
                                                             SUBROUTINE 
0000:03FB
 0000:03FB
0000:03FB
0000:03FB
0000:03FB
0000:03FB 3A 27 62
                                    animate_kong_and_pauline:
    ld    a
                                                                                                                                              ; CODE XREF: 0000:1980 p
                                                                            a, (level_type)
0000:03FE FE 02
0000:0400 C2 13 04
0000:0403 21 08 69
0000:0406 3A A3 63
                                                              cp
jp
ld
                                                                                                                                              ; cement pies?
                                                                            nz, loc_0_413
                                                                                                                                              ; no, skip
; sprite #2 y coord
                                                                           nz, ioc_U_413
hl, soft_sprite_ram+8
a, (unk_0_63A3)
                                                                                                                                                get top conveyer speed/direction
                                                               ld
0000:0400 3A A3 03
0000:0409 4F
0000:040A FF
0000:040B 3A 10 69
                                                                                                                                              ; kong location adjustment
; add +/-1 to y for 10 sprites
; sprite #4, y coord
                                                               ld
                                                              rst
ld
                                                                           a, (soft_sprite_ram+10h)
0000:040E D6 3B
0000:0410 32 B7 63
0000:0413
0000:0413
0000:0413 3A 91 63
0000:0416 A7
0000:0417 C2 66 04
0000:041A 3A 1A 60
0000:040E D6 3B
                                                               sub
                                                                           (unk_0_63B7), a
                                                               1d
                                    loc 0 413:
                                                                                                                                             ; CODE XREF: animate_kong_and_pauline+5^j
                                                               ld
                                                                           a, (kong_thrash_flag)
                                                               and
jp
ld
                                                                                                                                              ; thrashing arms?
; yes, continue
                                                                           nz, loc_0_426
                                                                           a, (gen_purpose_timer)
                                                               and
                                                                                                                                              ; expired?
0000:041D A7
0000:041E C2 86 04
0000:0421 3E 01
0000:0423 32 91 63
                                                               jp
ld
                                                                           nz, animate_pauline
                                                                                                                                             ; no, animate Pauline
; flag thrashing
                                                                           (kong_thrash_flag), a
                                                               ld
0000:0426
0000:0426
0000:0426 21 90 63
                                    loc_0_426:
                                                                                                                                              ; CODE XREF: animate_kong_and_pauline+1C↑j
                                                               ld
                                                                           hl, kong_thrash_tmr
0000:0426 21 90 63

0000:0429 34

0000:042A 7E

0000:042B FE 80

0000:042D CA 64 04

0000:0430 3A 93 63

0000:0433 A7

0000:0434 C2 86 04

0000:0437 7E
                                                                           (h1)
                                                                                                                                             ; inc
; get timer
; finished thrashing?
                                                               inc
ld
                                                                           a, (h1)
128
                                                               ср
                                                               jp
ld
and
jp
ld
                                                                            z, draw_kong_mouth_closed
                                                                                                                                              ; yes, continue
                                                                           a, (barrel_deployment)
                                                                                                                                             ; deployment in progress?
; yes, skip (no thrashing)
; get timer
                                                                           nz, animate_pauline
                                                                           a, (hl)
b, a
0000:0437 7E
0000:0438 47
                                                               ld
                                                               and
jp
ld
0000:0439 E6 1F
0000:043B C2 86 04
                                                                                                                                             ; time to thrash arms?
; no, skip (animate Pauline)
                                                                            nz, animate_pauline
0000:043E 21 CF 39
0000:0441 CB 68
0000:0443 20 03
0000:0445 21 F7 39
                                                                           hl, dk_thrash_right_spr
                                                                           5, b
nz, do_kong_thrash
hl, dk_thrash_left_spr
                                                               hit
                                                                                                                                             ; left/right depending on timer
0000:0448
0000:0448
                                    do_kong_thrash:
                                                                                                                                             ; CODE XREF: animate_kong_and_pauline+48<sup>†</sup>j
 0000:0448 CD 4E 00
                                                               call
                                                                           copy_sprites_2_11_data
0000:044B 3E 03
0000:044D 32 82 60
                                                                                                                                              ; tmr=3
                                                               ld
                                                                           (digital_snd_tmr_thump), a
                                                               ld
0000:0450
0000:0450
0000:0450
0000:0450 3A 27 62
                                    loc_0_450:
                                                                                                                                              ; CODE XREF: animate_kong_and_pauline+7A|j
                                                               1d
                                                                           a, (level type)
0000:0453 0F
0000:0454 D2 78 04
0000:0457 0F
0000:0458 DA 86 04
                                                               rrca
                                                                                                                                              ; level 2/4?
                                                                                                                                              ; yes, skip
; level 3?
                                                               jp
rrca
                                                                           nc, loc_0_478
                                                                              . animate pauline
                                                               jp
ld
                                                                                                                                              ; ves. skip
0000:0458 21 0B 69
0000:045E 0E FC
0000:0460 FF
                                                                           hl, soft_sprite_ram+0Bh
c, 0FCh; '3'
38h
                                                                                                                                              ; sprite #2, x coord
                                                               ld
                                                                                                                                              ; subtract 4 from x for 10 sprites
                                                               rst
0000:0461 C3 86 04
                                                                           animate_pauline
                                                               jp
0000:0464
0000:0464
                                                                                                                                              ; CODE XREF: animate kong and pauline+32<sup>†</sup> j
                                    draw kong mouth closed:
0000:0464
0000:0464 AF
0000:0465
0000:0466
0000:0467
                                                               ld
                                                                            (hl), a
                                                                                                                                              ; zero kong_animation_tmr
                                                                           hl (hl), a
                                                               inc
ld
UUUU:0467 77
0000:0468 3A 93 63
0000:046B A7
0000:046C C2 86 04
0000:046F L5 C3 80
0000:0472 CD 4E 00
0000:0478 C3 50 04
0000:0478
                                                                            a, (barrel_deployment)
                                                               1d
                                                               and
                                                                                                                                              ; deployment in progess?
                                                                           nz, animate_pauline
hl, kong_normal_spr
                                                                                                                                              ; no, continue
                                                               jp
ld
                                                                           copy_sprites_2_11_data
loc_0_450
                                                               call
                                                               jp
0000:0478
                                                                                                                                             ; CODE XREF: animate_kong_and_pauline+59<sup>†</sup>j
; ptr sprite #2 (x coord)
0000:0478
                                    loc_0_478:
0000:0478
0000:0478 21 08 69
0000:047B 0E 44
0000:047D 0F
                                                              ld
ld
                                                                           hl, soft_sprite_ram+8
c, 44h; 'D'
                                                               rrca
                                                                                                                                              ; level 2?
0000:047E D2 85 04
0000:0481 3A B7 63
0000:0484 4F
                                                                           nc, loc_0_485
a, (unk_0_63B7)
                                                               jp
ld
                                                              ld
0000:0485
0000:0485
0000:0485 FF
                                    loc_0_485:
                                                                                                                                              ; CODE XREF: animate_kong_and_pauline+83<sup>†</sup>j; add C to y coord of 10 sprites
                                                              rst
0000:0486
                                                                                                                                              ; CODE XREF: animate_kong_and_pauline+23<sup>†</sup>j
; animate_kong_and_pauline+39<sup>†</sup>j ...
 0000:0486
                                    animate_pauline:
0000:0486 3A 90 63
0000:0486
                                                                           a, (kong_thrash_tmr)
                                                               ld
0000:0489 4F
                                                               1d
                                                                           de, 20h ; ' '
0000:048A 11 20 00
```

```
0000:048D 3A 27 62
                                                                 ld
                                                                              a, (level_type)
                                                                 cp
jp
ld
and
                                                                              z, display_help_rivets_level a, c
0000:0490 FE 04
0000:0492 CA BE 04
0000:0495 79
0000:0496 A7
0000:0497 CA A1 04
0000:049A 3E EF
0000:049C CB 71
0000:049E C2 A3 04
0000:0490 FE 04
                                                                                                                                                    ; rivets?
                                                                                                                                                      yes, skip
kong_thrash_tmr
finished?
                                                                              z, wipe_help
                                                                 jp
ld
                                                                                                                                                      yes, skip
                                                                                                                                                   ; time to display help?
; yes, skip
                                                                              nz, display_or_wipe_help
                                                                 jр
0000:04A1
0000:04A1
0000:04A1 3E 10
0000:04A3
                                      wipe_help:
                                                                                                                                                   ; CODE XREF: animate_kong_and_pauline+9C^jj
                                                                                                                                                   ; blank tiles
                                                                 ld
0000:04A3
0000:04A3 21 C4 75
0000:04A6 CD 14 05
0000:04A9 3A 05 69
                                                                                                                                                  ; CODE XREF: animate_kong_and_pauline+A3<sup>†</sup>j
; screen position for HELP!
; display/wipe HELP!
; sprite #1, flipy & code
                                      display_or_wipe_help:
                                                                              hl, VRAM_start+1C4h
                                                                 call
                                                                              display_3_tiles_HL
a, (soft_sprite_ram+5)
                                                                 ld
0000:04AC
0000:04AC
0000:04AC 32 05 69
                                                                                                                                                  ; CODE XREF: animate_kong_and_pauline+F3|;
; animate_kong_and_pauline+10B|;
; sprite #1, flipy & code
                                      make_pauline_run:
0000:04AC
                                                                 ld
                                                                              (soft sprite ram+5), a
0000:04AF CB 71
0000:04BI C8
0000:04B2 47
0000:04B3 79
                                                                 bit
                                                                 ld
                                                                              b, a
                                                                 ld
0000:04B3 79
0000:04B4 E6 07
0000:04B6 C0
0000:04B7 78
                                                                 and
ret
                                                                              nz
                                                                                                                                                   ; sprite #1, flipy & code
; toggle sprites 0x11/0x12 pauline running
; sprite #1, flipy & code
                                                                              a, b
                                                                 1d
0000:04B8 EE 03
0000:04BA 32 05 69
0000:04BD C9
0000:04BE
                                                                 xor
                                                                 ld
                                                                              (soft_sprite_ram+5), a
                                                                 ret
0000:04BE
0000:04BE
0000:04BE 3E 10
0000:04E0 21 23 76
0000:04C0 21 23 76
0000:04C6 21 83 75
0000:04C6 21 83 75
0000:04C9 CD 14 05
                                      display_help_rivets_level:
                                                                                                                                                   ; CODE XREF: animate_kong_and_pauline+97<sup>†</sup>j
                                                                              a, 10h
hl, VRAM_start+223h
                                                                                                                                                   ; blank tiles
                                                                ld
ld
                                                                                                                                                   ; screen pos
                                                                              display_3_tiles_HL
hl, VRAM_start+183h
display_3_tiles_HL
                                                                 call
                                                                 ld
call
                                                                             a, (mario_y_coord)
a, (mario_y_coord)
80h; 'C'
- display_help_r
                                                                 bit
0000:04CC CB 71
0000:04CE CA 09 05
0000:04D1 3A 03 62
0000:04D4 FE 80
0000:04D6 D2 F1 04
0000:04D9 3E DF
0000:04DB 21 23 76
0000:04DE CD 14 05
                                                                 jp
ld
                                                                                                                                                   ; mario left/right side of screen?
                                                                 ср
                                                                              nc, display_help_right
a, ODFh;
hl, VRAM_start+223h
                                                                 jp
ld
ld
                                                                                                                                                   ; right, skip
; "HELP!" to the left
; screen pos
; display "HELP!"
                                                                 call
                                                                              display_3_tiles_HL
0000:04E1
                                                                                                                                                   ; CODE XREF: animate_kong_and_pauline+116|j
; sprite #0, flipy & code
; flipy
0000:04E1
0000:04E1 3A 01 69
                                      display_pauline_left:
                                                                              a, (soft_sprite_ram+1)
80h ; 'C'
                                                                 ld
0000:04E4 F6 80
0000:04E6 32 01 69
0000:04E9 3A 05 69
0000:04EC F6 80
                                                                 or
                                                                               (soft_sprite_ram+1), a
                                                                                                                                                   ; save
; sprite #1, flipy & code
; flipy
                                                                 ld
                                                                              a, (soft_sprite_ram+5)
80h; 'C'
                                                                 ld
                                                                 or
0000:04EE C3 AC 04
                                                                              make pauline run
                                                                 jр
0000:04F1
0000:04F1
0000:04F1
                                                                                                                                                   ; CODE XREF: animate_kong_and_pauline+DB|j
                                      display_help_right:
0000:04F1 3E EF
0000:04F3 21 83 75
0000:04F6 CD 14 05
0000:04F9
                                                                               a, 0EFh ; '''
                                                                                                                                                   ; "HELP!" to the right
; screen pos
; display "HELP!"
                                                                 1d
                                                                              hl, VRAM_start+183h
display_3_tiles_HL
                                                                 call
                                                                                                                                                   ; CODE XREF: animate_kong_and_pauline+113|j
; sprite #0, flipy & code
; not flipped
0000:04F9
                                      display_pauline_right:
0000:04F9 3A 01 69
0000:04FC E6 7F
0000:04FE 32 01 69
0000:0501 3A 05 69
0000:0504 E6 7F
0000:0506 C3 AC 04
                                                                              a, (soft_sprite_ram+1)
7Fh ; ' '
                                                                 ld
and
                                                                               (soft_sprite_ram+1),
                                                                 1d
                                                                               a, (soft_sprite_ram+5)
7Fh; ''
                                                                                                                                                   ; save
                                                                                                                                                   ; sprite #1, flipy & code
; not flipped
                                                                 14
                                                                              make_pauline_run
                                                                 jр
0000:0509
0000:0509
0000:0509
0000:0509 3A 03 62
                                      loc_0_509:
                                                                                                                                                   ; CODE XREF: animate_kong_and_pauline+D3<sup>†</sup>j
                                                                 ld
                                                                              a, (mario_y_coord)
                                                                              80h; 'Ç'
nc, display_pauline_right
0000:050C FE 80
0000:050E D2 F9 04
0000:0511 C3 E1 04
0000:0511
                                                                 cp
jp
                                                                              display_pauline_left
                                                                 jр
                                      ; End of function animate kong and pauline
0000:0511
0000:0514
0000:0514
0000:0514
                                                  SUBROUTINE
0000:0514
0000:0514
0000:0514
0000:0514 06 03
0000:0514
                                      display_3_tiles_HL:
                                                                                                                                                      CODE XREF: animate_kong_and_pauline+AB<sup>↑</sup>p
                                                                                                                                                   ; animate_kong_and_pauline+C8\(\bar{p}\) ...
                                                                ld
                                                                              b. 3
                                                                                                                                                   ; 3 tiles
0000:0514
0000:0516
0000:0516
0000:0517
                                                                                                                                                    ; CODE XREF: display_3_tiles_HL+5|j
                                      loc_0_516:
                 77
19
                                                                              (hl),
hl, de
                                                                                                                                                   ; store tile
; next row/column
; prev tile
; loop for 3 tiles
                                                                 ld
                                                                 add
0000:0518 3D
0000:0519 10 FB
0000:051B C9
                                                                 djnz
                                                                              loc 0 516
                                                                 ret
0000:051B
                                      ; End of function display_3_tiles_HL
0000:051B
0000:051B
0000:051C
                                                             SUBROUTINE
0000:051C
0000:051C
0000:051C
                                     add_bonus_and_update_high_score:
                                                                                                                                                      CODE XREF: 0000:0698 p
0000:051C 4F
                                                                                                                                                   ; 0000:06A5|j
; DATA XREF:
0000:051C
0000:051C
0000:051D CF
                                                                                                                                                   ; return if attract mode
                                                                 rst
0000:051E CD 5F 05
                                                                 call
                                                                              current_player_score_DE
0000:0521 79
0000:0522 81
                                                                 ld
add
                                                                              a, c
0000:0523 81
                                                                 add
                                                                              a, c
0000:0524 4F
                                                                 ld
0000:0524 4F
0000:0525 21 29 35
0000:0528 06 00
0000:052A 09
                                                                              hl, Bonus_Points_Tbl
b, 0
hl, bc
                                                                 ld
ld
                                                                 add
0000:052B A7
0000:052C 06 03
0000:052E
                                                                  and
                                                                 ld
                                                                              b, 3
                                                                                                                                                   ; 3 bytes of score
                                                                                                                                                   ; CODE XREF: add_bonus_and_update_high_score+18|-j
0000:052E
                                     loc 0 52E:
0000:052E 1A
                                                                1d
                                                                              a, (de)
                                                                                                                                                    ; get score BCD pair
```

```
; add bonus BCD pair
                                                                                                                                       adjust for BCD
0000:0530 27

0000:0531 12

0000:0532 13

0000:0533 23

0000:0534 10 F8

0000:0536 D5

0000:0537 1B

0000:0538 CD 6B 05
                                                          ld
inc
inc
                                                                                                                                    ; update score BCD pair
                                                                      de
hl
                                                                                                                                    ; next byte ; loop through score
                                                                      loc_0_52E
                                                          djnz
                                                          push
dec
ld
                                                                      de
de
                                                                           (current_player_D)
                                                          call
                                                                      display_player_A_score
0000:053B CD 6B 05
                                                          pop
dec
ld
0000:053E D1
0000:053E DI
0000:053F 1B
0000:0540 21 BA 60
                                                                      hl, high_score+2
                                                                                                                                    ; MSB
0000:0543 06 03
0000:0545
0000:0545
0000:0545 1A
                                                          ld
                                                                      b. 3
                                                                                                                                    ; 3 bytes to compare
                                  loc_0_545:
                                                                                                                                       CODE XREF: add_bonus_and_update_high_score+31|j
                                                          ld
                                                                      a, (de)
                                                                                                                                    ; get byte from score
                                                                                                                                    , get byte from score;
; less than high score?
; yes, return
; greater, we have a high score
                                                                      (hl)
0000:0546 BE
0000:0546 BE
0000:0547 D8
0000:0548 C2 50 05
0000:054B 1B
                                                                      nz, new_high_score
                                                          jp
dec
                                                                      de
0000:054E 1B
0000:054C 2B
0000:054D 10 F6
0000:054F C9
                                                                                                                                    ; same, check next byte
; loop through 3 bytes
                                                          dec
                                                          djnz
                                                                       loc_0_545
                                                          ret
0000:0550
0000:0550
0000:0550
0000:0550
0000:0550 CD 5F 05
0000:0553 CD 5F 05
0000:0556
0000:0556
0000:0556 1A
                                                                                                                                    ; CODE XREF: add_bonus_and_update_high_score+2Cfj
                                  new_high_score:
                                                          call
                                                                      current player score DE
                                                          14
                                                                      hl, high_score
                                                                                                                                    ; CODE XREF: add_bonus_and_update_high_score+3E|j
                                  update_high_score:
                                                                           (de)
                                                          ld
                                                                                                                                    ; get score byte
0000:0557 77
0000:0558 13
0000:0559 23
0000:055A 10
                                                                      (hl), a
                                                          1d
                                                                                                                                    ; copy to high score
                                                                      de
hl
              23
10 FA
                                                                                                                                    ; next location
; loop through 3 bytes
                                                                      update high score
                                                          dinz
0000:055C C3 DA 05
0000:055C
0000:055C
                                  jp display_high_score
; End of function add_bonus_and_update_high_score
0000:055F
0000:055F
0000:055F
0000:055F
                                                 SUBROUTINE
                                                                                                                                    ; CODE XREF: add_bonus_and_update_high_score+2\uparrowp; add_bonus_and_update_high_score+34\uparrowp
0000:055F
                                  current_player_score_DE:
0000:055F 11 B2 60
0000:055F
0000:0562 3A 0D 60
                                                                      de, pl_score
                                                                      a, (current_player_D)
a
                                                          1d
                                                                                                                                    ; player one?
; yes, return
0000:0565 A7
                                                          and
0000:0565 A7
0000:0566 C8
0000:0567 11 B5 60
0000:056A C9
                                                          ret
ld
                                                                      de, p2_score
                                                          ret
0000:056A
0000:056A
0000:056B
                                  ; End of function current_player_score_DE
                                             SUBROUTINE
0000:056B
0000:056B
0000:056B
                                                                                                                                    ; CODE XREF: add_bonus_and_update_high_score+1Ffp
0000:056B
                                 display_player_A_score:
0000:056B DD 21 81 77
0000:056B
0000:056F A7
0000:0570 28 0A
                                                                                                                                    ; display_score_or_high_score+11|j
                                                          ld
and
                                                                      ix, VRAM_start+381h
                                                                       z, display score HL
                                                          jr
ld
0000:0572 DD 21 21 75
0000:0576 18 04
0000:0578
0000:0578
                                                                            VRAM start+121h
                                                                      display_score_HL
                                                                                                                                    ; CODE XREF: display_score_or_high_score+17\mid ; screen position for score
0000:0578
                                 display_score_at_hs_location:
0000:0578 DD 21 41 76
0000:057C
                                                                      ix, VRAM_start+<mark>241h</mark>
                                                                                                                                    ; CODE XREF: display_player_A_score+5<sup>†</sup>j; display_player_A_score+B<sup>†</sup>j ...
0000:057C
                                 display_score_HL:
0000:057C EB
0000:057C
0000:057C
0000:057D 11 E0 FF
                                                                      de, OFFEOh
                                                                                                                                    ; column address delta
; 3=6 digits
                                                          ld
0000:0580 01 04 03
0000:0583
0000:0583
0000:0583 7E
                                                          1d
                                                                      bc, 304h
                                                                                                                                    ; CODE XREF: display_player_A_score+25|;
; display_credits+11|;
; get bcd digit pair
                                 display_B_bcd_digit_pairs:
0000:0583
0000:0584 OF
0000:0585 OF
0000:0586 OF
                                                                      a, (hl)
                                                          1d
                                                          rrca
                                                          rrca
                                                          rrca
0000:0587 OF
0000:0588 CD 93 05
0000:058B 7E
                                                          rrca
call
                                                                                                                                    ; shift high nibble
                                                                      display_score_digit
                                                                                                                                    ; low nibble
                                                          ld
call
                                                                            (hl)
                                                                      a, (h1)
display_score_digit
0000:058C CD 93 05
0000:058F 2B
0000:0590 10 F1
0000:0592 C9
0000:0592
                                                                                                                                    ; next digit pair
; loop through 6 digits
                                                          djnz
                                                                      display_B_bcd_digit_pairs
                                  ret
; End of function display_player_A_score
0000:0592
0000:0593
0000:0593
                                                 SUBROUTINE
0000:0593
0000:0593
0000:0593
0000:0593 E6 OF
                                                                                                                                    ; CODE XREF: display_player_A_score+1D|p; display_player_A_score+21|p; low nibble only; display digit; next column
                                 display_score_digit:
0000:0593
0000:0595 DD 77 00
0000:0598 DD 19
                                                          ld
add
                                                                       (ix+0), a
                                                                      ix, de
0000:059A C9
                                                          ret
0000:0592
                                  ; End of function display_score_digit
0000:059A
0000:059B
                                                        SUBROUTINE
0000:059B
0000:059B
0000:059B
                                                                                                                                    ; CODE XREF: zero_score_or_high_score+24|p; DATA XREF: 0000:0309|o
0000:059B
                                 zero score or high score:
0000:059B FE 03
0000:059B
0000:059D D2 BD 05
                                                                                                                                    ; zero all scores?
; yes, skip
                                                                      nc, loc_0_5BD
                                                          jр
0000:05A0 F5
0000:05A1 21 B2 60
0000:05A4 A7
0000:05A5 CA AB 05
                                                          push
ld
and
                                                                      af
                                                                      hl, pl_score
                                                                       z, loc_0_5AB
                                                          jp
ld
0000:05A8 21 B5 60
                                                                      hl, p2 score
0000:05AB
```

```
; CODE XREF: zero_score_or_high_score+A^jj
                                 loc_0_5AB:
0000:05AB FE 02
0000:05AB FE 02
0000:05AD C2 B3 05
0000:05B0 21 B8 60
0000:05B3
                                                                      nz, loc_0_5B3
hl, high_score
                                                                                                                                   ; CODE XREF: zero score or high score+121j
                                 loc 0 5B3:
0000:05B3
0000:05B3 AF
0000:05B4 77
0000:05B5 23
0000:05B6 77
                                                                      a
(hl), a
                                                          ld
                                                                      hl (hl), a
                                                          ld
0000:05B7 23
                                                          inc
ld
                                                                      hl (hl), a
0000:05B9 F1
                                                          pop
0000:05BA C3 C6 05
                                                          jp
                                                                      display score or high score
0000:05BD
0000:05BD
0000:05BD
                                 loc 0 5BD:
                                                                                                                                    ; CODE XREF: zero score or high score+21i
                                                                                                                                    ; zero_score_or_high_score+29 | j ; next score to zero
0000:05BD 3D
0000:05BD 3D
0000:05BD
0000:05BE F5
0000:05BF CD 9B 05
                                                          push
                                                                      af
                                                          call
                                                                      zero score or high score
0000:05C2 F1
0000:05C3 C8
0000:05C4 18 F7
0000:05C4
                                                          pop
ret
                                                                      af
                                                                                                                                   ; return when done
                                                                      loc 0 5BD
                                                          jr
                                                                                                                                    ; zero next score
                                  ; End of function zero_score_or_high_score
0000:05C4
0000:05C6
                                                       SUBROUTINE
0000:05C6
0000:0506
0000:05C6
0000:05C6
0000:05C6 FE 03
                                                                                                                                      CODE XREF: zero_score_or_high_score+1F<sup>†</sup>j display_score_or_high_score+1C<sup>†</sup>p
                                 display_score_or_high_score:
0000:05C6 FE 03

0000:05C6

0000:05C6

0000:05C8 CA E0 05

0000:05CB 11 B4 60

0000:05CE A7

0000:05CF CA D5 05

0000:05D2 11 B7 60
                                                                                                                                    ; DATA XREF: ...
                                                                      z, loc_0_5E0
                                                          jp
ld
                                                                      de, p1_score+2
                                                          and
                                                          jp
ld
                                                                         , loc_0_5D5
                                                                      de, p2_score+2
0000:05D5
0000:05D5
                                 loc 0 5D5:
                                                                                                                                   ; CODE XREF: display_score_or_high_score+9<sup>†</sup>j
0000:05D5 FE 02
0000:05D7 C2 6B 05
                                                          ср
                                                                      nz, display player A score
                                                          qŗ
0000:05DA
                                 display_high_score:
0000:05DA
0000:05DA
0000:05DA 11 BA 60
0000:05DD C3 78 05
                                                                                                                                    ; CODE XREF: add_bonus_and_update_high_score+40^j
                                                                      de, high_score+2
                                                          jр
                                                                      display_score_at_hs_location
0000:05E0
0000:05E0
0000:05E0
                                                                                                                                    ; CODE XREF: display_score_or_high_score+2<sup>†</sup>j
; display_score_or_high_score+21<sup>†</sup>j
                                  loc_0_5E0:
0000:05E0 3D
0000:05E0
0000:05E1 F5
0000:05E2 CD C6 05
                                                                      af
display_score_or_high_score
                                                          call
0000:05E5 F1
0000:05E6 C8
0000:05E7 18 F7
0000:05E7
                                                         pop
ret
                                                                      af
                                                                      loc_0_5E0
                                  jr loc_0_5E0
; End of function display_score_or_high_score
0000:05E7
0000:05E9
0000:05E9
                                                         SUBROUTINE
0000:05E9
0000:05E9
                                                                                                                                   ; CODE XREF: display_credits+2|p
; display_start_12P_get_selection+18|p
; DATA XREF: ...
0000:05E9
0000:05E9 21 4B 36
                                 print_message_A:
0000:05E9
0000:05E9
                                                          14
                                                                      hl, message_table
0000:05E0 87
0000:05ED F5
                                                          add
                                                                                                                                    ; convert entry to offset
                                                                      a, a
af
                                                          push
0000:05EE E6 7F
                                                           and
                                                                      7Fh ;
                                                                                                                                   ; mask off 'wipe' bit
0000:05F0 5F
0000:05F1 16 00
0000:05F3 19
                                                          ld
ld
                                                                                                                                   ; DE = offset ; pointer to entry
                                                                      hl, de
                                                          add
                                                                      e, (hl)
hl
0000:05F4 5E
                                                          ld
inc
0000:05F4 5E
0000:05F5 23
0000:05F6 56
0000:05F7 EB
                                                                      d, (hl)
de, hl
                                                          ld
                                                                                                                                   ; DE = entry (word)
                                                          ex
0000:05F7 EB
0000:05F8 5E
0000:05F9 23
0000:05FA 56
                                                          ld
                                                                           (hl)
                                                          inc
                                                                     d, (hl)
                                                                                                                                   ; DE = screen address to print
; HL = message text
0000:05FB 23
0000:05FC 01 E0 FF
0000:05FF EB
0000:0600
                                                          inc
                                                                      bc, OFFEOh
de, hl
                                                                                                                                    ; screen column address inc value
; DE = text, HL = screen address
                                                          ld
                                                                                                                                    ; CODE XREF: print_message_A+26 | j
0000:0600
                                 loc_0_600:
0000:0600 1A
0000:0601
                                                          ld
                                                                      a, (de)
                                                                                                                                    ; get message character
                                                                                                                                    ; DATA XREF: 0000:1275 o
0000:0601
0000:0601 FE 3F
                                 loc 0 601:
                                                                      3Fh ; '?
                                                                                                                                    i end of message?
i yes, exit
i display character on screen
restore original entry index
                                                          ср
0000:0603 CA 26 00
0000:0606 77
0000:0607 F1
                                                          jp
ld
                                                                      z, pop_hl_ret(hl), a
                                                                     af
nc, loc_0_60C
(hl), 10h
                                                          pop
0000:0608 30 02
0000:060A 36 10
0000:060C
0000:060C
                                                          jr
ld
                                                                                                                                    ; not wiping, skip
; display space character on screen
                                                                                                                                    ; CODE XREF: print_message_A+1F^j
                                 loc 0 60C:
0000:060C F5
0000:060D 13
0000:060E 09
                                                                                                                                   ; store original entry index
; next message character
; next screen location
; loop through message
                                                          push
                                                                      de
hl, bc
                                                          add
0000:060F 18 EF
                                                          ir
                                                                      loc 0 600
0000:060F
0000:060F
0000:0611
                                  ; End of function print_message_A
0000:0611
0000:0611
0000:0611
0000:0611 3A 07 60
0000:0614 0F
                                 ; DATA XREF: 0000:030F1o
                                                                                                                                   ; in attract mode?
; no, return
                                                          rrca
0000:0615 D0
                                                                      nc
                                                         SUBROUTINE
0000:0616
0000:0616
0000:0616
0000:0616 3E 05
                                                                                                                                   ; CODE XREF: display_start_12P_get_selection+1B\midp; 0000:141E\midp ...
                                 display_credits:
                                                                                                                                    ; "credit"
                                                         1d
0000:0618 CD E9 05
                                                          call
                                                                      print_message_A
```

```
0000:061B 21 01 60
                                                                                     hl, no_of_credits
0000:061B 21 01 60
0000:061E 11 E0 FF
0000:0621 DD 21 BF 74
0000:0625 06 01
0000:0627 C3 83 05
0000:0627
0000:0627
0000:062A
0000:062A
                                                                                     de, OFFEOh
ix, VRAM_start+OBFh
b, 1
display_B_bcd_digit_pairs
                                                                      ld
                                                                                                                                                               ; column address delta
                                                                                                                                                               ; screen position of credits
; 1=2 digits
                                                                      1d
                                                                      jр
                                         ; End of function display_credits
                                                                                                                                                               ; DATA XREF: 0000:0311†o
0000:062A
                                        update bonus timer:
0000:062A

0000:062B CA 91 06

0000:062B 3A 8C 63

0000:0631 A7

0000:0632 C2 A8 06

0000:0633 A7

0000:0638 A7
                                                                                    z, loc_0_691
a, (bonus_timer)
                                                                      jp
ld
                                                                                    nz, loc_0_6A8
a, (unk_0_63B8)
                                                                      and
                                                                                                                                                               ; zero?
; no, skip
                                                                      jp
ld
                                                                      and
0000:0639 C0
0000:063A 3A B0 62
0000:063D 01 0A 00
                                                                      ret
ld
ld
                                                                                     nz
                                                                                     a, (unk_0_62B0)
                                                                                     bc, OAh
0000:0640
0000:0640
0000:0640 04
0000:0641 91
                                        loc_0_640:
                                                                                                                                                               ; CODE XREF: 0000:0642-j
                                                                      sub
0000:0642 C2 40 06
                                                                      jp
ld
rlca
                                                                                     nz, loc_0_640
a, b
0000:0645 78
0000:0646 07
0000:0647 07
                                                                      rlca
rlca
0000:0647 07
0000:0648 07
0000:0649 07
0000:0644 32 8C 63
0000:0640 21 4A 38
0000:0650 11 65 74
0000:0655
0000:0655
                                                                      rlca
rlca
ld
ld
                                                                                    hl, bonus_graphic_tiles
de, VRAM_start+65h
a, 6
                                                                                                                                                               ; set initial bonus timer value
                                                                                                                                                              ; screen position for bonus
; 6 columns of tiles to display
                                                                      ld
                                                                                                                                                               ; CODE XREF: 0000:0664 j
                                        loc 0 655:
0000:0655 DD 21 1D 00
0000:0659 01 03 00
0000:065C ED B0
                                                                                    ix, 1Dh
bc, 3
                                                                                                                                                               column inc
; 3 tiles to display
; display bonus tiles
; next column
                                                                      1d
                                                                      ld
ldir
0000:065C ED B0
0000:065E DD 19
0000:0660 DD E5
0000:0662 D1
0000:0663 3D
0000:0664 C2 55 06
0000:0667 3A 8C 63
0000:066A
                                                                                     ix, de
                                                                      add
                                                                      push
                                                                                                                                                               ; screen position
                                                                      pop
                                                                                                                                                              ; done?
; no, loop
                                                                      dec
                                                                      jp
ld
                                                                                     nz. loc 0 655
                                                                                     a, (bonus_timer)
0000:066A
                                        loc 0 66A:
                                                                                                                                                              ; CODE XREF: 0000:06B5-1
0000:066A 4F
                                                                      14
0000:066A 4F
0000:066B E6 0F
0000:066D 47
0000:066E 79
                                                                      and
ld
                                                                                     0Fh
                                                                                                                                                               ; B=low nibble
                                                                                     b, a
                                                                      1d
0000:066F 0F
0000:0670 0F
0000:0671 0F
                                                                      rrca
                                                                      rrca
                                                                      rrca
and
0000:0672 OF
0000:0672 0F
0000:0673 E6 0F
0000:0675 C2 89 06
0000:0678 3E 03
0000:067A 3E 70
0000:067D 3E 70
0000:067F 32 86 74
                                                                                                                                                               ; C=high nibble
; skip if more than 9s left
                                                                                     nz, display_bonus_digits
                                                                      jp
ld
                                                                      ld
ld
ld
                                                                                     (unk_0_6089), a
a, 70h; 'p'
(VRAM_start+86h), a
                                                                                                                                                                 purple '0'
                                                                      ld
                                                                                     (VRAM start+0A6h), a
                                                                                     a, b
b, a
a, 10h
0000:0685 80
                                                                      add
                                                                                                                                                               ; 2nd digit to 'ascii'
0000:0686 47
0000:0687 3E 10
                                                                      ld
ld
                                                                                                                                                               ; store
; <space>
0000:0689
0000:0689
0000:0689 32 E6 74
0000:068C 78
0000:068D 32 C6 74
                                                                                                                                                               ; CODE XREF: 0000:0675<sup>†</sup>j
                                        display_bonus_digits:
                                                                                                                                                              ; display 1st digit
; restore 2nd digit
; display 2nd digit
                                                                      ld
ld
                                                                                     (VRAM_start+0E6h), a
                                                                                     a, b
(VRAM_start+0C6h), a
                                                                      ld
0000:0690 C9
0000:0691
0000:0691
0000:0691
0000:0691 3A 8C 63
0000:0694 47
0000:0695 E6 0F
                                                                                                                                                              ; CODE XREF: 0000:062B1j
                                        loc_0_691:
                                                                      ld
ld
                                                                                     a, (bonus_timer)
                                                                                     b, a
0Fh
                                                                      and
0000:0697 C5
0000:0698 CD 1C 05
0000:0698 C1
0000:069C 78
                                                                      push
call
                                                                                     add_bonus_and_update_high_score
                                                                      pop
ld
                                                                                     bc
a, b
0000:069D OF
0000:069E OF
0000:069F OF
                                                                      rrca
rrca
                                                                      rrca
0000:06A0 OF
                                                                      rrca
0000:06A0 0F
0000:06A1 E6 0F
0000:06A3 C6 0A
0000:06A5 C3 1C 05
0000:06A8
0000:06A8
0000:06A8 D6 01
                                                                      and
add
                                                                                     add bonus and update high score
                                                                      qŗ
                                                                                                                                                               ; CODE XREF: 0000:0632<sup>†</sup>j
                                         loc_0_6A8:
                                                                      sub
0000:06AA 20 05
0000:06AC 21 B8 63
0000:06AF 36 01
0000:06B1
                                                                                     nz, loc_0_6B1
hl, unk_0_63B8
(hl), 1
                                                                      jr
ld
                                                                      ld
0000:06B1
0000:06B1 27
0000:06B2 32 8C 63
0000:06B5 C3 6A 06
                                        loc_0_6B1:
                                                                                                                                                               ; CODE XREF: 0000:06AA11
                                                                      daa
                                                                                     (bonus_timer), a
                                                                      ld
                                                                      jр
                                                                                     loc 0 66A
0000:06B8
0000:06B8
0000:06B8
                                                                     SUBROUTINE
0000:06B8
0000:06B8
0000:06B8 4F
0000:06B8
                                                                                                                                                                  CODE XREF: 0000:01DC<sup>†</sup>p check_and_award_bonus+2C<sup>†</sup>j
                                        display_lives_and_level:
                                                                                                                                                                  DATA XREF: ... store number of lives
                                                                                     c, a
8
b, 6
0000:06B8
                                                                      ld
0000:06B9 CF
0000:06BA 06 06
0000:06BC 11 E0 FF
0000:06BC 21 83 77
0000:06C2
                                                                      rst
ld
                                                                                                                                                                  return if attract mode max icons
                                                                                     de, OFFE0h
                                                                                                                                                               ; column delta
                                                                      ld
                                                                      ld
                                                                                     hl, VRAM_start+383h
                                        loc_0_6C2:
                                                                                                                                                               ; CODE XREF: display_lives_and_level+D|j
0000:06C2 36 10
0000:06C4 19
                                                                                    (hl), <mark>10h</mark>
hl, de
                                                                      1d
                                                                      add
                                                                                                                                                               ; next column
```

```
0000:06C5 10 FB
                                                                     djnz
                                                                                    loc_0_6C2
                                                                                                                                                             ; wipe 6 icons
0000:06C7 3A 28 62
                                                                                         (lives left)
                                                                     1d
                                                                     sub
jp
ld
0000:06CA 91
                                                                                                                                                            ; HUH???
0000:06CA 91
0000:06CB CA D7 06
0000:06CE 47
0000:06CF 21 83 77
                                                                                    z, loc_0_6D7
                                                                                                                                                            ; number of lives ; screen location
                                                                                   b, a
hl, VRAM_start+383h
                                                                     ld
0000:06D2
0000:06D2
0000:06D2 36 FF
                                                                                                                                                             ; CODE XREF: display_lives_and_level+1D|j
                                        loc_0_6D2:
                                                                                    (hl), OFFh
                                                                     ld
                                                                                                                                                             ; mario icon
                                                                                                                                                            ; mario icon
; next screen location
; loop for no. of lives
                                                                                   hl, de
loc_0_6D2
0000:06D4 19
                                                                     add
0000:06D5 10 FB
0000:06D7
0000:06D7
                                                                     djnz
                                        loc_0_6D7:
                                                                                                                                                            ; CODE XREF: display_lives_and_level+13<sup>†</sup>j
0000:06D7 21 03 75
0000:06DA 36 1C
0000:06DC 21 E3 74
0000:06DF 36 34
                                                                     1d
                                                                                   hl, VRAM_start+103h
(hl) 1Ch
                                                                                   h1, VRAM_start+103h
(h1), 1Ch
h1, VRAM_start+0E3h
(h1), 34h; '4'
a, (level)
                                                                     ld
ld
                                                                                                                                                            7 'L'
                                                                                                                                                            i^{-1} = 1
                                                                     ld
0000:06E1 3A 29 62
0000:06E4 FE 64
0000:06E6 38 05
                                                                     ld
cp
jr
ld
                                                                                   a, (level)
100
c, loc_0_6ED
                                                                                                                                                            ; too high?
; no, skip
; max out at 99
0000:06E8 3E 63
0000:06EA 32 29 62
0000:06ED
                                                                     ld
                                                                                    (level), a
                                                                                                                                                             ; adjust
 0000:06ED
                                        loc 0 6ED:
                                                                                                                                                            ; CODE XREF: display lives and level+2E<sup>†</sup> j
0000:06ED 01 0A FF
                                                                     ld
                                                                                   bc. 0FF0Ah
0000:06ED 01
0000:06F0
0000:06F0 04
                                        loc_0_6F0:
                                                                                                                                                             ; CODE XREF: display_lives_and_level+3A|j
                                                                                   b
0000:06F1 91
0000:06F2 D2 F0 06
0000:06F5 81
0000:06F6 32 A3 74
                                                                     sub
                                                                     jp
add
ld
                                                                                    nc, loc_0_6F0
                                                                                                                                                            ; level tens digit
                                                                                    a, c
(VRAM_start+0A3h), a
0000:06F9 78
0000:06FA 32 C3 74
0000:06FD C9
0000:06FD
                                                                     1d
                                                                                                                                                            ; level units digit
                                                                                    (VRAM_start+0C3h), a
                                                                     ld
                                                                     ret
                                        ; End of function display_lives_and_level
0000:06FD
0000:06FE
0000:06FE
                                                                                                                                                            ; DATA XREF: 0000:00D010
0000:06FE
                                        vector_on_ingame_sequencer:
0000:06FE 3A 0A 60
0000:0701 EF
0000:0701
0000:0702 86 09
0000:0704 AB 09
0000:0706 D6 09
                                                                                   a, (main_sequencer)
28h
                                                                     1d
                                                                     rst
                                                                                                                                                            ; Jump table
                                                                      .dw cls_and_set_screen_flip
                                                                      .dw init_ingame_data_p1
.dw loc_0_9D6
                                                                     .dw init_ingame_data_p2
.dw display_p2_screen?
.dw display_p1_screen?
.dw wait_cls____
 0000:0708 FE 09
0000:070A 1B 0A
0000:070C 37 0A
0000:070E 63 0A
0000:0710 76 0A
                                                                      .dw do intro sequence
0000:0712 DA 0B
0000:0714 00 00
0000:0716 91 0C
                                                                      .dw draw_how_high_can_you_get
                                                                     .dw wait_init_and_draw_level
0000:0718 3C 12
0000:071A 7A 19
0000:071C 7C 12
0000:071E F2 12
                                                                      .dw init_mario
.dw gameplay
.dw died_in_gameplay
.dw copy_current_lvl_data_to_Pl
                                                                     0000:0720 44
0000:0722 8F
0000:0724 A1
0000:0726 AA
 0000:0728 BB 13
 0000:072E
                                                                      .dw mario_pauline_reunion
.dw loc_0_196B
 0000:072E 15
0000:0730 6B
                                                                      .dw
.dw
0000:0736 00 00
                                                                      .dw
0000:0736 00 00
0000:0738 00 00
0000:0738 00 00
0000:073C
0000:073C
0000:073C 21 0A 60
0000:073F 3A 01 60
0000:0742 A7
0000:0743 C2 5C 07
0000:0746 7E
0000:0747
                                                                      .dw
                                        chk_credits_and_vector_on_attrac:
                                                                                                                                                            ; DATA XREF: 0000:00CCTo
                                                                                   hl, main_sequencer
a, (no_of_credits)
                                                                     ld
                                                                     ld
                                                                     and
jp
ld
                                                                                                                                                            ; any credits?
; yes, skip
                                                                                   nz, inc_nmi_sequencer
a, (h1)
28h
                                                                                                                                                            ; go!
0000:0747 EF
0000:0747
0000:0748 79 07
0000:0748 63 07
0000:0742 77 19
0000:0750 7C 12
0000:0752 C3 07
0000:0756 4B 08
0000:0756 4B 08
0000:0758 00 00
0000:0758 00 00
                                                                     rst
                                                                     .dw insert_coin_screen
.dw init_attract_mode_and_draw_level
.dw init_mario
                                                                                                                                                             ; Jump Table (attract sequencer)
                                                                      .dw attract_mode_gameplay
.dw died_in_gameplay
                                                                      .dw cls_and_next_sequence
.dw title screen flash
                                                                     .dw title_screen_flash
.dw title_screen_no_flash
.dw 0
.dw 0
0000:0750
0000:075C
0000:075C
0000:075C
0000:075C
0000:075C 36 00
0000:075E 21 05 60
0000:0761 34
0000:0762 C9
                                                                                                                                                                CODE XREF: 0000:0743 j
                                        inc_nmi_sequencer
                                                                                    (hl), 0
                                                                     ld
                                                                                                                                                             ; reset game seguencer
                                                                     ld
inc
                                                                                   hl, nmi_sequencer
(hl)
                                                                                                                                                             ; inc nmi_sequencer
                                                                     ret
0000:0763
0000:0763
0000:0763
0000:0763
0000:0763 E7
0000:0764 AF
0000:0765 32
0000:0768 32
                                                                                                                                                            ; DATA XREF: 0000:074A\u00e1o
; wait for 16-bit countdown
                                        init_attract_mode_and_draw_level:
                                                                     rst
                                                                                    20h
                                                                     xor
0000:0764 AF
0000:0765 32 92 63
0000:0768 32 AO 63
0000:076B 3E 01
0000:076D 32 27 62
0000:0770 32 29 62
                                                                     ld
ld
                                                                                    (unk_0_6392), a
(unk_0_63A0), a
                                                                     ld
                                                                                    a, 1
(level_type), a
                                                                     ld
0000:0770 32 29 62
0000:0773 32 28 62
0000:0776 C3 92 0C
                                                                     ld
ld
                                                                                    (level), a
(lives_left),
                                                                     jр
                                                                                    init and draw level
0000:0779
0000:0779
0000:0779
                                                                                                                                                             ; DATA XREF: 0000:074810
                                        insert_coin_screen:
                                                                                   hl, palette_bank
(hl), 0
                                                                     1d
0000:077C 36 00
                                                                     ld
```

```
0000:077F 36 00
0000:0781 11 1B 03
0000:0784 CD 9F 30
0000:0787 1C
                                                                                        (hl), 0
de. 31Bh
                                                                         ld
                                                                                                                                                                    ; palette bank = 0
                                                                                       de, 31Bh
sub_0_309F
                                                                         1d
                                                                        call
inc
call
                                                                                       e
sub_0_309F
sub_0_965
hl, eight_bit_countdown
(hl), 2
 0000:0787 IC
0000:0788 CD 9F 30
 0000:0788 CD 9F 30
0000:078B CD 65 09
0000:078E 21 09 60
0000:0791 36 02
                                                                         call
ld
ld
                                                                                                                                                                    ; main_sequencer
; next sequence (1)
 0000:0793 23
                                                                         inc
                                                                                       hl
 0000:0794 34
0000:0795 CD 74 08
0000:0798 CD 53 0A
                                                                                        (hl)
clear_visible_area_and_sprites
                                                                         inc
                                                                         call
0000:0798 CD 53 0A
0000:0798 3A 0F 60
0000:0798 FE 01
0000:07A0 CC EE 09
0000:07AA ED 5B 22 60
0000:07AA CD AD 07
0000:07AD
0000:07AD
0000:07AD
0000:07AD 23
0000:07AF 23
0000:07AF 23
0000:07AF 23
0000:07BD 72
0000:07BD 73
0000:07BD 74
0000:07BD 75
0000:07BD 76
0000:07BD 77
0000:07BD 77
                                                                         call
                                                                                       display_1UP
                                                                                        a, (two_players)
                                                                         1d
                                                                                                                                                                    ; last game 2P?
; yes, display 2UP
                                                                        cp
call
                                                                                        z, display_2UP
                                                                                       de, (coinage)
hl, VRAM_start+16Ch
display_coinage
                                                                         1d
                                                                         1d
                                          display_coinage:
                                                                                       (hl), e
hl
hl
                                                                        1d
                                                                         inc
                                                                         ld
                                                                                        (hl), d
                                                                                       a, d

OAh

nz, loc_0_7BC

(h1), a
                                                                         ld
sub
                                                                         jp
ld
 0000:07B7 77
0000:07B8 3C
0000:07B9 32 8E 75
0000:07BC
                                                                         inc
ld
                                                                                        (VRAM_start+18Eh), a
loc_0_7BC:
                                                                                                                                                                    ; CODE XREF: 0000:07B41 j
                                                                                       de, 201h
hl, VRAM_start+28Ch
                                                                         14
                                                                         ld
                                                                         ret
                                                                                                                                                                    ; DATA XREF: 0000:0752\dagger
                                          cls_and_next_sequence
                                                                                        clear_visible_area_and_sprites
                                                                         call
                                                                                       hl, main_sequencer (hl)
                                                                        ld
inc
                                                                                                                                                                    ; next sequence (6)
                                                                         ret
 0000:07CB
0000:07CB
                                          title_screen_flash:
                                                                                                                                                                    ; DATA XREF: 0000:0754 o
a, (unk_0_638A)
                                                                         ld
                                                                         cp
jp
ld
                                                                                       nz, loc_0_82D
a, 60h; '`'
(unk_0_638A), a
                                                                         ld
                                                                         ld
                                                                                                                                                                    ; CODE XREF: 0000:0838/j
                                          loc_0_7DA:
 0000:07DA FE 00
0000:07DC CA 3B 08
0000:07DF 21 86 7D
0000:07E2 36 00
                                                                        cp
jp
ld
ld
                                                                                       z, loc_0_83B
hl, palette_bank
(hl), 0
 0000:07E4 79
0000:07E5 CB 07
0000:07E7 30 02
0000:07E9 36 01
                                                                        ld
rlc
jr
ld
                                                                                       nc, loc_0_7EB (hl), 1
 0000:07EB
0000:07EB
0000:07EB 23
0000:07EC 36 00
0000:07EC CB 07
0000:07EC CB 07
0000:07F0 30 02
0000:07F0 36 01
                                          loc_0_7EB:
                                                                                                                                                                   ; CODE XREF: 0000:07E7|j
                                                                                        (hl), 0
                                                                         ld
                                                                         rlc
                                                                                       a
nc, loc_0_7F4
(hl), 1
                                                                         jr
ld
 0000:07F4
 0000:07F4
0000:07F4 32 8B 63
0000:07F7 21 08 3D
                                          loc_0_7F4:
                                                                                                                                                                    ; CODE XREF: 0000:07F01i
                                                                                       (unk_0_638B), a hl, title_screen
                                                                         ld
 0000:07FA
0000:07FA
0000:07FA 3E B0
0000:07FC 46
                                                                                                                                                                    ; CODE XREF: 0000:0809|j
                                          display_donkey_kong_title:
                                                                                                                                                                    ; girder tile
; get number of tiles to display
                                                                         ld
ld
                                                                                       b, (hl)
hl
0000:07FC 40
0000:07FD 23
0000:07FE 5E
0000:07FF 23
                                                                                       e, (hl)
                                                                         1d
                                                                                       d. (hl)
                                                                                                                                                                    ; DE = screen address
 0000:0800 56
                                                                         1d
 0000:0801
0000:0801
0000:0801
                                          loc_0_801:
                                                                                                                                                                    ; CODE XREF: 0000:0803/j
                  12
                                                                         ld
                                                                                        (de), a
                                                                                                                                                                    ; display character
; next line
0000:0801 12
0000:0802 13
0000:0803 10 FC
0000:0805 23
0000:0806 7E
0000:0807 FE 00
                                                                         inc
                                                                                        de
                                                                         djnz
                                                                                       loc_0_801
hl
                                                                                                                                                                    ; loop
; next entry
                                                                                       a, (hl)
                                                                         inc
ld
                                                                                                                                                                    ; get entry byte ; done?
                                                                         cp
jp
ld
 0000:0807 FE 00
0000:0809 C2 FA 07
0000:080C 11 1E 03
0000:080F CD 9F 30
                                                                                        nz, display_donkey_kong_title
                                                                                                                                                                    ; no, loop
                                                                                       de, 31Eh
sub_0_309F
                                                                         call
0000:0812 13
0000:0813 CD 9F 30
0000:0816 21 CF 39
0000:0819 CD 4E 00
                                                                        inc
call
ld
call
                                                                                        de
                                                                                        sub_0_309F
                                                                                       hl, dk_thrash_right_spr
copy_sprites_2_11_data
sub_0_3F24
 0000:081C CD 24 3F
0000:081F 00
0000:0820 21 08 69
                                                                         call
nop
ld
                                                                                       hl, soft_sprite_ram+8
                                                                                                                                                                    ; sprite #2, y coord
 0000:0823 0E 44
0000:0825 FF
0000:0826 21 0B 69
0000:0829 0E 78
                                                                         1d
                                                                                        c, 68
38h
                                                                        rst
ld
                                                                                                                                                                    ; add 68 to y coord for 10 sprites ; sprite #2, x coord
                                                                                       hl, soft_sprite_ram+0Bh c, 120
                                                                         ld
                                                                                       c, 1
38h
                                                                                                                                                                    ; add 120 to xs coord for 10 sprites
 0000:082B FF
                                                                         rst
 0000:082C C9
0000:082D
 0000:082D
 0000:082D
0000:082D 3A 8B 63
0000:0830 4F
                                                                                                                                                                    ; CODE XREF: 0000:07D01j
                                          loc 0 82D:
                                                                        ld
ld
                                                                                       a, (unk_0_638B)
0000:0830 4F
0000:0831 3A 8A 63
0000:0834 3D
0000:0835 32 8A 63
0000:0838 C3 DA 07
                                                                                       a, (unk_0_638A)
                                                                         ld
                                                                                         (unk_0_638A), a
                                                                         ld
                                                                                        loc_0_7DA
                                                                         jр
 0000:083B
```

0000:083B

```
0000:083B
                                                                                                                                                ; CODE XREF: 0000:07DC<sup>†</sup>j
                                     loc_0_83B:
0000:083B 21 09 60
                                                                             hl, eight_bit_countdown
                                                                             (h1), 2
h1
(h1)
0000:083E 21 09
0000:083E 36 02
0000:0840 23
0000:0841 34
                                                               ld
inc
                                                                                                                                               ; game_sequencer
                                                                             hl, unk_0_638A (hl), 0
0000:0841 34
0000:0842 21 8A 63
0000:0845 36 00
0000:0847 23
0000:0848 36 00
                                                                1d
                                                                ld
inc
ld
                                                                             hl (hl), 0
0000:084A C9
                                                                ret
0000:084B
0000:084B
0000:084B
                                     title_screen_no_flash:
                                                                                                                                                ; DATA XREF: 0000:0756 o
0000:084B E7
0000:084C 21 0A 60
0000:084F 36 00
0000:0851 C9
                                                               rst
ld
ld
                                                                             20h
hl, main_sequencer
(hl), 0
                                                                                                                                                ; wait for 16-bit countdown
                                                                                                                                                ; reset game sequencer
                                                               ret
0000:0852
                                                              SUBROUTINE
0000:0852
0000:0852
0000:0852
0000:0852 21 00 74
0000:0852
                                                                                                                                                ; CODE XREF: 0000:0986 p; 0000:196B p
                                     clear_tiles_and_sprites:
                                                                ld
                                                                             \begin{array}{ccc} \text{hl, VRAM\_start} \\ \text{c, 4} \end{array}
0000:0855 OE 04
                                                                                                                                                ; 4x256 bytes to clear
                                                                ld
0000:0857
0000:0857
0000:0857
0000:0857 06 00
                                                                                                                                                ; CODE XREF: clear_tiles_and_sprites+E|j
                                     loc_0_857:
                                                                             b, 0
a, 10h
                                                                ld
                                                                                                                                                   256 bytes to clear
0000:0857 06 00
0000:0859 3E 10
0000:085B
0000:085B
0000:085B 77
                                                                14
                                                                                                                                                ; space character
                                                                                                                                                ; CODE XREF: clear_tiles_and_sprites+B|;
; display space
                                    loc_0_85B:
                                                                             (hl), a
                                                                ld
0000:085E 73
0000:085E 23
0000:085D 10 FC
0000:085F 0D
0000:0860 C2 57 08
0000:0863 21 00 69
0000:0866 0E 02
0000:0868
                                                                             h1
                                                               djnz
dec
                                                                             loc_0_85B
                                                                                                                                                ; clear 256 bytes
                                                                             nz, loc_0_857
                                                                                                                                                ; do 1024 bytes
                                                                jp
ld
                                                                             hl, soft_sprite_ram
c, 2
                                                                                                                                                ; 2x192 bytes to clear
                                                                                                                                                ; CODE XREF: clear_tiles_and_sprites+lE|j
; 192 bytes to clear
0000:0868
                                     loc 0 868:
0000:0868 06 C0
0000:086A AF
0000:086B
                                                                1d
                                                                             b, 192
                                                                xor
                                                                                                                                                ; CODE XREF: clear_tiles_and_sprites+1B|;
; clear soft sprite ram byte
; next address
0000:086B
                                     loc_0_86B:
0000:086B 77
0000:086C 23
0000:086D 10 FC
                                                               ld
inc
                                                                             (hl), a
                                                                djnz
                                                                             loc 0 86B
                                                                                                                                                ; clear 192 bytes
0000:086F 0D
0000:0870 C2 68 08
0000:0873 C9
0000:0873
                                                                jp
                                                                             nz, loc_0_868
                                                                                                                                                ; clear 384 bytes
                                                                ret
                                     ; End of function clear_tiles_and_sprites
0000:0873
0000:0874
0000:0874
                                     ; SUBROUTINE
0000:0874
0000:0874
0000:0874
0000:0874
0000:0874 21 04 74
                                                                                                                                                ; CODE XREF: 0000:01C3<sup>p</sup>; 0000:0795<sup>p</sup> ...
                                     clear_visible_area_and_sprites:
0000:0874
0000:0877 OE 20
0000:0879
0000:0879
                                                                1d
                                                                             hl, VRAM_start+4
c, 32
                                                                ld
                                                                                                                                                ; 32 columns
                                     loc 0 879:
                                                                                                                                                ; CODE XREF: clear visible area and sprites+12+j
0000:0879 06 1C
                                                                ld
                                                                             b, 28
                                                                                                                                                ; 28 rows
                                                                                                                                                ; <space>
; bottm-to-top next column increment
0000:087B 3E 10
0000:087D 11 04 00
0000:0880
0000:0880

0000:0880 77

0000:0881 10 FC

0000:0882 10 FC

0000:0884 19

0000:0885 0D

0000:0886 CZ 79 08

0000:0886 CZ 79 08

0000:0889 21 22 75

0000:0886 DE 0Z

0000:0887 DE 0Z

0000:0881 3E 10

0000:0883 3E 10
                                                                                                                                                ; CODE XREF: clear_visible_area_and_sprites+E|j
; display space character
; next line
; loop screen height
; next column
; done all columns?
; no, loop
                                     loc_0_880:
                                                                             (hl), a
                                                                ld
                                                                             hl
                                                                             loc_0_880
                                                                djnz
                                                                add
dec
                                                                             hl, de
                                                                             nz, loc_0_879
                                                                jp
ld
ld
ld
                                                                             hl, VRAM_start+122h de, 32
                                                                             c, 2
a, 10h
                                                                ld
                                                                                                                                                ; <space>
0000:0893
0000:0893
0000:0893 06 0E
                                     loc_0_893:
                                                                                                                                                ; CODE XREF: clear_visible_area_and_sprites+29\mid j ; 14 columns
                                                                ld
                                                                             b, 14
0000:0895
0000:0895
0000:0895 77
0000:0896 19
                                                                                                                                                ; CODE XREF: clear_visible_area_and_sprites+23|;
; display space character
; next column
; loop for 14 columns
                                     loc_0_895:
                                                                             (hl), a
hl, de
loc_0_895
                                                                add
0000:0896 19
0000:0897 10 FC
0000:0899 21 23 75
0000:0895 05
0000:0880 C2 93 08
0000:08A0 21 00 69
0000:08A3 36 00
0000:08A5 3E 00
                                                                dinz
                                                                ld
dec
                                                                             hl, VRAM_start+123h
                                                                            nz, loc_0_893
hl, soft_sprite_ram
b, 0
a, 0
                                                                                                                                                ; repeat at new location
                                                                jp
ld
                                                                ld
ld
                                                                                                                                                ; 256 bytes to clear ; clear to 0x00
                                                                                                                                                ; CODE XREF: clear_visible_area_and_sprites+35|;
; clear soft sprite ram byte;
; next location
; do 256 bytes
0000:08A7
0000:08A7 77
0000:08A8 23
0000:08A9 10 FC
                                     loc 0 8A7:
                                                                1d
                                                                             (hl), a
                                                                             loc 0 8A7
                                                                dinz
0000:08A9 10 FC
0000:08AB 06 80
0000:08AD
0000:08AD
                                                                lď
                                                                             b, 128
                                                                                                                                                ; 128 bytes to clear
                                                                                                                                                ; CODE XREF: clear_visible_area_and_sprites+3B|;
; clear soft sprite ram byte
                                     loc_0_8AD:
0000:08AD 77
                                                                1d
                                                                             (hl), a
0000:08AE 23
0000:08AF 10 FC
0000:08B1 C9
                                                                                                                                                ; next location
; clear 128 bytes
                                                                djnz
                                                                             loc_0_8AD
                                                                ret
                                     ; End of function clear_visible_area_and_sprites
0000:08B1
0000:08B1
0000:08B2
0000:08B2
                                                                          a, (main_sequencer)
28h
                                                                                                                                                ; DATA XREF: 0000:00CE10
0000:08B2
                                     vector_on_credit_sequencer:
0000:08B2 3A 0A 60
0000:08B5 EF
                                                               ld
rst
                                                                                                                                                ; go!
0000:08B5
                                                                .dw loc_0_8BA
0000:08B6 BA 08
                                                                                                                                                ; jump table
0000:08B8 F8 08
0000:08BA
                                                                .dw display_start_12P_init_???
0000:08BA
0000:08B
                                     loc_0_8BA:
                                                                                                                                                ; DATA XREF: 0000:08B61o
```

```
0000:08BA CD 74 08
                                                                         call
                                                                                        clear_visible_area_and_sprites
0000:08BD AF
0000:08BE 32 07 60
0000:08C1 11 0C 03
0000:08C4 CD 9F 30
0000:08C7 21 0A 60
0000:08CB CD 65 09
0000:08CB AF
 0000:08BD AF
                                                                         xor
                                                                         ld
ld
call
                                                                                        (attract_mode_flag), a de, 30Ch sub_0_309F
                                                                                                                                                                   ; clear attract mode flag
                                                                         ld
                                                                                        hl, main_sequencer (hl)
                                                                         inc
                                                                         call
                                                                                        sub_0_965
0000:08CE AF
0000:08CF 21 86 7D
0000:08D2 77
0000:08D3 2C
0000:08D4 77
                                                                         xor
                                                                                        a
hl, palette_bank
(hl), a
                                                                         1d
                                                                         ld
                                                                         inc
ld
                                                                                        (hl), a
                                                                                                                                                                     ; palette bank 0
 0000:08D5
0000:08D5
0000:08D5
                                                                        SUBROUTINE
 0000:08D5
0000:08D5
0000:08D5 0 04
0000:08D5 1E 09
0000:08D7 1E 09
0000:08D9 3A 01 60
0000:08DC FE 01
0000:08DE CA E4 08
0000:08E1 06 0C
                                          ; CODE XREF: 0000:08F8-p
                                                                                        e, return_if_attract_mode+1
                                                                                                                                                                     ; "ONLY 1 PLAYER BUTTON"
                                                                         ld
                                                                                        a, (no_of_credits)
                                                                                          z, loc_0_8E4
                                                                         jp
ld
                                                                                                                                                                    ; mask for START1/START2
; "1 or 2 PLAYERS"
                                                                                        b, 0Ch
                                                                         inc
 0000:08E3 1C
0000:08E4
0000:08E4 3A 1A 60
0000:08E7 E6 07
0000:08E7 C7 F3 08
0000:08EC 7B
0000:08ED CD E9 05
                                                                                                                                                                     ; CODE XREF: display_start_12P_get_selection+9<sup>†</sup>j
                                           loc_0_8E4:
                                                                                        a, (gen_purpose_timer)
                                                                         ld
                                                                         and
                                                                         jp
ld
                                                                                        nz, loc_0_8F3
                                                                                                                                                                    ; message 9/10
; display
                                                                                        a, e
print_message_A
                                                                         call
 0000:08F0 CD 16 06
0000:08F3
0000:08F3
0000:08F3 3A 00 7D
                                                                         call
                                                                                        display_credits
                                           loc_0_8F3:
                                                                                                                                                                     ; CODE XREF: display_start_12P_get_selection+14^j
                                                                         ld
                                                                                        a. (in2 snd latch)
                                                                                                                                                                     ; read IN2
 0000:08F6 A0
0000:08F7 C9
0000:08F7
                                                                                                                                                                     ; only START1/START2
                                                                         and
                                           ; End of function display_start_12P_get_selection
 0000:08F7
 0000:08F8
0000:08F8
0000:08F8
                                           display_start_12P_init_???
                                                                                                                                                                     ; DATA XREF: 0000:08B810
 0000:08F8 CD D5 08
0000:08FB FE 04
0000:08FD CA 06 09
0000:0900 FE 08
                                                                         call
                                                                                        display_start_12P_get_selection
                                                                                                                                                                     ; START1?
; yes, skip
; START2?
                                                                         ср
                                                                                         z, start_1_selected
                                                                         jр
0000:0900 FE 08 08 0000:0902 CA 19 09 0000:0905 C9 0000:0906 0000:0906 0000:0906 CD 77 09 0000:0906 CD 77 09 0000:0906 AF 0000:090F 0000:090F 0000:090F 77
                                                                         cp
jp
ret
                                                                                                                                                                     ; yes, skip
                                                                                        z, start_2_selected
                                           start_1_selected:
                                                                                                                                                                    ; CODE XREF: 0000:08FD1 i
                                                                         call
                                                                                         dec_credits_and_???
                                                                                        hl, p2_level_data
b, 8
                                                                         ld
                                                                         1d
0000:090F

0000:090F 77

0000:0911 10 FC

0000:0913 21 00 00

0000:0913 21 00 00

0000:0919 CD 77 09

0000:0919 CD 77 09

0000:0919 CD 77 09

0000:0915 11 48 60

0000:0925 12

0000:0925 12

0000:0926 1C

0000:0927 21 5E 09

0000:0927 21 5E 09
                                                                                                                                                                    ; CODE XREF: 0000:0911 j
                                           loc_0_90F:
                                                                         ld
                                                                                        (hl), a
                                                                         djnz
                                                                                         loc_0_90F
                                                                         ld
                                                                                        hl, 0
loc_0_938
                                                                         jp
                                                                                                                                                                    ; CODE XREF: 0000:09021j
                                           start_2_selected:
                                                                                        dec_credits_and_???
dec_credits_and_???
de, p2_level_data
a, (lives_per_game)
(de), a
                                                                         call
call
ld
                                                                         ld
                                                                         ld
inc
ld
                                                                                        e
hl, 95Eh
bc, 7
                                                                         1d
                                                                         ldir
                                                                         ld
call
                                                                                        de, 101h
                                                                                         sub 0 309F
 0000:0935 21 00 01
0000:0938
0000:0938
0000:0938
0000:0938 22 0E 60
0000:093B CD 74 08
0000:093B 11 40 60
0000:0941 3A 20 60
                                                                         ld
                                                                                        hl, 100h
                                                                                                                                                                    ; players=2, current_player=1
                                                                                                                                                                     ; CODE XREF: 0000:0916
                                          loc_0_938:
                                                                                         (current player E), hl
                                                                         ld
                                                                                                                                                                     ; players and current player
                                                                                        (current_player_B), ni
clear_visible_area_and_sprites
de, pl_level_data
a, (lives_per_game)
(de), a
                                                                         call
ld
ld
                                                                         1d
 0000:0944 12
 0000:0944 12

0000:0945 1C

0000:0946 21 5E 09

0000:0949 01 07 00

0000:094C ED B0

0000:094E 11 00 01

0000:0951 CD 9F 30

0000:0954 AF
                                                                         inc
ld
                                                                                        hl, game_init_data
bc, 7
                                                                                                                                                                    ; 7 bytes
                                                                         ld
ldir
                                                                         ld
call
                                                                                        de 100h
                                                                                        sub_0_309F
                                                                         xor
 0000:0954 AF
0000:0955 32 0A 60
0000:0958 3E 03
0000:095A 32 05 60
0000:095D C9
                                                                         1d
                                                                                        (main_sequencer), a
                                                                         ld
                                                                         ld
                                                                                        (nmi_sequencer), a
                                                                         ret
 0000:095D
0000:095D
0000:095E 01
0000:095E
                                                                                                                                                                     ; DATA XREF: 0000:0946†o
; Start of game level init data
                                           game_init_data: .db 1
                                                                         .dw level_seq_1
 0000:095F 65 3A
 0000:0961 01 00 00 00
0000:0965
0000:0965
                                                                         .db 1, 0, 0,
                                                                        SUBROUTINE
 0000:0965
 0000:0965
0000:0965
                                                                                                                                                                     ; CODE XREF: 0000:078B<sup>†</sup>p; 0000:08CB<sup>†</sup>p
                                           sub_0_965:
 0000:0965 11 00 04
 0000:0965
                                                                         ld
                                                                                        de, 400h
 0000:0968 CD 9F 30
0000:0968 I1 14 03
0000:096E 06 06
0000:0970
0000:0970
0000:0970 CD 9F 30
                                                                                        sub_0_309F
de, 314h
b, 6
                                                                         call
ld
                                                                         ld
                                                                                                                                                                    ; CODE XREF: sub_0_965+F|j
                                           loc_0_970:
                                                                         call
                                                                                        sub_0_309F
 0000:0973 1C
0000:0974 10 FA
                                                                         djnz
                                                                                        loc_0_970
```

```
0000:0976 C9
                                          ; End of function sub_0_965
 0000:0976
0000:0976
0000:0976
0000:0977
0000:0977
0000:0977
0000:0977
0000:0977
0000:0977 21 01 60
                                                      SUBROUTINE
                                                                                                                                                                     ; CODE XREF: 0000:0906†p; 0000:0919†p ...
                                          dec_credits_and_???:
                                                                                       hl, no_of_credits
a, 99h; 'Ö'
a, (hl)
                                                                         ld
0000:0977

0000:097A 3E 99

0000:097C 86

0000:097D 27

0000:097E 77

0000:097F 11 00 04

0000:0982 CD 9F 30

0000:0985 C9
                                                                         ld
                                                                         add
                                                                                                                                                                     ; decrement credits
                                                                         daa
                                                                                       (hl), a
de, 400h
sub_0_309F
                                                                         1d
                                                                                                                                                                     ; save
                                                                         call
                                                                         ret
0000:0985
0000:0985
0000:0986
                                           ; End of function dec_credits_and_???
0000:0986

0000:0986 CD 52 08

0000:0986 CD 1C 01

0000:0988 C1 182 7D

0000:098F 3E 01

0000:0991 12

0000:0992 21 0A 60

0000:0995 3A 0E 60

0000:0998 A7

0000:0999 C2 9F 09

0000:0999 C9 F 09

0000:0998 C9
 0000:0986
                                                                                                                                                                    ; DATA XREF: 0000:0702\dagger
                                          call
                                                                                        stop_sound
de, flipscreen
                                                                         ld
                                                                         ld
ld
                                                                                                                                                                     ; default flipscreen
                                                                                        hl, main_sequencer
a, (current_player_E)
a
                                                                         ld
                                                                         ld
                                                                                                                                                                     ; player 2?
; yes, skip
; ingame sequencer = 1
                                                                                        nz, loc_0_99F (hl), 1
                                                                         jp
ld
 0000:099E C9
0000:099F
0000:099F
                                                                                                                                                                     ; CODE XREF: 0000:09991j
                                          loc 0 99F:
 0000:099F
0000:099F 3A 26 60
0000:099A2 3D
0000:09A2 3D
0000:09A3 CA A8 09
0000:09A7 12
0000:09A8
0000:09A8
                                                                         ld
dec
jp
                                                                                                                                                                     ; get cabinet type
; upright?
; yes, skip
; disable flipscreen
                                                                                        a, (upright)
                                                                                        z, loc_0_9A8
                                                                         xor
                                                                         1d
                                                                                        (de), a
                                                                                                                                                                     ; to hardware
                                                                                                                                                                     ; CODE XREF: 0000:09A31j
                                          loc 0 9A8:
 0000:09A8 36 03
0000:09AA C9
0000:09AB
                                                                         ld
                                                                                        (hl), 3
                                                                                                                                                                     ; ingame sequencer =
 0000:09AB
                                          : DATA XREF: 0000:070410
 0000:09AB
0000:09AB

0000:09AB 21 40 60

0000:09AE 11 28 62

0000:09B1 01 08 00

0000:09B4 ED B0

0000:09B6 2A 2A 62

0000:09B9 7E
                                                                                       hl, p1_level_data
de, lives_left
bc, 8
                                                                                                                                                                    ; player_current_data
; 8 bytes to copy
                                                                         ld
                                                                         ldir
ld
ld
                                                                                        hl, (seq_data)
a, (hl)
                                                                                                                                                                     ; ptr current sequence table
; get level type
0000:0989 7E
0000:0988 32 27 62
0000:098B 3A 0F 60
0000:099C A7
0000:09C1 21 09 60
0000:09C1 21 09 60
0000:09C7 CA D0 09
0000:09CA 36 78
0000:09CC EB
0000:09CD 36 02
0000:09CP C9
0000:09DD
                                                                                        a, (hl)
(level_type), a
a, (two_players)
                                                                         ld
ld
                                                                                                                                                                     ; store as current
                                                                         and
ld
                                                                                                                                                                     ; 1 player?
                                                                                        hl, eight_bit_countdown
                                                                                       de, main_sequencer
z, loc_0_9D0
(hl), 78h; 'x'
de, hl
(hl), 2
                                                                         ld
jp
ld
                                                                                                                                                                     ; yes, skip
; set 8-bit countdown
                                                                         ex
ld
                                                                                                                                                                     ; next sequence (2)
 0000:09D0
 0000:09D0
0000:09D0 36 01
0000:09D2 EB
0000:09D3 36 05
                                                                                                                                                                     ; CODE XREF: 0000:09C7†j
                                          loc_0_9D0:
                                                                                        (hl), 1
de, hl
(hl), 5
                                                                         ld
                                                                                                                                                                     ; set 8-bit countdown
                                                                         ex
ld
                                                                                                                                                                     ; next sequence (5)
 0000:09D5 C9
0000:09D6
0000:09D6
0000:09D6
0000:09D6 AF
0000:09D6 AF
0000:09D7 32 86 7D
0000:09DD 11 02 03
0000:09E0 CD 9F 30
0000:09E5 CD 9F 30
                                                                                                                                                                     ; DATA XREF: 0000:070610
                                          loc_0_9D6:
                                                                         xor
ld
ld
                                                                                        (palette_bank), a
(palette_bank+1), a
                                                                                                                                                                    ; palette bank 0
                                                                         ld
                                                                                        de. 3021
                                                                                         sub_0_309F
                                                                         call
ld
                                                                                        de, 201h
sub_0_309F
                                                                         call
 0000:09E0 CD 9F 30
0000:09E9 3E 05
0000:09EB 32 0A 60
0000:09EE
                                                                         1d
                                                                                        (main_sequencer), a
                                                                         SUBROUTINE
 0000:09EE
 0000:09EE
0000:09EE
                                                                                                                                                                     ; CODE XREF: 0000:07A0|p; 0000:0A2E|p
                                          display_2UP:
 0000:09EE
0000:09EE 3E 02
0000:09EE 3E 02

0000:09EE 32 E0 74

0000:09F3 3E 25

0000:09F5 32 C0 74

0000:09F8 3E 20

0000:09FA 32 A0 74

0000:09FD C9
                                                                                                                                                                         12
                                                                         ld
ld
                                                                                         (VRAM_start+0E0h), a
                                                                                                                                                                     ; 'U'
                                                                                        (VRAM_start+0C0h), a
                                                                         1d
                                                                         ld
                                                                                                                                                                     ; 'P'
                                                                         ld
                                                                                        (VRAM_start+0A0h), a
                                                                         ret
 0000:09FD
0000:09FD
0000:09FE
                                           ; End of function display_2UP
0000:097E
0000:09FE
0000:09FE 21 48 60
0000:0A01 11 28 62
0000:0A04 01 08 00
0000:0A07 ED B0
0000:0A07 ED B0
0000:0A00 7E
0000:0A00 32 27 62
0000:0A10 3E 78
0000:0A15 3E 04
0000:0A15 3E 04
0000:0A15 3E 04
0000:0A16 C9
0000:0A18
 0000:09FE
                                          init_ingame_data_p2:
    ld
    ld
                                                                                                                                                                    ; DATA XREF: 0000:0708 o
                                                                                       hl, p2_level_data
de, lives_left
bc, 8
                                                                                                                                                                    ; player_current_data
; 8 bytes to copy
                                                                         ld
                                                                         ldir
ld
                                                                                        hl, (seq_data)
                                                                                                                                                                     ; ptr current seq table
                                                                                       a, (hl)
(level_type), a
a 78h; 'x'
                                                                         ld
                                                                                                                                                                     ; get level type
; store as current
                                                                         ld
                                                                         ld
ld
                                                                                                                                                                     ; init 8-bit countdown
                                                                                        a, /off / A
(eight_bit_countdown), a
                                                                                                                                                                    ; next sequence (4)
                                                                         ld
                                                                         14
                                                                                        (main_sequencer), a
 0000:0A1B
 0000:0A1B
                                          display_p2_screen?:
                                                                                                                                                                     ; DATA XREF: 0000:070A o
```

```
File: E:\Projects\pace\pacedev.net\sw\re\platform\dkong\dkong.lst 21/11/2013, 11:26:09 PM
0000:0A1B AF
0000:0A1C 32 86 7D
0000:0A1F 32 87 7D
0000:0A22 11 03 03
0000:0A25 CD 9F 30
                                                                                                       (palette_bank), a (palette_bank+1), a de, 303h sub_0_309F
                                                                                      1d
                                                                                     ld
ld
call
                                                                                                                                                                                               ; palette bank 0
0000:0A25 CD 9F 30

0000:0A28 11 01 02

0000:0A28 CD 9F 30

0000:0A2E CD EE 09

0000:0A31 3E 05

0000:0A33 32 0A 60

0000:0A36 C9

0000:0A37

0000:0A37
                                                                                      ld
                                                                                                        de, 201h
sub 0 309F
                                                                                     call
call
                                                                                                        display_2UP
                                                                                                       (main_sequencer), a
                                                                                      ld
0000:0A37
0000:0A37 11 04 03
0000:0A3A CD 9F 30
0000:0A3D 11 02 02
                                                 display_pl_screen?:
                                                                                                                                                                                                  ; DATA XREF: 0000:070C1o
                                                                                     ld
call
                                                                                                       de, 304h
sub_0_309F
                                                                                                       de.
                                                                                      ld
0000:0A3D 11 02 02
0000:0A40 CD 9F 30
0000:0A43 11 00 02
0000:0A46 CD 9F 30
0000:0A49 11 00 06
0000:0A4C CD 9F 30
0000:0A4F 21 0A 60
0000:0A52 34
                                                                                     call
ld
call
                                                                                                       sub_0_309F
de, 200h
sub_0_309F
                                                                                      1d
                                                                                                        de.
                                                                                                       sub_0_309F
hl, main_sequencer
(hl)
                                                                                      call
ld
                                                                                      inc
0000:0A53
                                                                                      SUBROUTINE
                                                                                                                                                                                                   ; CODE XREF: 0000:01F1 p
                                                 display_1UP:
                                                                                                                                                                                                  ; 0000:07981p
; '1'
                                                                                                        a, 1
(VRAM_start+340h), a
                                                                                      ld
0000:0A58 3E 25
0000:0A5A 32 20 77
0000:0A5D 3E 20
0000:0A5F 32 00 77
                                                                                      ld
                                                                                                        a, 25h ; '%'
(VRAM_start+320h), a
                                                                                                                                                                                                  7 '11'
                                                                                      ld
ld
                                                                                                        a, 2011 ,
(VRAM_start+300h), a
                                                                                      ld
                                                  ret ; End of function display_1UP
0000:0A5F 32
0000:0A62 C9
0000:0A62
0000:0A62
0000:0A63

0000:0A63

0000:0A63

0000:0A63

0000:0A64

0000:0A67

0000:0A67

0000:0A67

0000:0A60

0000:0A60

0000:0A60

0000:0A61

0000:0A71

0000:0A71

0000:0A73

0000:0A73

0000:0A75

0000:0A75

0000:0A75

0000:0A75

0000:0A75
0000:0A63
                                                                                                                                                                                                  ; DATA XREF: 0000:070E<sup>†</sup>o; wait for 8-bit countdown
                                                  wait_cls___:
                                                                                      rst
                                                                                                       clear_visible_area_and_sprites
hl, eight_bit_countdown
(hl), 1
                                                                                      call
                                                                                      ld
ld
                                                                                      inc
                                                                                                                                                                                                   ; game_sequencer
; inc
                                                                                                        (h1)
                                                                                      inc
                                                                                                       de, unk_0_622C
a, (de)
                                                                                      ld
ld
                                                                                                                                                                                                   ; already seen intro?
                                                                                      and
                                                                                     ret
inc
ret
                                                                                                                                                                                                   ; no, return
; skip intro sequence
0000:0A76
0000:0A76
0000:0A76
0000:0A76
0000:0A76 3A 85 63
                                                                                                                                                                                                   ; DATA XREF: 0000:0710 o
                                                  do_intro_sequence:
                                                                                                       a, (intro_sequencer)
                                                                                     ld
0000:0A76 3A 85
0000:0A79 EF
0000:0A78 8A 0A
0000:0A7C BF 0A
0000:0A7C E8 0A
0000:0A86 69 30
0000:0A84 69 30
                                                                                                       28h
                                                                                      rst
                                                                                                                                                                                                  ; go!
                                                                                      .dw draw_climb_screen
                                                                                                                                                                                                  ; Jump table
                                                                                      .dw loc_0_ABF
.dw loc_0_ABB
.dw loc_0_3069
.dw draw_lst_girder_dformation
.dw loc_0_3069
0000:0A86 68 0B
0000:0A88 B3 0B
0000:0A8A
                                                                                       .dw draw_rest_of_deformations
                                                                                      .dw growl
0000:0A8A
0000:0A8A
                                                  draw_climb_screen:
                                                                                                                                                                                                  ; DATA XREF: 0000:0A7A10
0000:0A8A AF
0000:0A8B 32 86 7D
                                                                                     xor
ld
                                                                                                        (palette_bank), a
0000:0A8E 3C
0000:0A8F 32 87 7D
0000:0A92 11 0D 38
0000:0A95 CD A7 0D
                                                                                      inc
                                                                                                       (palette_bank+1), a
de, draw_data_climb
sub_0_DA7
                                                                                      ld
ld
                                                                                                                                                                                                  ; palette bank 2
0000:0A95 CD A7 0D
0000:0A98 B 10
0000:0A98 32 A3 76
0000:0A90 32 A3 76
0000:0A00 3E D4
0000:0AA0 3E D4
0000:0AA5 AF
0000:0AA6 32 AF 62
0000:0AA6 32 AF 62
0000:0AA6 22 C2 63
0000:0AA6 21 CE 38
0000:0AB5 22 C4 63
0000:0AB5 32 40
0000:0AB7 32 09 60
0000:0AB7 32 09 60
0000:0ABB 21 85 63
                                                                                      call
                                                                                                                                                                                                  ; get address of ???
                                                                                     ld
ld
ld
                                                                                                       a, 10h
(VRAM_start+2A3h), a
(VRAM_start+263h), a
a, 0D4h; 'È'
                                                                                                                                                                                                  ; <space>
                                                                                     ld
ld
xor
ld
                                                                                                                                                                                                 ; half ladder, half girder
                                                                                                        (VRAM_start+1AAh), a
                                                                                                        (unk_0_62AF), a
                                                                                                      (unk_0_o,AAF), a
hl, dk_intro_jump_up_data
(unk_0_63C2), hl
hl, dk_intro_jump_across_data
(unk_0_63C4), hl
a, 40h; '@'
                                                                                      ld
                                                                                     ld
ld
ld
ld
                                                                                                       (eight_bit_countdown), a
hl, intro_sequencer
(hl)
                                                                                      ld
ld
                                                                                      inc
0000:0ABE C9
0000:0ABF
0000:0ABF
0000:0ABF
                                                                                      ret
                                                                                                                                                                                                   ; DATA XREF: 0000:0A7C\u00f30
0000:0ABF DF 0000:0A0F DF 0000:0AC0 21 8C 38 0000:0AC3 CD 4E 00 0000:0AC6 DF 0000:0AC6 FF 0000:0AC6 DF 9 0000:0ACF DF 0000:0ACF DF 0000:0AC7 DF 0000:0AC7 DF 0000:0AC7 DF 0000:0AC7 AF 0000:0AC7 AF 0000:0AC7 AF 0000:0AC7 AF
                                                  loc 0 ABF:
                                                                                     rst
ld
call
                                                                                                       18h
hl, kong_climbing_spr
                                                                                                                                                                                                  ; wait for 8-bit countdown
                                                                                                       copy_sprites_2_11_data
hl, soft_sprite_ram+8
c, 48
38h
                                                                                      1d
                                                                                                                                                                                                  ; sprite #2, y coord
                                                                                     ld
rst
ld
ld
                                                                                                                                                                                                  ; add 48 to y coord for 10 sprites ; sprite #2, x coord
                                                                                                       hl, soft_sprite_ram+0Bh
c, 153
                                                                                                       C, 1.
38h
1Fh
```

(unk_0_638E), a

(h1), 3 h1, intro_sequencer (h1)

(soft_sprite_ram+0Ch), a
hl, unk_0_608A
(hl), 1

ld xor

ld ld

ld inc

ld ld

0000:0AD7 AF 0000:0AD8 32 0C 69 0000:0ADB 21 8A 60 0000:0ADE 36 01 0000:0AE0 23 0000:0AE1 36 03 0000:0AE3 21 85 63

0000:0AE7 C9

```
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```

; add 153 to \boldsymbol{x} coord for 10 sprites

; sprite #3, y coord

```
0000:0AE8
0000:0AE8
0000:0AE8
                                           loc_0_AE8:
                                                                                                                                                                           ; DATA XREF: 0000:0A7E\0
0000:0AE8 CD 6F 30
0000:0AE8 CD 6F 30
0000:0AEB 3A AF 62
0000:0AEE E6 0F
0000:0AF0 CC 4A 30
0000:0AF3 3A 0B 69
0000:0AF6 FE 5D
                                                                                           sub_0_306F
a, (unk_0_62AF)
0Fh
                                                                            call
ld
and
                                                                                            z, sub_0_304A
a, (soft_sprite_ram+0Bh)
5Dh; ']'
                                                                            call
                                                                            ld
                                                                                                                                                                          ; sprite #2, x coord
                                                                            ср
0000:0AP6 FE 5D

0000:0AP8 D0

0000:0AF9 3E 20

0000:0AFB 32 09 60

0000:0APE 21 85 63

0000:0B01 34

0000:0B02 22 C0 63

0000:0B05 C9

0000:0B06
                                                                            ret
ld
ld
ld
                                                                                            nc
                                                                                                 20h :
                                                                                            a, 20h; '(eight_bit_countdown), a
                                                                                            hl, 6385h (hl)
                                                                            1d
                                                                                            (unk_0_63C0), hl
                                                                            ret
0000:0B06
0000:0B06
0000:0B06 3A 1A 60
0000:0B09 0F
                                            draw_1st_girder_dformation:
                                                                                                                                                                           ; DATA XREF: 0000:0A8210
                                                                                           a, (gen_purpose_timer)
                                                                            ld
                                                                            rrca
0000:0B0A D8
0000:0B0B 2A C2 63
0000:0B0E 7E
                                                                                            hl, (unk_0_63C2)
a, (hl)
7Fh; ''
                                                                            ld
0000:0B0F FE 7F
                                                                           cp
jp
inc
                                                                                           z, loc_0_B1E
0000:0B0F FE 7F
00000:0B11 CA 1E 0B
0000:0B14 23
0000:0B15 22 C2 63
0000:0B18 4F
0000:0B19 21 0B 69
0000:0B1C FF
0000:0B1D C9
                                                                                            (unk_0_63C2), hl
                                                                            ld
                                                                                            c, a
hl, 690Bh
38h
                                                                            14
                                                                            ld
0000:0B1E
0000:0B1E
0000:0B1E
                                           loc_0_B1E:
                                                                                                                                                                            ; CODE XREF: 0000:0B11↑j
0000:0B1E 21 5C 38
                                                                                           hl, kong_normal_spr
copy_sprites_2_11_data
de, soft_sprite_ram
bc, 8
                                                                            ld
0000:0B1E 21 5C 38
0000:0B21 CD 4E 00
0000:0B24 11 00 69
0000:0B27 01 08 00
                                                                            call
ld
ld
0000:0B27 01 08 00
0000:0B2A ED B0
0000:0B2C 21 08 69
0000:0B2F 0E 50
0000:0B31 FF
0000:0B35 0E FC
0000:0B37 FF
0000:0B38
0000:0B38
                                                                            ldir
                                                                            ld
ld
                                                                                            hl, soft_sprite_ram+8
c, 50h; 'P'
                                                                                                                                                                           ; sprite #2, y coord
                                                                                           c, 50h; 'P'
38h
hl, soft_sprite_ram+0Bh
c, 0FCh; '3'
38h
                                                                            rst
                                                                            ld
                                                                                                                                                                           ; sprite #2, x coord
                                                                            ld
rst
0000:0B38
                                            loc 0 B38:
                                                                                                                                                                           : CODE XREF: 0000:084014
0000:0B38 CD 4A 30
0000:0B3B 3A 8E 63
0000:0B3B FE 0A
0000:0B40 C2 38 0B
0000:0B43 3E 03
0000:0B45 32 82 60
                                                                                           sub_0_304A
a, (unk_0_638E)
0Ah
                                                                            call
ld
                                                                            cp
jp
ld
ld
                                                                                            nz, loc_0_B38
                                                                                                                                                                            ; tmr=3
                                                                                            a, 3
(digital_snd_tmr_thump), a
0000:0B48 11 2C 39
0000:0B4B CD A7 0D
0000:0B4E 3E 10
0000:0B50 32 AA 74
                                                                                            de, draw_data_bend_girders_1
sub_0_DA7
                                                                            1d
                                                                            call
ld
ld
                                                                                             a, 10h
(VRAM_start+0AAh), a
0000:0B50 32 AA 74
0000:0B58 32 BA 67
0000:0B58 3E 05
0000:0B5B 3E 20
0000:0B5B 3E 20
0000:0B5D 32 09 60
0000:0B60 21 85 63
0000:0B63 34
0000:0B64 22 C0 63
0000:0B68 0000:0B68
                                                                            ld
ld
ld
                                                                                            (VRAM_start+8Ah), a
                                                                                            a, 5
(unk_0_638D), a
                                                                            ld
                                                                                             (eight_bit_countdown), a
                                                                            ld
                                                                                            hl, 6385h
(hl)
                                                                            ld
                                                                                            (unk_0_63C0), hl
                                                                            1d
0000:0B68
                                            draw_rest_of_deformations:
                                                                                                                                                                            ; DATA XREF: 0000:0A86 o
0000:0B68 3A 1A 60
0000:0B6B 0F
0000:0B6C D8
                                                                            ld
                                                                                            a, (gen_purpose_timer)
                                                                            rrca
                                                                            ret
0000:0B6D 2A C4 63
0000:0B70 7E
0000:0B71 FE 7F
0000:0B73 CA 86 0B
                                                                                            hl, (unk_0_63C4)
a, (hl)
7Fh; ''
                                                                            1d
                                                                            ld
                                                                            ср
                                                                                           z, loc_0_B86
                                                                            jp
inc
0000:0B76 23
0000:0B77 22 C4 63
0000:0B7A 21 0B 69
0000:0B7D 4F
                                                                                           (unk_0_63C4), hl
hl, soft_sprite_ram+0Bh
c, a
38h
                                                                            ld
ld
                                                                                                                                                                          ; sprite #2, x coord
                                                                            ld
0000:0B7E FF
0000:0B7E FF
0000:0B7F 21 08 69
0000:0B82 0E FF
                                                                            rst
ld
                                                                                            hl, soft_sprite_ram+8
c, 0FFh
                                                                                                                                                                            ; sprite #2, y coord
                                                                            ld
                                                                                            c, 0
                                                                                                                                                                            ; subtract 1 from y coord for 10 sprites
0000:0B84 FF
                                                                            rst
0000:0B85 C9
0000:0B86
0000:0B86
0000:0B86
                                            loc_0_B86:
                                                                                                                                                                            ; CODE XREF: 0000:0B731i
0000:0B86 21 CB 38
0000:0B89 22 C4 63
0000:0B8C 3E 03
                                                                                            hl, dk_intro_jump_across_data
(unk_0_63C4), hl
                                                                            ld
ld
                                                                                                                                                                            ; tmr=3
                                                                                            a, 3
(digital_snd_tmr_thump), a
hl, draw_data_bend_girders_2
a, (unk_0_638D)
0000:0B8E 32 82 60
0000:0B91 21 DC 38
0000:0B94 3A 8D 63
0000:0B97 3D
                                                                            ld
ld
ld
                                                                            dec
0000:0B98 07
0000:0B98 07
0000:0B99 07
0000:0B9A 07
                                                                            rlca
rlca
rlca
0000:0B9B 07
                                                                            rlca
0000:0B9C 5F
0000:0B9D 16
0000:0B9F 19
                                                                            ld
ld
                                                                                            e, a d, 0 hl, de de, hl
                                                                            add
0000:0BA0 EB
                                                                            ex
0000:0BA1 CD A7 0D
0000:0BA4 21 8D 63
0000:0BA7 35
                                                                            call
ld
                                                                                            sub_0_DA7
hl, unk_0_638D
(hl)
                                                                            dec
0000:0BA8 C0
                                                                            ret
0000:0BA8 C0
0000:0BA9 3E B0
0000:0BAB 32 09 60
0000:0BAE 21 85 63
0000:0BB1 34
0000:0BB2 C9
0000:0BB3
                                                                            ld
ld
                                                                                            a, OBOh; '\" (eight_bit_countdown), a
                                                                                            hl, intro_sequencer (hl)
                                                                            ld
0000:0BB3
                                            growl:
0000:0BB3
                                                                                                                                                                             ; DATA XREF: 0000:0A8810
```

0000:0C67 DD 77 20

```
0000:0BB3 21 8A 60
                                                                                           hl, unk_0_608A
                                                                                           a, (eight_bit_countdown)
90h; 'É'
nz, loc_0_BC8
(hl), OFh
0000:0BB6 3A 09 60
                                                                            ld
0000:0BB6 3A 09
0000:0BB9 FE 90
0000:0BBB 20 0B
0000:0BBD 36 0F
                                                                            cp
jr
ld
0000:0BBF 23
                                                                            inc
                                                                                           hl
0000:0BC0 36 03
0000:0BC2 21 19 69
0000:0BC5 34
0000:0BC6 18 09
                                                                            ld
                                                                                            (hl),
                                                                                           hl, soft_sprite_ram+19h (hl)
                                                                            ld
                                                                                                                                                                          ; sprite #6, flipy & code
                                                                            inc
                                                                                           loc 0 BD1
                                                                            jr
0000:0BC8
0000:0BC8
0000:0BC8
                                            loc_0_BC8:
                                                                                                                                                                           ; CODE XREF: 0000:0BBB<sup>†</sup>j
0000:0BC8 FE 18
0000:0BCA 20 05
0000:0BCC 21 19 69
0000:0BCF 35
                                                                                           18h
nz, loc_0_BD1
hl, soft_sprite_ram+19h
(hl)
                                                                            cp
jr
ld
                                                                                                                                                                           ; sprite #6, flipy & code
                                                                            dec
0000:0BD0 00
0000:0BD1
0000:0BD1
                                                                            nop
                                                                                                                                                                            ; CODE XREF: 0000:0BC6<sup>†</sup>j; 0000:0BCA<sup>†</sup>j
                                            loc_0_BD1:
0000:0BD1 DF
0000:0BD1 DF
0000:0BD2 AF
0000:0BD3 32 85 63
0000:0BD6 34
0000:0BD7 23
0000:0BD8 34
                                                                            rst
xor
                                                                                           18h
                                                                                                                                                                            ; wait for 8-bit countdown
                                                                                            a
(intro_sequencer), a
                                                                            1d
                                                                            inc
0000:0BD9 C9
                                                                            ret
0000:0BDA
0000:0BDA
0000:0BDA
0000:0BDA CD 1C 01
                                           draw_how_high_can_you_get:
                                                                                                                                                                            ; DATA XREF: 0000:0712<sup>†</sup>o
                                                                                           stop_sound
0000:0BDA CD 1C 01

0000:0BDD DF

0000:0BDE CD 74 08

0000:0BE1 16 06

0000:0BE3 3A 00 62

0000:0BE6 5F

0000:0BE7 CD 9F 30

0000:0BE7 26 7D

0000:0BED 36 01

0000:0BEF 23
                                                                            rst
                                                                                                                                                                           ; wait for 8-bit countdown
                                                                            call
ld
ld
                                                                                            clear_visible_area_and_sprites
                                                                                           d, 6
a, (mario_alive_flag)
e, a
                                                                            ld
                                                                            call
ld
                                                                                            sub_0_309F
                                                                                           hl, palette_bank (hl), 1
                                                                            ld
                                                                            inc
ld
                                                                                           hl (hl), 0
0000:0BEF 23
0000:0BF0 36 00
0000:0BF2 21 8A 60
0000:0BF5 36 02
0000:0BF7 23
0000:0BF8 36 03
0000:0BFA 21 A7 63
                                                                                           hl, unk_0_608A
(hl), 2
                                                                            ld
ld
                                                                            inc
                                                                                           hl (hl),
                                                                                           hl, unk_0_63A7
(hl), 0
hl, VRAM_start+2DCh
(unk_0_63A8), hl
a, (unk_0_622E)
                                                                            ld
                                                                            14
0000:0BFD 36 00
0000:0BFF 21 DC 76
0000:0C02 22 A8 63
0000:0C05 3A 2E 62
0000:0C08 FE 06
0000:0C0A 38 05
0000:0C0C 3E 05
                                                                            ld
ld
ld
                                                                            cp
jr
ld
                                                                                            c, loc_0_C11
                                                                                           (unk_0_622E), a
0000:0C0E 32 2E 62
0000:0C0E 32 2E 62
0000:0C11
0000:0C11 47
0000:0C15 3A 2A 62
0000:0C18 B8
0000:0C18 21 2E 62
0000:0C1B 34
0000:0C1B 34
0000:0C1B 34
0000:0C1F
                                                                            1d
                                                                                                                                                                          ; CODE XREF: 0000:0C0Afj
                                            loc_0_C11:
                                                                            ld
                                                                                           a, (unk_0_622F)
                                                                            ld
ld
cp
                                                                                           b, a
a, (seq_data)
b
                                                                                           z, loc_0_C1F
                                                                            jr
ld
                                                                                           , ioc_U_C1F
h1, unk_0_622E
(h1)
0000:0C1F
0000:0C1F 32 2F 62
0000:0C22 3A 2E 62
0000:0C25 47
                                            loc_0_C1F:
                                                                                                                                                                          ; CODE XREF: 0000:0C19†j
                                                                            14
                                                                                           (unk_0_622F)
                                                                                            a, (unk_0_622E)
                                                                            ld
0000:0C25 47
0000:0C26 21 BC 75
                                                                                           hl, VRAM start+1BCh
                                                                           ld
0000:0029
0000:0C29
0000:0C29
0000:0C29 0E 50
                                                                                                                                                                           ; CODE XREF: 0000:0C7F|j
                                            loc_0_C29:
                                                                                           c, 50h; 'P'
                                                                           ld
0000:0C2B
0000:0C2B
0000:0C2B 71
0000:0C2C 0C
                                            loc_0_C2B:
                                                                                                                                                                           ; CODE XREF: 0000:0C40-j
                                                                            ld
                                                                                           (hl), c
                                                                            inc
0000:0C2D 2B
0000:0C2E 71
0000:0C2F 0C
                                                                            dec
                                                                                           h1
                                                                            ld
                                                                                            (hl), c
                                                                            inc
0000:0C22
0000:0C30
0000:0C31
71
0000:0C32
0C
0000:0C33
2B
                                                                            dec
                                                                                           hl
                                                                            ld
inc
dec
                                                                                            (hl), c
                                                                                           hl
                                                                            ld
                                                                                            (hl), c
0000:0C34 71
0000:0C35 79
0000:034 71
0000:035 79
0000:036 FE 67
0000:038 CA 43 0C
0000:038 C 12 23 00
0000:035 11 23 00
0000:035 19
0000:040 C3 2B 0C
                                                                            ld
cp
                                                                                            z, loc_0_C43
                                                                            jp
inc
                                                                                           de, 23h; '#'
hl, de
loc_0_C2B
                                                                            ld
                                                                            jр
0000:0C43
0000:0C43
0000:0C43
0000:0C43 3A A7 63
                                            loc_0_C43:
                                                                                                                                                                            ; CODE XREF: 0000:0C38†j
                                                                            ld
                                                                                           a, (unk 0 63A7)
0000:0C43 3A A7 03
0000:0C46 3C
0000:0C47 32 A7 63
0000:0C4A 3D
                                                                            inc
ld
                                                                                             (unk_0_63A7), a
0000:0C4B CB 27
                                                                            sla
0000:0C4B CB 27

0000:0C4D CB 27

0000:0C4F E5

0000:0C50 21 F0 3C

0000:0C53 D 2A A8 63

0000:0C54 DD 2A A8 63

0000:0C58 4F

0000:0C59 06 00
                                                                            sla
                                                                            push
ld
                                                                                           hl, draw data how high
                                                                            push
ld
ld
                                                                                           bc
                                                                                            ix, (unk_0_63A8)
                                                                                           c, a
b, 0
hl, bc
a, (hl)
(ix+60h), a
                                                                            ld
0000:0C5B 09
                                                                            add
                                                                            ld
ld
0000:0C60 23
0000:0C61 7E
                                                                                           hl
a, (hl)
(ix+40h), a
                                                                            inc
                                                                            ld
0000:0C61 7E
0000:0C62 DD 77 40
0000:0C65 23
0000:0C66 7E
                                                                            ld
                                                                                           hl
a, (hl)
                                                                            1d
                                                                                            a, (hl)
(ix+20h), a
```

```
0000:0C6A DD 36 E0 8B
                                                                                     (ix-20h), 8Bh; 'i'
                                                                      ld
                                                                     pop
push
0000:0C6E C1
                                                                                    bc
0000:0C6F DD E5
                                                                     pop
ld
0000:0C6F BB
0000:0C71 E1
0000:0C72 11
0000:0C75 19
                  11 FC FF
                                                                                    de, OFFFCh
                                                                      add
                                                                                    hl,
                                                                                           de
0000:0C76 22 A8 63
                                                                      ld
                                                                                     (unk_0_63A8), hl
0000:0C76 22 A8 63
0000:0C79 E1
0000:0C7A 11 5F FF
0000:0C7D 19
                                                                     pop
ld
                                                                                    de, OFF5Fh
                                                                      add
                                                                                    hl, de
                                                                     dec
jp
ld
0000:0C7E 05
                                                                                    b
0000:0C7E 03
0000:0C7F C2 29 0C
0000:0C82 11 07 03
                                                                                    nz, loc_0_C29
                                                                                    de, 307h
0000:0C85 CD 9F 30
0000:0C88 21 09 60
0000:0C8B 36 A0
0000:0C8D 23
                                                                     call
ld
ld
                                                                                    sub_0_309F
hl, eight_bit_countdown
(hl), 0A0h; 'á'
                                                                      inc
                                                                                    hl
0000:0C8E 34
                                                                      inc
                                                                                     (hl)
0000:0C8E 34
0000:0C8F 34
0000:0C90 C9
0000:0C91
0000:0C91
0000:0C91 DF
                                                                      ret
                                        wait_init_and_draw_level:
                                                                                                                                                              ; DATA XREF: 0000:0716 o ; wait for 8-bit countdown
                                                                     rst
0000:0C92
0000:0C92

0000:0C92 CD 74 08

0000:0C95 AF

0000:0C95 G32 8C 63

0000:0C95 J1 01 05

0000:0C95 D 9F 30

0000:0C95 D 9F 30

0000:0CA2 36 00

0000:0CA3 36 01

0000:0CA5 36 01

0000:0CA5 36 26
                                                                                                                                                              ; CODE XREF: 0000:0776<sup>†</sup> †
                                        init_and_draw_level:
                                                                     call
                                                                                    clear_visible_area_and_sprites
                                                                     xor
                                                                      14
                                                                                     (bonus timer), a
                                                                                                                                                              ; init bonus timer
                                                                                    de, 501h
sub_0_309F
                                                                     call
                                                                                    hl, palette_bank (hl), 0
                                                                     ld
inc
ld
ld
                                                                                    hl
(hl)
                                                                                                                                                              ; select palette bank 1
                                                                                    a, (level_type)
0000:0CAA 3D
0000:0CAB CA D4 0C
0000:0CAE 3D
0000:0CAF CA DF 0C
                                                                      dec
                                                                                                                                                              ; barrel level?
                                                                                                                                                             ; barrel level?
; yes, skip
; cement pie level?
; yes, skip
; elevator level?
; yes, skip
                                                                      jp
dec
                                                                                     z, draw_barrel_level
                                                                     jp
dec
jp
call
                                                                                    z, draw_cement_pie_level
0000:0CAF CA DF 0C
0000:0CB2 3D
0000:0CB3 CA F2 0C
0000:0CB6 CD 43 0D
0000:0CB9 21 86 7D
0000:0CB2 36 01
0000:0CB2 36 01
0000:0CB3 38 0B
0000:0CC0 32 89 60
0000:0CC3 11 88 3C
                                                                                     z, draw_elevator_level
                                                                                    sub_0_D43
                                                                                    hl, palette_bank (hl), 1
a, 0Bh
                                                                      ld
ld
                                                                                                                                                              ; select palette bank 3
                                                                                    (unk_0_6089), a
de, rivet_level_tilemap_data
                                                                      ld
                                                                      14
0000:0CC3 11 8B 3C
0000:0CC6
0000:0CC6 CD A7 0D
0000:0CC6 CD A7 62
0000:0CC9 3A 27 62
0000:0CC9 FE 04
0000:0CCE CC 00 0D
0000:0CD1 C3 A0 3F
0000:0CD4
                                        draw_level_tilemap:
                                                                                                                                                              ; CODE XREF: 0000:0CDC/j
                                                                                    sub_0_DA7
a, (level_type)
4
                                                                                                                                                              ; 0000:0CEF+j ...
                                                                      call
                                                                                                                                                              ; draw screen
                                                                      ld.
                                                                                                                                                             ; rivets?
; yes, call
                                                                      ср
                                                                                        . draw rivets
                                                                      call
                                                                      jp
                                                                                    loc_0_3FA0
0000:0CD4
0000:0CD4 11 E4 3A
0000:0CD7 3E 08
0000:0CD9 32 89 60
                                         draw_barrel_level:
                                                                                                                                                              ; CODE XREF: 0000:0CAB<sup>†</sup> i
                                                                                    de, barrel_level_tilemap_data
                                                                                     (unk_0_6089),
                                                                      ld
0000:0CDF 32 39 00
0000:0CDF 0000:0CDF
                                                                      jр
                                                                                    draw_level_tilemap
                                        draw_cement_pie_level:
                                                                                                                                                              ; CODE XREF: 0000:0CAF^i
0000:0CDF
0000:0CDF 11 5D 3B
0000:0CE2 21 86 7D
0000:0CE5 36 01
0000:0CE7 23
                                                                                    de, cement_pie_level_tilemap_data
hl, palette_bank
(hl), 1
                                                                      14
                                                                     ld
ld
                                                                      inc
                                                                                    hl
0000:0CE7 23
0000:0CE8 36 00
0000:0CEA 3E 09
0000:0CEC 32 89 60
                                                                                     (hl), 0
                                                                      ld
                                                                      ld
                                                                                     (unk_0_6089),
                                                                      ld
0000:0CEF C3 C6 0C
0000:0CF2
0000:0CF2
0000:0CF2
                                                                      jp
                                                                                    draw level tileman
                                                                                                                                                              ; CODE XREF: 0000:0CB31i
                                        draw elevator level:
0000:0CF2 CD 27 0D
0000:0CF5 3E 0A
0000:0CF7 32 89 60
0000:0CFA 11 E5 3B
                                                                     call
ld
ld
                                                                                    sub_0_D27
                                                                                    a, 0Ah
(unk_0_6089), a
de, elevator_level_tilemap_data
                                                                      ld
0000:0CFD C3 C6 0C
0000:0D00
0000:0D00
                                                                      jp
                                                                     SUBROUTINE
0000:0D00
0000:0D00
0000:0D00
0000:0D00
0000:0D00 06 08
0000:0D02 21 17 0D
                                                                                                                                                                 CODE XREF: 0000:0CCE↑p
                                        draw_rivets:
                                                                                    b, 8
hl, rivet_loc_tbl
                                                                      ld
ld
                                                                                                                                                              ; 8 rivets
0000:0D02 21 17
0000:0D05
0000:0D05
0000:0D05 3E B8
                                                                                                                                                              ; CODE XREF: draw_rivets+14|j
; top of rivet tile
; 2 tiles/rivet (vertical)
                                         loc_0_D05:
                                                                                    a, 0B8h ; '©
                                                                      ld
0000:0D07 0E 02
0000:0D09 5E
0000:0D0A 23
0000:0D0B 56
                                                                      1d
                                                                                    c,
e,
hl
                                                                                          (hl)
                                                                      ld
                                                                                    d, (hl)
                                                                      ld
0000:0D0C 23
0000:0D0D
0000:0D0D
                                                                      inc
                                                                                    hl
                                                                                                                                                              ; get VRAM location
                                        loc_0_D0D:
                                                                                                                                                              ; CODE XREF: draw_rivets+11|j
                                                                                                                                                              ; draw rivet tile
; next rivet tile
; next VRAM location
0000:0D0D 12
                                                                      1d
                                                                                    (de), a
0000:0D0D 12
0000:0D0E 3D
0000:0D0F 13
0000:0D10 0D
0000:0D11 C2 0D 0D
0000:0D14 10 EF
0000:0D16 C9
                                                                     dec
                                                                                                                                                              ; done a rivet?
; no, loop
; loop through 8 rivets
                                                                      dec
                                                                      jр
                                                                                    nz. loc 0 D0D
                                                                      djnz
                                                                                    loc_0_D05
                                                                      ret
                                        ; End of function draw_rivets
0000:0D16
0000:0D16
0000:0D17 CA 76
0000:0D17
                                                                                                                                                              ; DATA XREF: draw_rivets+2\u00e10
                                        rivet_loc_tbl: .dw VRAM_start+2CAh
                                                                                                                                                              ; Rivets level, location of rivets
 0000:0D19 CF 76
                                                                      .dw VRAM start+2CFh
0000:0D19 CF 70
0000:0D1B D4 76
0000:0D1D D9 76
                                                                      .dw VRAM_start+2D4h
.dw VRAM_start+2D9h
0000:0D1F 2A 75
0000:0D21 2F 75
                                                                      .dw VRAM_start+12Ah
.dw VRAM_start+12Fh
```

```
0000:0D23 34 75
0000:0D25 39 75
0000:0D27
0000:0D27
0000:0D27
                                                                 .dw VRAM_start+134h
                                                                 .dw VRAM start+139h
                                                                SUBROUTINE
0000:0D27
0000:0D27
0000:0D27 21 0D 77
0000:0D2A CD 30 0D
                                     sub_0_D27:
                                                                                                                                                  ; CODE XREF: 0000:0CF21p
                                                                              hl, VRAM_start+30Dh
sub_0_D30
                                                                call
                                     1d h1, VRAM_start+20Dh; End of function sub_0_D27
0000:0D2D 21 0D 76
0000:0D2D
0000:0D2D
0000:0D30
0000:0D30
0000:0D30
0000:0D30
0000:0D30
                                                               S U B R O U T I N E
                                     sub 0 D30:
                                                                                                                                                  ; CODE XREF: sub 0 D27+31p
0000:0330

0000:0330

0000:0332

0000:0332

0000:0332

36 FD

0000:0335 10 FB

0000:0337 11 0F 00

0000:033A 19
                                                                ld
                                                                              b, 11h
                                     loc_0_D32:
                                                                                                                                                  ; CODE XREF: sub_0_D30+5|j
                                                                              (hl), OFDh; '2'
                                                                 1d
                                                                              hl
loc_0_D32
                                                                 djnz
                                                                 ld
                                                                              de, OFh
hl, de
                                                                 add
0000:0D3A 19
0000:0D3B 06 11
0000:0D3D
                                                                 ld
0000:0D3D
                                                                                                                                                 ; CODE XREF: sub 0 D30+10-j
                                     loc 0 D3D:
0000:0D3D
0000:0D3D 36 FC
0000:0D3F 23
0000:0D40 10 FB
0000:0D42 C9
                                                                              (hl), OFCh; '3'
                                                                14
                                                                inc
djnz
                                                                              hl
loc_0_D3D
                                                                 ret
0000:0D42
0000:0D42
0000:0D43
0000:0D43
                                      ; End of function sub_0_D30
                                                               SUBROUTINE
0000:0D43
0000:0D43
0000:0D43
                                     sub_0_D43:
                                                                                                                                                  ; CODE XREF: 0000:0CB6†p
0000:0D43 21 87 76
0000:0D46 CD 4C 0D
0000:0D49 21 47 75
0000:0D49
0000:0D49
                                                                ld
                                                                              hl. VRAM start+287h
                                     call sub_0_D4C
ld hl, VRAM_start+147h
; End of function sub_0_D43
0000:0D4C
                                                               SUBROUTINE
0000:0D4C
0000:0040
0000:0D4C
0000:0D4C
0000:0D4C 06 04
                                                                                                                                                  ; CODE XREF: sub_0_D43+3\p
                                     sub_0_D4C:
                                                                              b, 4
                                                                 ld
0000:0D4E
0000:0D4E
0000:0D4E 36 FD
0000:0D50 23
                                     loc_0_D4E:
                                                                                                                                                  ; CODE XREF: sub_0_D4C+5|j
                                                                 ld
                                                                               (hl), OFDh ; '2'
                                                                 inc
                                                                              hl
0000:0D51 10 FB
0000:0D53 11 1C 00
0000:0D56 19
0000:0D57 06 04
                                                                              loc_0_D4E
                                                                djnz
ld
add
ld
                                                                              de, 1Ch
hl, de
b, 4
0000:0D57 06 04

0000:0D59

0000:0D59 36 FC

0000:0D5E 23

0000:0D5E C9

0000:0D5E C9

0000:0D5E
                                     loc_0_D59:
                                                                                                                                                 ; CODE XREF: sub_0_D4C+10|j
                                                                 ld
                                                                              (hl), OFCh; '3'
                                                                              hl
                                                                              loc 0 D59
                                                                dinz
                                     ret; End of function sub_0_D4C
0000:0D5F
0000:0D5F
0000:0D5F
                                      loc_0_D5F:
                                                                                                                                                  ; CODE XREF: 0000:3FA3|j
0000:0D5F
0000:0D5F CD 56 0F
0000:0D62 CD 41 24
0000:0D65 21 09 60
0000:0D68 36 40
                                                                              loc_0_F56
sub_0_2441
hl, eight_bit_countdown
(hl), 40h; '@'
                                                                 call
                                                                 call
ld
ld
0000:0D6A 23
0000:0D6B 34
0000:0D6C 21 5C 38
0000:0D6F CD 4E 00
                                                                 inc
                                                                              h1
                                                                              n1 (h1)
h1, kong_normal_spr
copy_sprites_2_11_data
de, soft_sprite_ram
bc, 8
                                                                ld
call
0000:005F CD 4E 00
0000:0072 11 00 69
0000:0075 01 08 00
0000:0078 ED B0
0000:007A 3A 27 62
0000:007D FE 04
0000:007F 28 0A
0000:008B 0F
                                                                                                                                                  ; sprites 0,1
; 8 bytes to copy
; copy pauline sprite
                                                                 ld
                                                                ld
ldir
                                                                              a, (level_type)
                                                                 ld
                                                                 cp
jr
                                                                                                                                                  ; rivets?
; yes, skip
                                                                              z, loc_0_D8B
                                                                 rrca
                                                                                                                                                   ; level 2/3?
0000:0D82 OF
                                                                 rrca
0000:0D83 D8
0000:0D84 21 0B 69
0000:0D87 0E FC
0000:0D89 FF
                                                                 ret
ld
                                                                                                                                                      yes, return sprite #2, x coord
                                                                              hl, soft_sprite_ram+0Bh
                                                                              c, 0FCh ;
38h
                                                                 ld
                                                                                                                                                   ; subtract 4 from x coord for 10 sprites
                                                                 rst
0000:0D8A C9
0000:0D8B
0000:0D8B
                                                                                                                                                  ; CODE XREF: 0000:0D7F<sup>†</sup>j; sprite #2, xcoord
0000:0D8B
                                     loc 0 D8B:
                                                                              hl, soft_sprite_ram+8
c, 68
38h
0000:0D8B 21 08 69
0000:0D8E 0E 44
0000:0D90 FF
                                                                 ld
                                                                 ld
                                                                                                                                                  ; add 68 to x coord for 10 sprites
                                                                 rst
0000:0D90 PP
0000:0D91 11 04 00
0000:0D94 01 10 02
0000:0D97 21 00 69
                                                                ld
ld
ld
                                                                              de, 4
bc, 210h
hl, soft_sprite_ram
                                                                                                                                                  ; sprite #0, y coord
0000:0D9A CD 3D 00
                                                                 call
                                                                              loc 0 3D
0000:0D9D 01 F8 02
0000:0DAO 21 03 69
0000:0DA3 CD 3D 00
0000:0DA6 C9
                                                                              bc, 2F8h
hl, soft_sprite_ram+3
                                                                 1d
                                                                 ld
                                                                                                                                                  ; sprite #0, x coord
                                                                 call
                                                                              loc 0 3D
                                                                 ret
0000:0DA7
0000:0DA7
                                                                  SUBROUTINE
0000:0DA7
0000:0DA7
                                                                                                                                                     CODE XREF: 0000:0A95<sup>p</sup>
0000:0B4B<sup>p</sup> ...
get flag/tile
0000:0DA7
0000:0DA7 1A
                                     sub_0_DA7:
0000:0DA7
                                                                 ld
                                                                                   (de)
0000:0DA7
0000:0DA8 32 B3 63
0000:0DAB FE AA
0000:0DAD C8
                                                                ld
cp
                                                                               (unk_0_63B3), a
                                                                                                                                                      store for later
                                                                                                                                                   ; done?
; yes, return
; next table address
                                                                               OAAh ;
                                                                 ret
0000:0DAE 13
                                                                              de
                                                                              a, (de)
0000:0DAF 1A
                                                                 ld
                                                                                                                                                   ; get byte
```

```
0000:0DB0 67
                                                                                        h, a
b, h
de
0000:0DB1 44
                                                                          1d
                                                                                                                                                                         B=bvte1
0000:0DB1 44
0000:0DB2 13
0000:0DB3 1A
0000:0DB4 6F
                                                                          inc
ld
ld
                                                                                                                                                                       i next table address
i get byte
i L=byte2
                                                                                       a, (c
1, a
                                                                                              (de)
0000:0DB5
                   4D
                                                                          ld
                                                                                                                                                                      ; C=byte2
0000:0DB6 D5
0000:0DB7 CD F0 2F
0000:0DBA D1
                                                                          push
call
                                                                                        de
                                                                                         sub_0_2FF0
                                                                          pop
ld
                                                                                         de
                                                                                         (unk_0_63AB), hl
0000:0DBB 22 AB 63
0000:0DBE 78
                                                                          ld
                                                                                         a, b
0000:0DBE 78
0000:0DBF E6 07
0000:0DC1 32 B4 63
0000:0DC4 79
0000:0DC5 E6 07
0000:0DC7 32 AF 63
                                                                          and
ld
                                                                                         (unk_0_63B4), a
                                                                          ld
and
                                                                          ld
                                                                                          (unk_0_63AF), a
                                                                          inc
                                                                                        de
0000:0DCA 13
0000:0DCB 1A
0000:0DCC 67
0000:0DCD 90
0000:0DCE D2 D3 0D
0000:0DD1 ED 44
0000:0DD3
0000:0DD3
                                                                                        a, (de)
h, a
                                                                          1d
                                                                          sub
                                                                          jp
neg
                                                                                        nc. loc 0 DD3
                                          loc 0 DD3:
                                                                                                                                                                     ; CODE XREF: sub 0 DA7+271
0000:0DD3 32 B1 63
                                                                         ld
                                                                                         (unk_0_63B1), a
0000:0DD5 32
0000:0DD6 13
0000:0DD7 1A
0000:0DD8 6F
                                                                                        de
a, (de)
1, a
                                                                          inc
ld
                                                                          1d
0000:0DD9 91
0000:0DDA 32 B2 63
0000:0DDD 1A
0000:0DDE E6 07
                                                                                        (unk_0_63B2), a
a, (de)
                                                                          sub
                                                                          ld
ld
                                                                          and
0000:0DE0 32 B0 63
0000:0DE3 D5
0000:0DE4 CD F0 2F
0000:0DE7 D1
                                                                                          (unk_0_63B0), a
                                                                          1d
                                                                         push
call
                                                                                        de
sub_0_2FF0
                                                                          pop
ld
                                                                                         de
0000:0DE8 22 AD 63
0000:0DEB 3A B3 63
0000:0DEE FE 02
0000:0DF0 F2 4F 0E
                                                                                         (unk_0_63AD), hl
                                                                                        a, (unk_0_63B3)

2
                                                                          ср
                                                                                        a, (unk_0_63B2)
10h
                                                                          jp
ld
0000:0DF0 F2 4F 0E
0000:0DF9 3A B2 63
0000:0DF6 D6 10
0000:0DF8 3A AF 63
0000:0DF9 3A AF 63
0000:0DFD 32 B2 63
0000:0DF0 3A AF 63
                                                                         sub
ld
ld
                                                                                        b, a
a, (unk_0_63AF)
a, b
(unk_0_63B2), a
                                                                          add
ld
                                                                          ld
                                                                                        a, (unk_0_63AF)
a, 0F0h; '-'
                                                                          add
0000:0E03 C6 F0
0000:0E05 2A AB 63
0000:0E08 77
                                                                          ld
ld
                                                                                        hl, (unk_0_63AB)
(hl), a
0000:0E09 2C
                                                                          inc
0000:0E0A D6 30
0000:0E0C 77
0000:0E0D 3A B3 63
                                                                          sub
1d
                                                                                         30h ; '0'
                                                                                        (hl), a
a, (unk_0_63B3)
                                                                          ld
0000:0E10 FE 01
0000:0E12 C2 19 0E
0000:0E15 AF
0000:0E16 32 B2 63
                                                                          cp
jp
                                                                                        nz, loc_0_E19
                                                                          xor
ld
                                                                                        a
(unk_0_63B2), a
0000:0E19
0000:0E19
0000:0E19 3A B2 63
0000:0E19
                                                                                                                                                                      ; CODE XREF: sub_0_DA7+6B<sup>†</sup>j; sub_0_DA7+80<sup>†</sup>j
                                           loc_0_E19:
                                                                                        a, (unk_0_63B2)
                                                                          ld
0000:0E19
                                                                          sub
0000:0E1C D6 08

0000:0E1E 32 B2 63

0000:0E21 DA 2A 0E

0000:0E24 2C

0000:0E25 36 CO

0000:0E27 C3 19 0E

0000:0E2A
                                                                                         (unk_0_63B2), a
c, loc_0_E2A
                                                                          ld
                                                                          jр
                                                                                          (hl), 0C0h; 'L'
                                                                          14
                                                                                         loc_0_E19
0000:0E2A
0000:0E2A
0000:0E2A 3A B0 63
0000:0E2D C6 D0
                                           loc_0_E2A:
                                                                                                                                                                     ; CODE XREF: sub_0_DA7+7A1j
                                                                                        a, (unk_0_63B0)
                                                                          add
                                                                                         a, 0D0h
0000:0E2F 2A AD 63
0000:0E32 77
0000:0E33 3A B3 63
0000:0E36 FE 01
                                                                                        hl, (unk_0_63AD)
(hl), a
                                                                         ld
ld
ld
                                                                                        a, (unk_0_63B3)
UUUU:0E36 FE 01
0000:0E38 C2 3F 0E
0000:0E3B 2D
0000:0E3C 36 C0
0000:0E3C 2C
                                                                          ср
                                                                                        nz, loc_0_E3F
                                                                          jp
                                                                          ld
                                                                                         (hl), 0C0h; 'L'
                                                                          inc
0000:0E3F
0000:0E3F
0000:0E3F
0000:0E3F 3A B0 63
                                           loc_0_E3F:
                                                                                        a, (unk_0_63B0)
                                                                                                                                                                      ; CODE XREF: sub_0_DA7+91^j
                                                                          ld
0000:0E3F 3A B0 63
0000:0E42 FE 00
0000:0E44 CA 4B 0E
0000:0E47 C6 E0
0000:0E49 2C
0000:0E4A 77
                                                                         cp
jp
add
                                                                                        z, loc_0_E4B
a, 0E0h ; 'Ó
                                                                                                                                                                      ; convert bottom of ladder to girder
                                                                          inc
                                                                                         (hl), a
0000:0E4B
0000:0E4B
0000:0E4B 13
                                                                                                                                                                      ; CODE XREF: sub_0_DA7+9D^j
                                           loc_0_E4B:
0000:0E4E 13
0000:0E4C C3 A7 0D
0000:0E4F
                                                                                        sub_0_DA7
                                                                          jp
                                                                                                                                                                      ; CODE XREF: sub_0_DA7+49↑j
0000:0E4F
                                           loc 0 E4F:
                                                                                        a, (unk_0_63B3)
0000:0E4F 3A B3 63
0000:0E52 FE 02
0000:0E54 C2 E8 0E
0000:0E57 3A AF 63
                                                                          1d
                                                                          ср
                                                                                        nz, loc_0_EE8
                                                                          jp
ld
                                                                                        a, (unk_0_63AF)
a, 0F0h; '-'
0000:0E57 3A AF 63
0000:0E5A C6 F0
0000:0E5C 32 B5 63
0000:0E5F 2A AB 63
                                                                          add
ld
                                                                                        (unk_0_63B5), a
hl, (unk_0_63AB)
                                                                          ld
0000:0E62
0000:0E62
0000:0E62 3A B5 63
                                                                                                                                                                      ; CODE XREF: sub_0_DA7+E5|;
; sub_0_DA7+125|; ...
                                          loc_0_E62:
                                                                                        a, (unk
(hl), a
                                                                                              (unk 0 63B5)
0000:0E62
                                                                          ld
0000:0E62
                                                                          ld
                                                                                        hl
a, l
1Fh
0000:0E66
0000:0E67
                                                                          inc
0000:0E68 E6 1F
0000:0E6A CA 78 0E
0000:0E6D 3A B5 63
0000:0E70 FE F0
                                                                          and
                                                                          jp
ld
                                                                                        z, loc_0_E78
a, (unk_0_63B5)
0F0h; '-'
                                                                          ср
0000:0E72 CA 78 0E
0000:0E75 D6 10
                                                                                        z, loc_0_E78
10h
                                                                          jp
sub
```

```
0000:0E77 77
                                                                                                                                            (hl), a
                                                                                                                   ld
 0000:0E78
                                                                                                                                                                                                                                                                      ; CODE XREF: sub_0_DA7+C3<sup>†</sup>j
; sub_0_DA7+CB<sup>†</sup>j
 0000:0E78
                                                                 loc_0_E78:
 0000:0E78 01 1F 00
0000:0E78
                                                                                                                                           bc, 1Fh
hl, bc
0000:0E78

0000:0E7B 09

0000:0E7C 3A B1 63

0000:0E7F D6 08

0000:0E81 DA CF 0E
                                                                                                                    add
                                                                                                                                            a, (unk_0_63B1)
                                                                                                                    14
                                                                                                                    sub
                                                                                                                                                   loc_0_ECF
                                                                                                                    jp
ld
 0000:0E84 32 B1 63
0000:0E87 3A B2 63
0000:0E8A FE 00
0000:0E8C CA 62 0E
                                                                                                                                            (unk_0_63B1), a
a, (unk_0_63B2)
                                                                                                                    ld
cp
                                                                                                                    jp
ld
ld
                                                                                                                                            z, loc_0_E62
 0000:0E8F 3A B5 63
0000:0E92 77
0000:0E93 23
                                                                                                                                            a, (unk_0_63B5)
(hl), a
                                                                                                                                            hl
a, l
1Fh
                                                                                                                    inc
ld
 0000:0E94 7D
 0000:0E95 E6 1F
0000:0E97 CA A0 0E
0000:0E9A 3A B5 63
0000:0E9D D6 10
                                                                                                                    and
jp
ld
                                                                                                                                            z, loc_0_EA0
a, (unk_0_63B5)
10h
                                                                                                                    sub
 0000:0E9D D0
0000:0E9F 77
0000:0EA0
0000:0EA0
                                                                                                                    ld
                                                                                                                                            (hl), a
                                                                  loc 0 EA0:
                                                                                                                                                                                                                                                                    ; CODE XREF: sub 0 DA7+F01j
                                                                                                                                           bc, 1Fh
h1, bc
a, (unk_0_63B1)
 0000:0EA0 01 1F 00
                                                                                                                    ld
0000:0EA0 01 1F 00
0000:0EA3 09
0000:0EA4 3A B1 63
0000:0EA7 D6 08
0000:0EA9 DA CF 0E
0000:0EA6 32 B1 63
0000:0EAF 3A B2 63
0000:0EAF 3A B2 63
                                                                                                                    add
ld
                                                                                                                    sub
                                                                                                                    jp
ld
ld
                                                                                                                                           c, loc_0_ECF
(unk_0_63B1), a
a, (unk_0_63B2)
7, a
                                                                                                                    bit
                                                                                                                                            nz, loc_0_ED3
a, (unk_0_63B5)
 0000:0EB4 C2 D3 0E
0000:0EB7 3A B5 63
0000:0EBA 3C
0000:0EBB 32 B5 63
                                                                                                                    jp
ld
                                                                                                                    inc
ld
                                                                                                                                             (unk_0_63B5), a
0000:0EBB 32 B5 63

0000:0ECE FE F8

0000:0EC0 C2 C9 0E

0000:0EC4 32 F0

0000:0EC6 32 B5 63

0000:0EC9

0000:0EC9
                                                                                                                    cp
jp
                                                                                                                                            0F8h; '°'
nz, loc_0_EC9
                                                                                                                                            hl
                                                                                                                                             a, 0F0h ; '-'
                                                                                                                    ld
                                                                                                                    1d
                                                                                                                                            (unk_0_63B5), a
                                                                                                                                                                                                                                                                    ; CODE XREF: sub_0_DA7+119 j
                                                                   loc 0 EC9:
                                                                                                                    ld
                                                                                                                                            a, 1
 0000:0ECA E6 1F
0000:0ECC C2 62 0E
0000:0ECF
                                                                                                                                            1Fh
nz, loc_0_E62
                                                                                                                    and
jp
                                                                                                                                                                                                                                                                      ; CODE XREF: sub_0_DA7+DA<sup>†</sup> j
; sub_0_DA7+102<sup>†</sup> j ...
                                                                   loc 0 ECF:
 0000:0ECF
0000:0ECF 13
0000:0ECF
 0000:0ED0 C3 A7 0D
                                                                                                                                            sub 0 DA7
                                                                                                                    jр
 0000:0ED3
0000:0ED3
0000:0ED3
                                                                                                                                                                                                                                                                      ; CODE XREF: sub_0_DA7+10Dfj
                                                                   loc_0_ED3:
 0000:0ED3 3A B5 63
0000:0ED6 3D
0000:0ED7 32 B5 63
0000:0EDA FE F0
                                                                                                                    1d
                                                                                                                                            a, (unk_0_63B5)
                                                                                                                    dec
ld
                                                                                                                                            (unk_0_63B5), a
                                                                                                                    ср
                                                                                                                                             0F0h
 0000:0EDC F2 E5 0E
0000:0EDF 2B
0000:0EE0 3E F7
0000:0EE2 32 B5 63
                                                                                                                    jp
                                                                                                                                            p, loc_0_EE5
                                                                                                                    ld
                                                                                                                                                    0F7h ; ','
                                                                                                                                            (unk 0 63B5), a
                                                                                                                    ld
 0000:0EE5
 0000:0EE5
0000:0EE5 C3 62 0E
                                                                   loc_0_EE5:
                                                                                                                                                                                                                                                                      ; CODE XREF: sub_0_DA7+135 j
                                                                                                                                          loc_0_E62
                                                                                                                    jр
 0000:0EE8
 0000:0EE8
0000:0EE8
0000:0EE8 3A B3 63
                                                                                                                                                                                                                                                                      ; CODE XREF: sub_0_DA7+AD^j
                                                                   loc_0_EE8:
                                                                                                                                            a, (unk_0_63B3)
                                                                                                                    ld
0000:0EE8 3A B3 63 63 0000:0EED FE 03 0000:0EED C2 1B 0F 0000:0EF0 2A AB 63 0000:0EF5 77 0000:0EF6 01 20 00 0000:0EF9 09 0000:0EFA 3A B1 63 0000:0EFB D6 10 0000:0EFA D6 10 00
                                                                                                                    cp
jp
ld
ld
                                                                                                                                           nz, loc_0_F1B
h1, (unk_0_63AB)
a, 0B3h; '|'
(h1), a
bc, 20h; ''
h1, bc
                                                                                                                    ld
ld
                                                                                                                    add
ld
                                                                                                                                                     (unk_0_63B1)
                                                                                                                                            a,
10h
 0000:0EFA 3A BI
0000:0EFD D6 10
0000:0EFF
0000:0EFF
                                                                                                                    sub
                                                                                                                                                                                                                                                                   ; CODE XREF: sub_0_DA7+16A|j
                                                                   loc_0_EFF:
0000:0EFF DA 14 0F
0000:0FFF DA 14 0F
0000:0F05 3E B1
0000:0F07 77
                                                                                                                    jp
ld
ld
ld
                                                                                                                                            c. loc 0 F14
                                                                                                                                           c, loc_U_F14
(unk_0_63B1), a
a, 0B1h; '||'
(h1), a
bc, 20h; ''
h1, bc
a, (unk_0_63B1)
 0000:0F08 01 20 00
                                                                                                                    ld
0000:0F08 01 20 00
0000:0F0B 09
0000:0F0C 3A B1 63
0000:0F0F D6 08
0000:0F11 C3 FF 0E
0000:0F14
0000:0F14
0000:0F14 3E B2
0000:0F16 77
0000:0F17 13
0000:0F18 C3 A7 0D
                                                                                                                    add
ld
                                                                                                                    sub
                                                                                                                                            loc 0 EFF
                                                                   loc_0_F14:
                                                                                                                                                                                                                                                                      ; CODE XREF: sub_0_DA7+158 j
                                                                                                                    1d
                                                                                                                                            a, 0B2h; '|| '
(hl), a
                                                                                                                    ld
                                                                                                                                            sub 0 DA7
                                                                                                                    αĖ
 0000:0F18
0000:0F1B
0000:0F1B
                                                                   loc_0_F1B:
                                                                                                                                                                                                                                                                     ; CODE XREF: sub_0_DA7+146 j
 0000:0F1B 3A B3 63
                                                                                                                    ld
                                                                                                                                            a, (unk_0_63B3)
0000:0F1B 3A B3 63
0000:0F1E FE 07
0000:0F20 F2 CF 0E
0000:0F23 FE 04
0000:0F25 CA 4C 0F
0000:0F28 FE 05
0000:0F2A CA 51 0F
0000:0F2D 3E FE
                                                                                                                    cp
jp
                                                                                                                                            p, loc_0_ECF
                                                                                                                    cp
jp
cp
jp
ld
                                                                                                                                            z, erase_straight_girders
                                                                                                                                             z, loc_0_F51
                                                                                                                                            a, 0FEh ; '
 0000:0F2F
                                                                                                                                                                                                                                                                      ; CODE XREF: sub_0_DA7+1A7|j; sub_0_DA7+1AC|j
 0000:0F2F
0000:0F2F 32 B5 63
                                                                   loc_0_F2F:
                                                                                                                                             (unk_0_63B5)
 0000:0F2F
                                                                                                                    ld
 0000:0F32 2A AB 63
0000:0F35
0000:0F35
                                                                                                                    ld
                                                                                                                                            hl, (unk_0_63AB)
                                                                                                                                                                                                                                                                      ; CODE XREF: sub_0_DA7+19E | j
                                                                   loc_0_F35:
0000:0F35 3A B5 63
0000:0F38 77
                                                                                                                    1d
                                                                                                                                                      (unk_0_63B5)
                                                                                                                                            (hl), a
```

```
bc, 20h; ' ' h1, bc a, (unk_0_63B1)
 0000:0F39 01 20 00
0000:0F3C 09
0000:0F3D 3A B1 63
0000:0F40 D6 08
0000:0F42 32 B1 63
0000:0F45 23 0F
0000:0F48 13
0000:0F49 C3 A7 0D
 0000:0F3C 09
                                                                                        add
                                                                                        1d
                                                                                        sub
ld
                                                                                                         (unk_0_63B1),
nc, loc_0_F35
de
                                                                                        jp
inc
                                                                                                          sub_0_DA7
                                                                                        jр
 0000:0F4C
 0000:0F4C
                                                   erase_straight_girders:
                                                                                                                                                                                                     ; CODE XREF: sub_0_DA7+17E j
 0000:0F4C 3E E0
0000:0F4E C3 2F 0F
                                                                                                         a, 0E0h ; 'Ó'
loc_0_F2F
                                                                                        ld
                                                                                        jр
0000:0F4E C3 2F 0F
0000:0F51
0000:0F51
0000:0F51 3E B0
0000:0F53 C3 2F 0F
0000:0F53
0000:0F53
                                                   loc_0_F51:
                                                                                                                                                                                                      ; CODE XREF: sub_0_DA7+183 j
                                                                                       ld
                                                                                                          a. 0B0h; '"
                                                   jp loc_0_F2F
; End of function sub_0_DA7
0000:0F56
0000:0F56
0000:0F56
0000:0F56
0000:0F56
0000:0F56
0000:0F5C
0000:0F5C
0000:0F5C
0000:0F5C
0000:0F5C
0000:0F5D
0000:0F5D
0000:0F5E
10 FC
0000:0F5C
1000:0F60
000:0F60
000:0F67
0000:0F67
0000:0F67
0000:0F67
0000:0F67
 0000:0F56
                                                    loc_0_F56:
                                                                                                                                                                                                      ; CODE XREF: 0000:0D5F1p
                                                                                                          b, 27h; '''
                                                                                        ld
                                                                                                          hl, mario_alive_flag
                                                                                        ld
                                                   loc 0 F5C:
                                                                                                                                                                                                     ; CODE XREF: 0000:0F5E-j
                                                                                        ld
                                                                                                          (hl), a
                                                                                        inc
djnz
ld
                                                                                                          loc_0_F5C
                                                                                                         c, 11h
d, 80h; 'C'
h1, unk_0_6280
                                                                                        1d
                                                                                                                                                                                                     ; CODE XREF: 0000:0F6D-i
                                                   loc 0 F67:
0000:0F67
0000:0F67
0000:0F68
0000:0F68
0000:0F68
                                                                                       ld
                                                                                                          b, d
                                                   loc_0_F68:
                                                                                                                                                                                                     ; CODE XREF: 0000:0F6A|j
0000:0F68 77

0000:0F69 23

0000:0F6C 10 FC

0000:0F6C 0D

0000:0F6D 20 F8

0000:0F6F 21 9C 3D

0000:0F72 11 80 62

0000:0F78 ED B0

0000:0F78 ED B0

0000:0F7A 3A 29 62

0000:0F7D 47

0000:0F7E A7

0000:0F7F 17

0000:0F81 17

0000:0F81 A7
                                                                                                          (hl), a
                                                                                        ld
                                                                                        djnz
                                                                                                          loc_0_F68
                                                                                        dec
                                                                                        jr
ld
ld
                                                                                                          nz, loc_0_F67
                                                                                                          hl, level_init_data
de, unk_0_6280
                                                                                        ld
                                                                                                          bc, 40h; '@'
                                                                                        ldir
                                                                                        ld
ld
                                                                                                          a, (level)
b, a
                                                                                        and
                                                                                        rla
and
rla
                                                                                                          a
 0000:0F81 17
0000:0F82 A7
0000:0F83 17
0000:0F84 80
0000:0F85 80
                                                                                        and
rla
add
                                                                                                          а
                                                                                                         a, b
a, 28h; '('
51h; 'Q'
c, loc_0_F8E
a, 50h; 'P'
                                                                                        add
 0000:0F86 C6 28
0000:0F88 FE 51
0000:0F8A 38 02
0000:0F8C 3E 50
                                                                                        add
                                                                                        cp
jr
ld
 0000:0F8E
0000:0F8E
0000:0F8E 21 B0 62
0000:0F91 06 03
0000:0F93
0000:0F93
0000:0F93 77
0000:0F94 2C
0000:0F95 10 FC
0000:0F97 87
0000:0F98 47
0000:0F99 3E DC
                                                   loc_0_F8E:
                                                                                                                                                                                                    ; CODE XREF: 0000:0F8A|j
                                                                                                          hl, unk_0_62B0
                                                                                        ld
                                                                                                          b, 3
                                                   loc_0_F93:
                                                                                                                                                                                                      ; CODE XREF: 0000:0F95|j
                                                                                        ld
                                                                                                          (hl), a
                                                                                        djnz
add
ld
ld
                                                                                                          loc_0_F93
                                                                                                          a, a
b, a
0000:0F98 47
0000:0F98 3E DC
0000:0F98 90
0000:0F9E 30 02
0000:0F9E 30 02
0000:0FA2 77
0000:0FA2 77
0000:0FA3 77
0000:0FA3 77
0000:0FA3 77
0000:0FA5 21 09 62
0000:0FA5 21 09 62
0000:0FA5 36 04
0000:0FA5 36 08
                                                                                                           a, 0DCh ; '<u></u>'
                                                                                        sub
                                                                                                           28h ; '('
                                                                                        ср
                                                                                                         nc, loc_0_FA2
a, 28h; '('
                                                                                        jr
ld
                                                   loc_0_FA2:
                                                                                                                                                                                                    ; CODE XREF: 0000:0F9E↑j
                                                                                                          (hl), a
                                                                                        1d
                                                                                                            (hl),
                                                                                                          hl, unk_0_6209
(hl), 4
                                                                                        ld
                                                                                        ld
                                                                                        inc
                                                                                                         1
(h1), 8
a, (level_type)
c, a
2, a
nz, loc_0_FCB
hl, soft_sprite_ram+100h
a, 4Fh; 'O'
b, 3
                                                                                        ld
ld
                                                                                        bit
jr
ld
                                                                                                                                                                                                     ; sprite #64, y coord
0000:0FB8 3E 4F
0000:0FBA 06 03
0000:0FBC
0000:0FBC
                                                                                        1d
                                                                                                                                                                                                     ; CODE XREF: 0000:0FC9|j
loc 0 FBC:
                                                                                        ld
inc
ld
                                                                                                          (hl), a
                                                                                                           (hl), 3Ah; ':'
                                                                                        inc
                                                                                        ld
inc
                                                                                                           (hl), OFh
                                                                                                          (hl), 18h
                                                                                        inc
                                                                                       add
djnz
                                                                                                               105
                                                                                                          loc_0_FBC
                                                   loc 0 FCB:
                                                                                                                                                                                                      ; CODE XREF: 0000:0FB31i
0000:0FCB
0000:0FCB 79
0000:0FCC EF
0000:0FCC
0000:0FCD 00 00
0000:0FCD 70 00
0000:0FD1 1F 10
0000:0FD3 87 10
                                                                                                                                                                                                      ; go!
                                                                                        rst
                                                                                        .dw RESET
.dw init_11_girder
.dw init_12_cement
                                                                                                                                                                                                      ; Jump table
                                                                                        .dw init_13_elevator .dw init_14_rivets
 0000:0FD5 31 11
```

```
0000:0FD7
0000:0FD7
0000:0FD7
0000:0FD7 21 DC 3D
0000:0FDA 11 A8 69
0000:0FDD 01 10 00
0000:0FED ED B0
0000:0FED 21 EC 3D
0000:0FES 11 07 64
0000:0FES 0E 1C
                                                  init_l1_girder:
                                                                                                                                                                                                ; DATA XREF: 0000:0FCF o
                                                                                      ld
ld
                                                                                                       hl, top_barrel_spr
de, soft_sprite_ram+0A8h
                                                                                      ld
                                                                                                       bc, 10h
                                                                                      ldir
                                                                                      ld
ld
                                                                                                       hl, fireball_spr
de, unk_0_6407
                                                                                                       c, 1Ch
b, 5
                                                                                      ld
  0000:0FEA 06 05
0000:0FEC CD 2A 12
0000:0FEF 21 F4 3D
                                                                                      ld
call
                                                                                                        sub_0_122A
                                                                                                       hl, girders_extra_spr
sub_0_11FA
hl, girder_oil_barrel_spr
de, soft_sprite_ram+0FCh
  0000:0FF2 CD FA 11
0000:0FF5 21 00 3E
0000:0FF8 11 FC 69
0000:0FFB 01 04 00
                                                                                      call
ld
ld
                                                                                      ld
                                                                                                       bc, 4
  0000:0FFE ED B0
0000:1000 21 0C 3E
0000:1003 CD A6 11
0000:1006
                                                                                      ldir
                                                                                                       hl, girder_hammer_locs
sub_0_11A6
                                                                                      call
  0000:1006
0000:1006 21 1B 10
0000:1009 11 07 67
0000:100C 01 1C 08
                                                  loc_0_1006:
                                                                                                       hl, cement_unknown_spr
                                                                                                       de, unk_0_6707
bc, 81Ch
                                                                                      ld
ld
 sub_0_122A
de, unk_0_6807
b, 2
                                                                                                        sub_0_122A
                                                                                                                                                                                                ; DATA XREF: 0000:1006↑o
  0000:101F
0000:101F
0000:101F
                                                  init_12_cement:
                                                                                                                                                                                                 ; DATA XREF: 0000:0FD1\u00e10
 0000:101F
0000:101F 21 EC 3D
0000:1022 11 07 64
0000:1025 01 1C 05
0000:1028 CD 2A 12
                                                                                      ld
                                                                                                       hl, fireball_spr
                                                                                                       de, unk_0_6407
bc, 51Ch
sub_0_122A
                                                                                      ld
ld
                                                                                      call
 0000:1028 CD 2A 12

0000:102B CD 86 11

0000:102E 21 18 3E

0000:1031 11 A7 65

0000:1034 01 0C 06

0000:1037 CD 2A 12

0000:103A DD 21 A0 65

0000:103E 21 B8 69

0000:1041 11 10 00

0000:1044 06 06
                                                                                      call
                                                                                                        sub_0_1186
                                                                                      ld
ld
ld
                                                                                                       hl, cement_pie_spr
de, unk_0_65A7
                                                                                                       bc,
                                                                                                        sub_0_122A
                                                                                      call
                                                                                      ld
ld
                                                                                                       ix, unk_0_65A0
hl, soft_sprite_ram+0B8h
                                                                                                       de, 10h
b, 6
set_B_sprites_data
                                                                                      ld
                                                                                      14
 0000:1044 06 06
0000:1046 CD D3 11
0000:1049 21 FA 3D
0000:104C CD FA 11
0000:104F 21 04 3E
0000:1052 11 FC 69
0000:1055 01 04 00
                                                                                      call
ld
                                                                                                               cement_extra_spr
                                                                                                       hl,
                                                                                      call
                                                                                                        sub_0_11FA
                                                                                      ld
ld
ld
                                                                                                       hl, cement_oil_barrel_spr
de, soft_sprite_ram+OFCh
                                                                                                       bc, 4
  0000:1058 ED B0
0000:105A 21 1C
0000:105D 11 44
0000:1060 01 08
                                                                                      ldir
                              1C 3E
44 69
08 00
                                                                                      ld
ld
ld
                                                                                                       hl, cement_ladder_spr
de, soft_sprite_ram+44h
bc, 8
  0000:1063 ED B0
0000:1065 21 24
0000:1068 11 E4
0000:106B 01 18
                                                                                      ldir
ld
ld
                                    3E
69
00
                                                                                                       hl, cement_conveyer_spr
de, soft_sprite_ram+0E4h
bc, 18h
                                                                                      ld
  0000:106E ED B0
                                                                                      ldir
  0000:106E ED B0
0000:1070 21 10
0000:1073 CD A6
0000:1076 21 3C
0000:1079 11 0C
0000:1077 ED B0
                                     3E
11
3E
6A
                                                                                      ld
call
                                                                                                       hl, cement_hammer_locs
sub_0_11A6
                                                                                                       sub_0_11A6
hl, cement_obj_spr
de, soft_sprite_ram+10Ch
                                                                                      ld
ld
ld
ldir
  0000:1081 3E 01
0000:1083 32 B9 62
0000:1086 C9
0000:1087
                                                                                      ld
                                                                                      ld
                                                                                                        (unk_0_62B9), a
                                                                                      ret
 0000:1087

0000:1087

0000:1087 21 EC 3D

0000:108A 11 07 64

0000:108D 01 1C 05

0000:109D 0D 2A 12

0000:1093 CD 86 11

0000:1096 21 00 66

0000:1099 11 10 00

0000:109C 3E 01

0000:10A0
                                                   init_13_elevator:
                                                                                                                                                                                                ; DATA XREF: 0000:0FD31o
                                                                                      ld
                                                                                                       hl, fireball_spr
de, unk_0_6407
                                                                                      ld
                                                                                                       bc, 51Ch
sub_0_122A
sub_0_1186
                                                                                      ld
                                                                                      call
                                                                                      call
                                                                                                       hl, unk_0_6600
de, 10h
a, 1
b, 6
                                                                                      1d
                                                                                      ld
                                                                                      ld
  0000:10A0
 0000:10A0
0000:10A0
0000:10A0 77
0000:10A1 19
0000:10A2 10 FC
0000:10A4 0E 02
0000:10A6 3E 08
                                                  loc_0_10A0:
                                                                                                                                                                                                ; CODE XREF: 0000:10A2-i
                                                                                                        (hl),
                                                                                      add
djnz
                                                                                                        hl, de
loc 0 10A0
                                                                                      ld
  0000:10A8
                                                  loc_0_10A8:
                                                                                                                                                                                                ; CODE XREF: 0000:1084 - i
  0000:10A8
0000:10A8 06 03
0000:10AA 21 0D 66
0000:10AD
                                                                                                       b, 3
hl, unk_0_660D
                                                                                      ld
 loc_0_10AD:
                                                                                                                                                                                                ; CODE XREF: 0000:10AF-j
                                                                                                       (hl), a
hl, de
loc_0_10AD
                                                                                      ld
add
                                                                                      dinz
                                                                                      ld
dec
                                                                                                       nz, loc_0_10A8
hl, elevator_spr_xy
de, unk_0_6603
bc, 60Eh
                                                                                      jp
ld
                                                                                      ld
ld
                                                                                                      sub_0_11EC
hl, elevator_spr
de, unk_0_6607
bc, 60Ch
                                                                                      call
ld
. 00 3E
.006 11 07 66
0000:1009 01 0C 06
0000:100C CD 2A 12
0000:100F DD 21 00 66
0000:100B 25 86 9
0000:100B 06 06
0000:100B 11 10 00
                                                                                      ld
ld
                                                                                                        sub_0_122A
                                                                                      call
                                                                                      ld
ld
                                                                                                       ix, unk_0_6600
hl, soft_sprite_ram+58h
                                                                                      ld
                                                                                                                 10h
                                                                                      1d
                                                                                      call
                                                                                                        set_B_sprites_data
```

```
File: E:\Projects\pace\pacedev.net\sw\re\platform\dkong\dkong.lst 21/11/2013, 11:26:09 PM
                                                                                                    hl, elevator_obj_spr
de, soft_sprite_ram+10Ch
bc, OCh
0000:10DE 21 48 3E
0000:10DE 21 48 3E
0000:10E1 11 0C 6A
0000:10E4 01 0C 00
0000:10E7 ED B0
0000:10ED DD 36 00 01
0000:10ED DD 36 03 58
0000:10F5 DD 36 0E 58
0000:10F5 DD 36 05 80
                                                                                    ld
                                                                                   ldir
ld
ld
ld
ld
                                                                                                                                                                                             ; fireball character data
                                                                                                    ix, unk_0_6400
(ix+0), 1
(ix+3), 58h; 'X'
(ix+0Eh), 58h; 'X'
(ix+5), 80h; 'C'
(ix+0Ph), 80h; 'C'
(ix+20h), 1
(ix+23h), 0EBh; 'Ü'
(ix+2Eh), 60h; '''
(ix+2Eh), 60h; '''
(ix+2Fh), 60h; '''
de, soft_sprite_ram+
de, soft_sprite_ram+
0000:10F9 DD 36 05 80 0000:10FD DD 36 0F 80 0000:1101 DD 36 20 01 0000:1105 DD 36 23 EB 0000:1109 DD 36 25 60 0000:1115 DD 36 25 60 0000:1115 11 70 69 0000:1118 21 21 11
                                                                                    ld
                                  20 01
23 EB
2E EB
                                                                                   ld
ld
ld
                                                                                   ld
ld
ld
                                                                                                     de, soft_sprite_ram+70h
hl, elevator_cap_spr
                                                                                    ld
0000:1131

0000:1131

0000:1131

0000:1131 21 F0 3D

0000:1134 11 07 64

0000:1137 01 C 05

0000:113A CD 2A 12

0000:113D 21 14 3E

0000:1140 CD A6 11

0000:1141 21 54 3E

0000:1146 11 0C 6A

0000:1149 01 0C 00

0000:1149 ED BO
                                                                                                                                                                                           ; DATA XREF: 0000:0FD510
                                                init_14_rivets:
                                                                                                     hl, fireball_rivet_spr
                                                                                                    hl, fireball_rivet_spr
de, unk_0_6407
bc, 51Ch
sub_0_122A
hl, rivet_hammer_locs
sub_0_11A6
hl, rivit_obj_spr
de, soft_sprite_ram+10Ch
bc. 0Ch
                                                                                    14
                                                                                    ld
                                                                                   call
ld
                                                                                   call
ld
ld
ld
0000:1149 01 0C 00
0000:114C ED B0
0000:114E 21 82 11
0000:1151 11 A3 64
0000:1157 CD EC 11
0000:1157 CD EC 11
0000:115A 21 7E 11
0000:115A 21 7E 11
0000:1160 01 1C 02
0000:1160 D 2A 12
0000:1166 DD 21 A0 64
0000:116A DD 36 00 01
0000:116E DD 36 20 01
0000:116E DD 36 69
                                                                                                     bc. 0Ch
                                                                                    ldir
                                                                                   ld
ld
                                                                                                    hl, rivet_unknown_spr2 de, unk_0_64A3
                                                                                    ld
                                                                                                     bc.
                                                                                                              21Eb
                                                                                                    sub_0_11EC
hl, rivet_unknown_sprl
de, unk_0_64A7
bc, 21Ch
                                                                                   call
ld
ld
                                                                                    ld
                                                                                                     sub_0_122A
ix, unk_0_64A0
(ix+0), 1
(ix+20h), 1
                                                                                    call
ld
                                                                                    1d
                                                                                    14
0000:116E DD 36 20
0000:1172 21 50 69
0000:1175 06 02
0000:1177 11 20 00
0000:117A CD D3 11
0000:117D C9
0000:117D
                                                                                                     hl, soft_sprite_ram+50h
b, 2
de, 20h; ''
                                                                                   ld
ld
                                                                                    ld
                                                                                   call
ret
                                                                                                     set_B_sprites_data
                                                                                                                                                                                             ; DATA XREF: 0000:115A<sup>†</sup>o
0000:117E 3F 0C 08 08 rivet_unknown_spr1:.db 3Fh, 0Ch, 8, 8
0000:117E
0000:1182 73 50 8D 50 rivet_unknown_spr2:.db 73h, 50h, 8Dh, 50h
0000:1186
                                                                                                                                                                                             ; Rivets level? Unknown sprites? ; DATA XREF: 0000:114E\u00e10
0000:1186
0000:1186
0000:1186
                                                ; SUBROUTINE
                                                                                                                                                                                             ; CODE XREF: 0000:102B<sup>p</sup>; 0000:1093<sup>p</sup>
                                               sub 0 1186:
 0000:1186
0000:1186
0000:1186 21 A2 11
0000:1186
0000:1189 11 07 65
0000:118F CD 2A 12
0000:118F CD 2A 12
0000:1192 DD 21 00 65
0000:1196 21 80 69
0000:1199 06 0A
                                                                                   ld
ld
                                                                                                    hl, elevator_bouncing_spr
de, unk_0_6507
                                                                                                    bc, OAOCh
sub_0_122A
                                                                                    ld
                                                                                    call
ld
ld
                                                                                                     ix, unk_0_6500
hl, soft_sprite_ram+80h
                                                                                    ld
                                                                                                     b, OAh
0000:119B 11 10 00
0000:119E CD D3 11
0000:11A1 C9
                                                                                    ld
                                                                                                     set_B_sprites_data
                                                                                    call
                                                                                    ret
0000:11A1 ; End of function sub_0_1186
0000:11A1 ;
0000:11A1 ;
0000:11A2 3B 00 02 02 elevator_bouncing_spr:.db 3Bh, 0, 2, 2
                                                                                                                                                                                            ; DATA XREF: sub 0 1186 o
0000:11A2
0000:11A6
0000:11A6
0000:11A6
                                                                                SUBROUTINE
0000:11A6
0000:11A6
0000:11A6
0000:11A6 11 83 66
0000:11A6
                                                                                                                                                                                            ; CODE XREF: 0000:1003\p; 0000:1073\p ...
                                                sub_0_11A6:
                                                                                                     de, unk_0_6683
0000:11A6
0000:11A9 01 0E 02
0000:11AC CD EC 11
0000:11AF 21 08 3E
0000:11B2 11 87 66
0000:11B5 01 0C 02
0000:11B5 DD 2A 12
0000:11BB DD 21 80 66
0000:11BF DD 36 00 01
                                                                                   ld
                                                                                                     bc.
                                                                                                     sub_0_11EC
hl, hammer_pickup_spr
de, unk_0_6687
bc, 20Ch
                                                                                    call
ld
                                                                                    ld
ld
                                                                                    call
ld
ld
                                                                                                     sub_0_122A
                                                                                                     ix, unk_0_6680
(ix+0), 1
(ix+10h), 1
0000:11C3 DD 36 10 01
0000:11C7 21 18 6A
0000:11CA 06 02
0000:11CC 11 10 00
                                                                                   ld
ld
ld
                                                                                                     hl, soft_sprite_ram+118h
b, 2
de, 10h
                                                                                                                                                                                         ; location of hammers in sprite ram
                                                                                    ld
0000:11CF CD D3 11
0000:11D2 C9
0000:11D2
0000:11D2
                                                                                    call
                                                                                                     set_B_sprites_data
                                                ret; End of function sub_0_11A6
0000:11D3
0000:11D3
0000:11D3
                                                                     SUBROUTINE
0000:11D3
0000:11D3
0000:11D3 DD 7E 03
                                                                                                                                                                                             ; CODE XREF: 0000:1046\uparrowp; 0000:10DB\uparrowp ...
                                                set_B_sprites_data:
                                                                                                    a, (ix+.
(hl), a
 0000:11D3
                                                                                                           (ix+3)
0000:11D3
0000:11D6 77
                                                                                    ld
                                                                                                                                                                                             ; set sprite X
                                                                                                    1
a, (ix+7)
(h1), a
                                                                                    inc
 0000:11DB 77
0000:11DC 2C
                                                                                    ld
                                                                                                                                                                                            ; set sprite tile
                                                                                                     1
a, (ix+8)
(h1), a
0000:11DC 2C
0000:11DD DD 7E 08
0000:11E0 77
0000:11E1 2C
```

ld

0000:11E2 DD 7E 05

a, (ix+5)

; set sprite vflip/palette

ld ld ld

inc ld

ld

ld

ld inc ld

1d

1 (ix+7), 80h; 'Ç' (h1), 80h; 'Ç'

; sprite #19, flipx &
; no flipx, colour=2
; no flipx, colour=2
; sprite #19, x coord
; mario x coord (Y)
; x coord

l (ix+8), 2 (hl), 2

1 (ix+5), b (h1), b (hl), b (ix+0Fh), 1

0000:125A

0000:125B DD 36 07 80 0000:125F 36 80 0000:1261 2C

0000:1261 2C 0000:1262 DD 36 08 02

0000:126C 70 0000:126D DD 36 0F 01

0000:1266 36 02 0000:1268 2C 0000:1269 DD 70 05

```
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```

```
0000:1271 21 0A 60
                                                                               ld
                                                                                               hl, main_sequencer
(hl)
0000:1274 34
                                                                               inc
                                                                                                                                                                                 ; next sequence (3)
0000:12/4 34
0000:1275 11 01 06
0000:1278 CD 9F 30
0000:127B C9
                                                                                              de, loc_0_601
sub_0_309F
                                                                              1d
                                                                              call
ret
0000:127C
0000:127C
0000:127C
0000:127C
0000:127C CD BD 1D
0000:127C
                                                                                                                                                                                  ; DATA XREF: 0000:071C\u00f10 ; 0000:0750\u00e90
                                             died_in_gameplay:
                                                                               call
                                                                                              a, (unk_0_639D)
28h
                                                                                               sub_0_1DBD
0000:127C
0000:127F 3A 9D 63
0000:1282 EF
0000:1282
                                                                               ld
                                                                               rst
0000:1283 8B 12
0000:1285 AC 12
0000:1287 DE 12
0000:1289 00 00
                                                                               .dw delay_before_spin
.dw mario_death_spin
.dw dead_mario_lying_down
                                                                                                                                                                                  ; Jump Table
                                                                               .dw 0
0000:128B
0000:128B
0000:128B
                                             delay_before_spin:
                                                                                                                                                                                  ; DATA XREF: 0000:1283\u00e10
0000:128B DF
0000:128C 21 4D 69
0000:128F 3E F0
0000:1291 CB 16
                                                                              rst
                                                                                               18h
                                                                                                                                                                                  ; wait for 8-bit countdown
                                                                                              hl, soft_sprite_ram+4Dh
a, 0F0h; '-'
(hl)
                                                                              ld
                                                                               ld
                                                                                                                                                                                  ; mario sprite << 1
                                                                               rl
0000:1291 CB 16

0000:1293 1F

0000:1294 77

0000:1295 21 9D 63

0000:1298 34

0000:1298 32 9E 63

0000:129B 32 9E 63

0000:129B 3E 08

0000:124B 3E 08
                                                                               rra
                                                                               ld
ld
                                                                                               (h1), a
h1, unk_0_639D
(h1)
                                                                               inc
                                                                               14
                                                                                                     0Dh
                                                                              ld
ld
ld
                                                                                                (unk_0_639E), a
                                                                                               a, 8
(eight_bit_countdown), a
0000:12A3 CD BD 30
0000:12A6 3E 03
0000:12A8 32 88 60
0000:12AB C9
                                                                              call
ld
ld
                                                                                               sub_0_30BD
                                                                                               a, 3
(unk_0_6088), a
                                                                               ret
0000:12AC
0000:12AC
0000:12AC
                                                                                                                                                                                  ; DATA XREF: 0000:1285\daggero o ; wait for 8-bit countdown
                                             mario_death_spin:
0000:12AC DF
                                                                               rst
                                                                                               18h
0000:12AC DF
0000:12AD 3E 08
0000:12AF 32 09 60
0000:12BE 21 9E 63
0000:12BE 35
0000:12B6 CA CB 12
0000:12B7 21 4D 69
0000:12B7 7E
                                                                              ld
ld
                                                                                               a, 8 (eight_bit_countdown), a
                                                                               ld
                                                                                               hl, unk_0_639E (hl)
                                                                                              z, loc_0_12CB
hl, soft_sprite_ram+4Dh
a, (hl)
                                                                               dec
                                                                               jp
ld
                                                                               ld
                                                                               rra
ld
0000:12BD 1F
0000:12BE 3E 02
0000:12C0 1F
0000:12C1 47
0000:12C2 AE
0000:12C3 77
0000:12C4 2C
                                                                               rra
                                                                                              b, a (h1) (h1), a
                                                                               ld
                                                                               xor
ld
                                                                                               a, b
80h; 'Ç'
(hl)
0000:1205 78
                                                                               1d
0000:12C5 76
0000:12C6 E6 80
0000:12C8 AE
0000:12C9 77
                                                                               and
                                                                                                                                                                                 ; flip mario upside down?
                                                                               xor
                                                                                               (hl), a
                                                                               ld
0000:12CA C9
0000:12CB
0000:12CB
                                                                                                                                                                                 ; CODE XREF: 0000:12B6†j
                                             loc 0 12CB:
 0000:12CB
0000:12CB 21 4D 69
                                                                                              hl, soft_sprite_ram+4Dh
a, 0F4h; '¶'
(hl)
                                                                               ld
0000:12CE 3E F4
0000:12D0 CB 16
                                                                              ld
rl
0000:12D0 CB 16

0000:12D2 1F

0000:12D3 77

0000:12D4 21 9D 63

0000:12D7 34

0000:12D8 3E 80

0000:12DB 32 09 60

0000:12DB 09

0000:12DB 09
                                                                               rra
                                                                               14
                                                                                               (hl),
                                                                                               hl, unk_0_639D (hl)
a, 80h; 'Ç'
                                                                               ld
                                                                               ld
                                                                               ld
                                                                                               (eight_bit_countdown), a
0000:12DE
0000:12DE
0000:12DE DF
0000:12DF CD DB 30
0000:12DE 21 0A 60
0000:12E5 3A 0E 60
0000:12E8 A7
                                                                                                                                                                                 ; DATA XREF: 0000:1287\u00e9o
; wait for 8-bit countdown
                                              dead_mario_lying_down:
                                                                               rst
call
                                                                                               sub 0 30DB
                                                                                               hl, main_sequencer
a, (current_player_E)
                                                                               1d
                                                                               and
                                                                                                                                                                                  ; player 1?
0000:12E9 CA ED 12
                                                                                                z. loc 0 12ED
                                                                               jp
inc
                                                                                                                                                                                  ; yes, skip
0000:12E9 CA
0000:12EC 34
0000:12ED
0000:12ED
                                                                                               (h1)
                                             loc_0_12ED:
                                                                                                                                                                                 ; CODE XREF: 0000:12E9<sup>†</sup>j
0000:12ED 34
                                                                               inc
                                                                                                (hl)
0000:12EE 34
0000:12EE 2B
0000:12EF 36 01
0000:12F1 C9
0000:12F2
                                                                              dec
ld
                                                                                               hl
(hl), 1
                                                                              ret
0000:12F2
0000:12F2
0000:12F2
0000:12F2 CD 1C 01
                                                                                                                                                                                  ; DATA XREF: 0000:071E†o
                                              copy_current_lvl_data_to_P1:
                                                                                               stop_sound
                                                                               call
0000:12F5 AF
0000:12F6 32 2C 62
0000:12F9 21 28 62
0000:12FC 35
                                                                               xor
                                                                               ld
ld
                                                                                                (unk_0_622C)
                                                                                              hl, lives_left (hl)
0000:12FC 35
0000:12FD 15
0000:12FD 11 40 60
0000:1301 01 08 00
0000:1304 ED B0
0000:1307 234 13
0000:1307 2 34 13
0000:1307 22 34 13
0000:1307 21 B2 60
0000:1307 21 B2 60
0000:1312 21 D4 76
0000:1315 3A 0F 60
0000:1315 3A 0F 60
0000:1318 A7
0000:1319 28 07
                                                                               dec
                                                                                              a, (hl)
de, pl_level_data
bc, 8
                                                                               ld
                                                                               ld
                                                                               ldir
                                              loc 0 1307:
                                                                               jp
ld
ld
                                                                                               nz, loc_0_1334
a, 1
hl, pl_score
                                                                                               hl, pl_score
sub_0_13CA
                                                                              call
                                                                                               hl, VRAM_start+2
a, (two_players)
                                                                                                       VRAM start+2D4h
                                                                              ld
and
UUUU:1318 A7
0000:1319 28 07
0000:131B 11 02 03
0000:131E CD 9F 30
0000:1321 2B
                                                                                                z, loc_0_1322
                                                                               jr
                                                                                                sub_0_309F
                                                                               call
0000:1322
0000:1322
                                             loc_0_1322:
                                                                                                                                                                                  ; CODE XREF: 0000:1319<sup>†</sup>j
```

```
0000:1322 CD 26 18
                                                                                                                                   call
                                                                                                                                                              clear_14x5_HL
0000:1322 CD 26 18
0000:1325 11 00 03
0000:1328 CD 9F 30
0000:132B 21 09 60
0000:133D 23
0000:1331 36 10
0000:1333 C9
0000:1333 C9
                                                                                                                                   1d
                                                                                                                                                              de.
                                                                                                                                   call
ld
ld
                                                                                                                                                             sub_0_309F
hl, eight_bit_countdown
(hl), 0C0h; 'L'
                                                                                                                                   inc
                                                                                                                                   14
                                                                                                                                                              (hl), 10h
0000:1334

0000:1334

0000:1334

0000:1334

0000:1336

3A OF 60

0000:1339

A7

0000:133B CA 3F 13

0000:133F

0000:133F
                                                                            loc_0_1334:
                                                                                                                                                                                                                                                                                                      ; CODE XREF: 0000:1307†j
                                                                                                                                  ld
ld
                                                                                                                                                            c, 8
a, (two_players)
                                                                                                                                   and
                                                                                                                                   jp
ld
                                                                                                                                                              z, loc_0_133F
 0000:133F
0000:133F
0000:133F 79
0000:1340 32 0A 60
                                                                            loc_0_133F:
                                                                                                                                                                                                                                                                                                       ; CODE XREF: 0000:133A<sup>†</sup> †
                                                                                                                                  ld
ld
                                                                                                                                                             (main_sequencer), a
 0000:1343 C9
0000:1344
0000:1344
0000:1344
                                                                                                                                   ret
0000:1344 CD 1C 01 0000:1347 AF 0000:1348 32 2C 62 0000:1348 32 2C 62 0000:134F 7E 0000:1355 01 48 60 0000:1356 ED B0 0000:1356 ED GD 6000:1356 ED GD 6000:1361 CD CA 13 0000:1361 CD CA 13 0000:1361 CD CA 13 0000:1361 CD F 30 0000:1364 11 00 03
                                                                                                                                                                                                                                                                                                       ; DATA XREF: 0000:0720 o
                                                                            copy current lvl data to P2:
                                                                                                                                   call
                                                                                                                                                              stop_sound
                                                                                                                                   xor
ld
                                                                                                                                                              a
(unk_0_622C)
                                                                                                                                                             hl, lives_left (hl)
                                                                                                                                   ld
                                                                                                                                   ld
ld
ld
                                                                                                                                                            a, (hl)
de, p2_level_data
bc, 8
                                                                                                                                  ldir
and
jp
ld
                                                                                                                                                            a
nz, loc_0_137F
a, 3
hl, p2_score
sub_0_13CA
de, 303h
sub_0_309F
                                                                                                                                  ld
call
ld
call
0000:1364 11 03 03 000:1367 CD 9F 30 0000:136A 11 00 03 0000:1370 21 D3 76 0000:1373 CD 26 18 0000:1376 21 09 60 0000:137B 23 0000:137E CP 0000:137F 0000:1384 A7 0000:1385 C2 8A 13 0000:138A 00000
                                                                                                                                  ld
call
ld
                                                                                                                                                              de, 300h
sub_0_309F
                                                                                                                                                             hl, VRAM start+2D3h
                                                                                                                                                             clear_14x5_HL
hl, eight_bit_countdown
(hl), 0C0h; 'L'
                                                                                                                                   call
                                                                                                                                   ld
ld
                                                                                                                                   inc
                                                                                                                                                              (hl), 11h
                                                                                                                                   14
                                                                                                                                                                                                                                                                                                       ; CODE XREF: 0000:1359<sup>†</sup> i
                                                                            loc_0_137F:
                                                                                                                                  ld
ld
                                                                                                                                                                                                                                                                                                        ; set to switch players?
                                                                                                                                                             a, (pl_level_data)
                                                                                                                                  and
jp
ld
                                                                                                                                                              nz, loc_0_138A
 0000:138A
0000:138A 79
0000:138B 32 0A 60
0000:138E C9
                                                                            loc_0_138A:
                                                                                                                                                                                                                                                                                                       ; CODE XREF: 0000:1385<sup>†</sup> †
                                                                                                                                   ld
ld
                                                                                                                                                              (main_sequencer), a
                                                                                                                                   ret
 0000:138F
 0000:138F
0000:138F
0000:138F
0000:138F DF
0000:1390 0E 17
0000:1392 3A 48 60
                                                                                                                                                                                                                                                                                                       ; DATA XREF: 0000:0722†o ; wait for 8-bit countdown
                                                                            p1_game_over
                                                                                                                                                             18h
c, 17h
a, (p2_level_data)
                                                                                                                                   rst
                                                                                                                                   14
                                                                                                                                   ld
0000:1395
0000:1395 34
0000:1395 34
0000:1396 A7
0000:1397 C2 9C 13
0000:139A 0E 14
0000:139C
0000:139C 79
                                                                                                                                                                                                                                                                                                      ; CODE XREF: 0000:13A7-j
                                                                            loc_0_1395:
                                                                                                                                   inc
                                                                                                                                                              (hl)
                                                                                                                                   and
                                                                                                                                                             nz, loc_0_139C
                                                                                                                                   jp
ld
                                                                                                                                                              c, 14h
                                                                            loc_0_139C:
                                                                                                                                                                                                                                                                                                       ; CODE XREF: 0000:1397<sup>†</sup>j
0000:139C 79
0000:139D 32 0A 60
0000:13AD 09
0000:13A1
0000:13A1
0000:13A1 DF
0000:13A2 0E 17
0000:13A4 3A 40 60
0000:13A4 3A 40 60
0000:13AA 3A 26 60
0000:13AA 0000:13AA 0000:13AA A
0000:13AA 3A 26 60
0000:13AD 32 82 7D
0000:13BD 32 0A 60
                                                                                                                                   ld
                                                                                                                                   1d
                                                                                                                                                              (main_sequencer), a
                                                                                                                                                                                                                                                                                                       ; DATA XREF: 0000:0724\u00e9o o; wait for 8-bit countdown
                                                                            p2_game_over:
                                                                                                                                                             c, 17h
a, (p1_level_data)
loc_0_1395
                                                                                                                                   ld
ld
                                                                                                                                   jp
                                                                            set_flip_and_current_P2:
                                                                                                                                                                                                                                                                                                       ; DATA XREF: 0000:0726 o
                                                                                                                                   ld
ld
                                                                                                                                                             a, (upright)
(flipscreen), a
                                                                                                                                   xor
UUUU:13B0 AF
0000:13B1 32 0A 60
0000:13B4 21 01 01
0000:13B7 22 0D 60
0000:13BA C9
                                                                                                                                  ld
ld
ld
                                                                                                                                                              (main_sequencer), a hl. 101h
                                                                                                                                                                                                                                                                                                       ; reset ingame sequencer
                                                                                                                                                              (current_player_D), hl
                                                                                                                                                                                                                                                                                                       ; both current player flags to P2
                                                                                                                                   ret
 0000:13BB
0000:13BB
0000:13BB
                                                                            set_flip_and_current_P1:
                                                                                                                                                                                                                                                                                                       ; DATA XREF: 0000:0728\u00e10
0000:13BB AF
0000:13BB 32 0D 60
0000:13BC 32 0E 60
0000:13C3 32 0A 60
0000:13C5 3C
0000:13C6 32 82 7D
0000:13CA
0000:13CA
                                                                                                                                  xor
ld
                                                                                                                                                              (current_player_D), a (current_player_E), a (main_sequencer), a
                                                                                                                                                                                                                                                                                                       ; player 1
; player 1
; reset ingame sequencer
; default flipscreen
                                                                                                                                   ld
                                                                                                                                   inc
                                                                                                                                  ld
ret
                                                                                                                                                              (flipscreen), a
                                                                                                                              SUBROUTINE
  0000:13CA
                                                                                                                                                                                                                                                                                                       ; CODE XREF: 0000:130F1p
                                                                            sub_0_13CA:
  0000:13CA
 0000:13CA 11 C6 61
0000:13CA
0000:13CD 12
                                                                                                                                                                                                                                                                                                       ; 0000:1361<sup>†</sup>p
                                                                                                                                  ld
ld
                                                                                                                                                             de, unk_0_61C6
(de), a
 0000:13CE CF
0000:13CF 13
                                                                                                                                  rst
                                                                                                                                                                                                                                                                                                       ; return if attract mode
                                                                                                                                                              de
```

```
0000:13D0 01 03 00
                                                                                                                                                       bc, 3
 0000:13D3 ED B0
                                                                                                                              ldir
 0000:13D5 06 03
0000:13D7 21 B1 61
0000:13DA
                                                                                                                                                       b, 3
hl, unk_0_61B1
 0000:13DA
0000:13DA 1B
0000:13DB 1A
0000:13DC 0F
                                                                                                                                                                                                                                                                                          ; CODE XREF: sub 0 13CA+1F-j
                                                                        loc_0_13DA:
                                                                                                                             dec
ld
                                                                                                                                                       de
                                                                                                                                                       a, (de)
                                                                                                                              rrca
 0000:13DD OF
0000:13DE OF
0000:13DF OF
0000:13EO E6 OF
                                                                                                                             rrca
rrca
rrca
                                                                                                                              and
 0000:13E2 77
0000:13E3 23
0000:13E4 1A
0000:13E5 E6 0F
                                                                                                                              ld
inc
                                                                                                                                                         (hl), a
                                                                                                                              ld
                                                                                                                                                       a, (de)
0Fh
                                                                                                                              and
 0000:13E3 E0 0F
0000:13E7 77
0000:13E8 23
0000:13E9 10 EF
                                                                                                                             ld
inc
djnz
                                                                                                                                                         (hl), a
                                                                                                                                                        loc_0_13DA
 0000:13EB 06 0E
0000:13ED
0000:13ED
0000:13ED 36 10
                                                                                                                             ld
                                                                                                                                                       b, OEh
                                                                         loc_0_13ED:
                                                                                                                                                                                                                                                                                           ; CODE XREF: sub_0_13CA+26|j
                                                                                                                                                         (hl), 10h
                                                                                                                              ld
0000:13ED 36 10
0000:13EF 23
0000:13F0 10 FB
0000:13F2 36 3F
0000:13F4 06 05
0000:13F6 21 A5 61
0000:13F6 11 C7 61
0000:13FC
                                                                                                                                                       hl
                                                                                                                             djnz
ld
                                                                                                                                                        loc_0_13ED
(hl), 3Fh; '?'
                                                                                                                                                      b, 5
hl, high_score_tbl_ram+0A5h
de, unk_0_61C7
                                                                                                                              ld
                                                                                                                              14
                                                                        loc_0_13FC:
                                                                                                                                                                                                                                                                                          ; CODE XREF: sub_0_13CA+51|j
0000:13FC 1A
0000:13FD 96
0000:13FE 23
0000:13FF 13
                                                                                                                                                      a, (de)
(hl)
hl
                                                                                                                              1d
                                                                                                                              sub
                                                                                                                              inc
inc
                                                                                                                                                       de
 0000:13FF 13
0000:1400 1A
0000:1401 9E
0000:1402 23
0000:1403 13
                                                                                                                                                       a, (de)
a, (hl)
hl
                                                                                                                             ld
sbc
                                                                                                                              inc
                                                                                                                              inc
                                                                                                                                                       de
0000:1403 13
0000:1404 1A
0000:1405 9E
0000:1406 D8
0000:1407 C5
0000:1408 06 19
0000:140A
                                                                                                                             ld
sbc
                                                                                                                              ret
                                                                                                                              push
1d
                                                                                                                                                       bc
                                                                                                                                                       b, 19h
0000:140A
0000:140A 4E
0000:140B 1A
0000:140C 77
0000:140D 79
0000:140E 12
0000:140F 2B
0000:1411 1B
                                                                        loc 0 140A:
                                                                                                                                                                                                                                                                                          ; CODE XREF: sub 0 13CA+47-j
                                                                                                                              14
                                                                                                                                                       c, (hl)
                                                                                                                             ld
ld
                                                                                                                                                       a, (de)
(hl), a
                                                                                                                                                       a, c
(de), a
                                                                                                                              ld
                                                                                                                             ld
dec
 0000:1411 10 F7
0000:1413 01 F5 FF
0000:1416 09
0000:1417 EB
                                                                                                                             djnz
ld
add
                                                                                                                                                       loc_0_140A
bc, OFFF5h
hl, bc
                                                                                                                                                       de, hl
                                                                                                                              ex
0000:1417 EB
0000:1418 09
0000:1419 EB
0000:141A C1
0000:141B 10 DF
0000:141D C9
0000:141D
                                                                                                                                                       hl, bc
de, hl
bc
                                                                                                                              add
                                                                                                                             ex
pop
                                                                                                                                                       loc 0 13FC
                                                                                                                              djnz
                                                                                                                              ret
                                                                         ; End of function sub_0_13CA
 0000:141E
0000:141E
0000:141E
0000:141E CD 16 06
                                                                                                                                                                                                                                                                                            ; DATA XREF: 0000:072A↑o
                                                                         draw_name_registered:
                                                                                                                                                       display_credits
                                                                                                                             call
0000:141E CD 16 06

0000:1421 DF

0000:1422 CD 74 08

0000:1425 3E 00

0000:1427 32 0E 60

0000:142A 32 0D 60

0000:142D 21 1C 61

0000:1430 11 22 00

0000:1433 06 05
                                                                                                                             rst
                                                                                                                                                                                                                                                                                           ; wait for 8-bit countdown
                                                                                                                             call
ld
ld
                                                                                                                                                       clear_visible_area_and_sprites
                                                                                                                                                         a, 0
(current_player_E), a
                                                                                                                                                                                                                                                                                            ; player 1
                                                                                                                             ld
ld
ld
                                                                                                                                                       (current_player_D), a
hl, high_score_tbl_ram+1Ch
de. 22h; '"'
                                                                                                                                                                                                                                                                                            ; player 1
                                                                                                                                                      de, 22h;
b, 5
                                                                                                                              ld
0000:1433 06 05

0000:1435 3E 01

0000:1437

0000:1437

0000:1437 BE

0000:1438 CA 59 14

0000:1438 19

0000:143E 21 1C 61

0000:1441 06 05

0000:1443 E 03

0000:1444 5E 03
                                                                                                                              ld
                                                                         loc_0_1437:
                                                                                                                                                                                                                                                                                           ; CODE XREF: 0000:143C|j
                                                                                                                              Cρ
                                                                                                                                                        (hl)
                                                                                                                             jp
add
djnz
                                                                                                                                                       z, loc_0_1459
hl, de
loc_0_1437
                                                                                                                                                       hl, high_score_tbl_ram+1Ch
b, 5
a, 3
                                                                                                                              1ď
                                                                                                                             ld
ld
0000:1443 3E 03

0000:1445

0000:1445 BE

0000:1446 CA 4F 14

0000:1449 19

0000:144A 10 F9

0000:144F

0000:144F

0000:144F
                                                                         loc 0 1445:
                                                                                                                                                                                                                                                                                          ; CODE XREF: 0000:144A-j
                                                                                                                                                       (hl)
z, loc_0_144F
hl, de
loc_0_1445
                                                                                                                              jp
add
                                                                                                                              djnz
                                                                                                                                                        loc_0_1475
                                                                                                                              jp
0000:144F

0000:144F

0000:144F 3E 01

0000:1451 32 0E 60

0000:1457 3E 00

0000:1459

0000:1459 21 26 60

0000:1459 22 26 60

0000:1450 3E 80

0000:1450 3E 00

0000:1460 3E 00

0000 3
                                                                                                                                                                                                                                                                                            ; CODE XREF: 0000:1446 j
                                                                         loc_0_144F:
                                                                                                                             ld
ld
                                                                                                                                                        (current_player_E), a
                                                                                                                                                                                                                                                                                            ; player 2
                                                                                                                              ld
                                                                                                                                                       (current_player_D), a
                                                                                                                                                                                                                                                                                            ; player 2
                                                                                                                              ld
                                                                                                                                                                                                                                                                                           ; CODE XREF: 0000:1438 j
                                                                          loc 0 1459:
                                                                                                                                                      hl, upright (hl) (flipscreen), a
                                                                                                                              ld
                                                                                                                              or
ld
                                                                                                                              ld
                                                                                                                                                        a, 0
(eight_bit_countdown), a
                                                                                                                              ld
                                                                                                                                                      hl, main_sequencer
(hl)
de, 30Dh
b, 0Ch
                                                                                                                              ld
                                                                                                                              ld
                                                                                                                              ld
                                                                         loc_0_146E:
                                                                                                                                                                                                                                                                                          ; CODE XREF: 0000:1472|j
 0000:146E CD 9F 30
                                                                                                                              call
                                                                                                                                                        sub_0_309F
 0000:1471 13
```

```
0000:1472 10 FA
                                                                                        djnz
                                                                                                          loc_0_146E
 0000:1474 C9
0000:1475
0000:1475
0000:1475
                                                                                                                                                                                                      ; CODE XREF: 0000:144C^j
                                                    loc_0_1475:
0000:1475 3E 01
0000:1477 3E 01
0000:1477 32 82 7D
0000:1477 32 05 60
0000:147D 32 07 60
0000:1480 3E 00
0000:1482 32 0A 60
0000:1485 C9
0000:1486
                                                                                                           a, 1 (flipscreen), a
                                                                                        ld
                                                                                                           (nmi_sequencer), a
(attract_mode_flag), a
                                                                                                                                                                                                      ; set attract mode flag
                                                                                        ld
                                                                                        ld
                                                                                        ld
                                                                                                           (main_sequencer), a
                                                                                        ret
0000:1486
0000:1486
0000:1486 CD 16 06
0000:1489 21 09 60
0000:148D A7
0000:148B A7
0000:148B A7
0000:149B A7
0000:1491 32 86 7D
0000:1497 36 01
0000:1497 36 01
0000:1497 36 00
0000:1498 23
                                                    do_initials_entry:
                                                                                                                                                                                                      ; DATA XREF: 0000:072C1o
                                                                                        call
ld
                                                                                                           display_credits
                                                                                                          hl, eight_bit_countdown
a, (hl)
                                                                                        ld
and
                                                                                                          nz, loc_0_14DC
                                                                                        jp
ld
                                                                                                         nz, loc_U_14DC
(palette_bank), a
(palette_bank+1), a
(h1), 1
h1, unk_0_6030
(h1), 0Ah
                                                                                        ld
ld
ld
                                                                                        1d
                                                                                        inc
                                                                                                          hl (hl), 0
 0000:14A1 23
0000:14A2 36 10
0000:14A4 23
0000:14A5 36 1E
0000:14A7 23
                                                                                        inc
ld
inc
ld
                                                                                                          hl
                                                                                                           (hl), 10h
                                                                                                          hl (hl), 1Eh
0000:14A7 23
0000:14A8 36 3E
0000:14AB 23
0000:14AB 36 00
0000:14AD 21 E8 75
0000:14B0 22 36 60
0000:14B6 3A 0E 60
0000:14B9 37
0000:14B9 37
                                                                                                          hl
                                                                                        inc
                                                                                                           (hl), 3Eh; '>'
                                                                                        ld
inc
ld
ld
                                                                                                          hl (hl), 0 hl, VRAM_start+1E8h
                                                                                                          (unk_0_6036), hl
hl, high_score_tbl_ram+1Ch
a, (current_player_E)
                                                                                        ld
ld
ld
                                                                                                                                                                                                      ; 0/1
; 0/2
; 1/3
                                                                                        rlca
 0000:14B9 07
0000:14BA 3C
0000:14BB 4F
0000:14BC 11 22 00
0000:14BF 06 04
                                                                                        inc
                                                                                                         c, a
de, 22h; '"'
b, 4
                                                                                        ld
0000:14BF 06 04

0000:14C1

0000:14C1 7E

0000:14C2 B9

0000:14C3 CA C9 14

0000:14C6 19

0000:14C7 10 F8

0000:14C9

0000:14C9

0000:14C9 22 38 60

0000:14CC 11 F3 FF
                                                                                        ld
                                                    loc_0_14C1:
                                                                                                                                                                                                      ; CODE XREF: 0000:14C7|j
                                                                                                          a, (hl)
                                                                                        ld
                                                                                        cp
jp
add
                                                                                                          z, loc_0_14C9
hl, de
loc_0_14C1
                                                                                        djnz
                                                    loc_0_14C9:
                                                                                                                                                                                                      ; CODE XREF: 0000:14C3<sup>†</sup>j; point to high score
                                                                                                           (unk_0_6038), hl
                                                                                        ld
 0000:14CC 11 F3 FF
0000:14CF 19
0000:14D0 22 3A 60
0000:14D3 06 00
                                                                                        1d
                                                                                                          de, OFFF3h
hl, de
                                                                                        add
ld
ld
                                                                                                           (unk_0_603A), hl
                                                                                                          b, 0
a, (unk_0_6035)
 0000:14D5 3A 35 60
0000:14D8 4F
0000:14D9 CD FA 15
0000:14DC
                                                                                        ld
                                                                                        ld
call
                                                                                                          sub_0_15FA
                                                                                                                                                                                                      ; high score initial select sprite
 0000:14DC
                                                   loc_0_14DC:
                                                                                                                                                                                                      ; CODE XREF: 0000:148E1i
0000:14DC
0000:14DC 21 34 60
0000:14DF 35
0000:14ED C2 FC 14
0000:14E3 36 3E
0000:14E5 2B
0000:14E6 35
0000:14E7 CA C6 15
0000:14EA 7E
0000:14EB 06 FF
0000:14ED 0000:14ED
                                                                                                          hl, unk_0_6034 (hl) nz, loc_0_14FC (hl), 3Eh; '>
                                                                                        ld
dec
                                                                                        jp
ld
dec
                                                                                                          hl
(hl)
                                                                                                          z, loc_0_15C6
a, (hl)
b, 0FFh
                                                                                        jp
ld
ld
 0000:14ED
0000:14ED 04
0000:14EE D6 0A
0000:14F0 D2 ED 14
                                                   loc_0_14ED:
                                                                                                                                                                                                     ; CODE XREF: 0000:14F0-j
                                                                                        sub
                                                                                                           0Ah
                                                                                                          nc, loc_0_14ED
                                                                                        jp
add
ld
ld
 0000:14F3 C6 0A
0000:14F5 32 52 75
0000:14F8 78
0000:14F9 32 72 75
                                                                                                           a, 0Ah
(VRAM_start+152h), a
                                                                                                          (VRAM_start+172h), a
0000:14F9 32 72 75

0000:14FC

0000:14FC 21 30 60

0000:14FF 46

0000:1500 36 0A

0000:1505 CB 7F

0000:1505 CB 7F

0000:1507 C2 46 15
                                                                                        ld
                                                    loc_0_14FC:
                                                                                                                                                                                                      ; CODE XREF: 0000:14E0↑j
                                                                                                          hl, unk_0_6030
                                                                                        ld
                                                                                        ld
                                                                                                                 (h1)
                                                                                                         b, (h1)
(h1), 0Ah
a, (controller_in)
7, a
nz, jump_pressed
                                                                                        ld
ld
                                                                                                                                                                                                       ; edge-detected inputs
                                                                                                                                                                                                      ; button pressed?
; yes, skip
; left/right only
; yes, skip
                                                                                        bit
                                                                                        jp
and
 0000:1507 C2 40 15
0000:150A E6 03
0000:150C C2 14 15
0000:150F 3C
                                                                                        jp
                                                                                                          nz, left_right_pressed
 0000:1510 77
0000:1511 C3 8A 15
0000:1514
0000:1514
                                                                                                           (hl).
                                                                                        1d
                                                                                                          (hl), a
loc_0_158A
 0000:1514
0000:1514 05
0000:1515 CA ID 15
0000:1518 78
0000:1519 77
0000:1510 C3 8A 15
                                                                                                                                                                                                      ; CODE XREF: 0000:150C1j
                                                    left_right_pressed:
                                                                                        dec
jp
ld
                                                                                                          z, loc_0_151D
                                                                                                                b
                                                                                        ld
                                                                                                           (h1)
                                                                                                           loc_0_158A
                                                                                        jp
0000:151D
0000:151D
0000:151D
0000:151D
0000:151D
0000:151F C2 39 15
0000:1522 3A 35 60
0000:1525 3C
0000:1526 FE 1E
0000:1528 2C 2D 15
0000:152B 3E 00
0000:152D
0000:152D
0000:152D
                                                    loc_0_151D:
                                                                                                                                                                                                      ; CODE XREF: 0000:1515<sup>†</sup>j
                                                                                                          nz, loc_0_1539
a, (unk_0_6035)
                                                                                        jp
ld
                                                                                                           a
1Eh
                                                                                                          nz, loc_0_152D
a, 0
                                                                                        ср
                                                                                                                                                                                                      ; CODE XREF: 0000:1528<sup>†</sup>j; 0000:153E<sup>†</sup>j ...
                                                   loc_0_152D:
 0000:152D 32 35 60
 0000:152D
                                                                                       ld
                                                                                                          (unk_0_6035), a
```

```
0000:1530 4F
                                                                                    ld
                                                                                                     c, a
b, 0
 0000:1531 06 00
0000:1533 CD FA 15
0000:1536 C3 8A 15
0000:1539
                                                                                    ld
                                                                                    call
jp
                                                                                                     sub_0_15FA
loc_0_158A
0000:1539
0000:1539
0000:1539
0000:1539 3A 35 60
0000:153C D6 01
0000:153E F2 2D 15
0000:1541 3E 1D
0000:1543 C3 2D 15
0000:1546
                                                 loc_0_1539:
                                                                                                                                                                                             ; CODE XREF: 0000:151F1 i
                                                                                                     a, (unk_0_6035)
                                                                                    sub
                                                                                                     p, loc_0_152D
                                                                                    jp
ld
                                                                                                     loc_0_152D
                                                                                    jр
 0000:1546
0000:1546
0000:1546 3A 35 60
0000:1549 FE 1C
                                                 jump_pressed:
                                                                                                                                                                                            ; CODE XREF: 0000:1507<sup>†</sup>j
                                                                                                    a, (unk_0_6035)
1Ch
                                                                                    ld
0000:1549 FE 1C
0000:1548 FE 1D
0000:1548 FE 1D
0000:1550 CA C6 15
0000:1550 01 88 75
0000:1556 01 88 75
0000:1550 CA 8A 15
0000:155C CA 8A 15
0000:155F 09
0000:1562 77
                                                                                   cp
jp
cp
jp
ld
                                                                                                    z, loc_0_156D
1Dh
z, loc_0_15C6
hl, (unk_0_6036)
bc, VRAM_start+188h
                                                                                   ld
and
sbc
                                                                                                     hl, bc
                                                                                                    h1, bc
z, loc_0_158A
h1, bc
a, 11h
(h1), a
bc, 0FFE0h
h1, bc
                                                                                    jp
add
add
0000:1562 77
0000:1563 01 E0 FF
0000:1566 09
0000:1567
0000:1567
                                                                                    ld
ld
                                                                                    add
                                                loc_0_1567:
                                                                                                                                                                                           ; CODE XREF: 0000:1583|j
 0000:1567 22 36 60
0000:156A C3 8A 15
0000:156D
                                                                                                     (unk_0_6036), hl
loc_0_158A
                                                                                    1d
0000:156D
0000:156D 2A 36 60
0000:1570 01 20 00
0000:1573 09
0000:1574 A7
0000:1575 01 08 76
0000:1578 ED 42
0000:157A C2 86 15
0000:157D 21 E8 75
0000:1580
                                                 loc_0_156D:
                                                                                                                                                                                            ; CODE XREF: 0000:154B<sup>†</sup> <sup>†</sup>
                                                                                   ld
ld
                                                                                                     hl, (unk_0_6036)
                                                                                                     bc, 20h; 'hl, bc
                                                                                    add
                                                                                    and
ld
                                                                                                     bc, VRAM_start+208h
                                                                                    sbo
                                                                                                     hl, bc
nz, loc_0_1586
                                                                                    jp
ld
                                                                                                     hl, VRAM_start+1E8h
                                                                                                                                                                                            ; CODE XREF: 0000:1587 j
 0000:1580
                                                 loc 0 1580:
0000:1580 3E 10
0000:1582 77
0000:1583 C3 67 15
0000:1586
0000:1586
0000:1586 09
                                                                                    14
                                                                                                           10h
                                                                                    ld
                                                                                                     (hl), a
loc_0_1567
                                                                                    jр
                                                 loc_0_1586:
                                                                                                                                                                                             ; CODE XREF: 0000:157A j
                                                                                    add
                                                                                                     hl, bc
loc_0_1580
UUUU:1586 09
0000:1587 C3 80 15
0000:158A
0000:158A
0000:158A
                                                                                                                                                                                            ; CODE XREF: 0000:1511<sup>†</sup>j; 0000:151A<sup>†</sup>j ...
                                                loc_0_158A:
0000:158A 21 32 60 0000:158A 21 32 60 0000:158D 35 0000:158D 35 0000:1591 3A 31 60 0000:1595 C2 B8 15 0000:1595 32 31 60 0000:1590 11 BF 01 0000:15A0
                                                                                                    hl, unk_0_6032
(hl)
nz, locret_0_15F9
a, (unk_0_6031)
                                                                                    jp
ld
                                                                                    and
jp
ld
                                                                                                     nz, loc_0_15B8
                                                                                                     a, 1
(unk_0_6031),
                                                                                    14
                                                                                    ld
                                                                                                     de, byte_0_1BD+2
                                                                                                                                                                                             ; empty/dummy score
                                                                                                                                                                                            ; CODE XREF: 0000:15C3|j
                                                loc_0_15A0:
 0000:15A0
0000:15A0 FD 2A 38 60
0000:15A4 FD 6E 04
0000:15A4 FD 66 05
0000:15A7 FD 66 05
0000:15AB DD E1
0000:15AB DD E1
0000:15AB DD E1
0000:15BD 2D 7C 05
0000:15BD 32 22 22 60
                                                                                                     iy, (unk_0_6038)
1, (iy+4)
h, (iy+5)
                                                                                    14
                                                                                                                                                                                             ; ptr high score
                                                                                   ld
ld
                                                                                   push
pop
call
ld
                                                                                                     h1
                                                                                                     display_score_HL
0000:15B2 32 32 60
0000:15B5 C3 F9 15
0000:15B8
0000:15B8
                                                                                                     (unk_0_6032), a
locret_0_15F9
                                                                                    1d
                                                                                    jр
 0000:15B8
0000:15B8 AF
0000:15B9 32 31 60
                                                loc_0_15B8:
                                                                                                                                                                                           ; CODE XREF: 0000:1595<sup>†</sup> †
                                                                                                      (unk_0_6031)
                                                                                    ld
ld
0000:15B9 32 31 60

0000:15DC ED 5B 38 60

0000:15C1 13

0000:15C1 13

0000:15C2 13

0000:15C3 C3 A0 15

0000:15C6

0000:15C6

0000:15C6 ED 5B 38 60
                                                                                                     de, (unk_0_6038)
                                                                                                                                                                                            ; point to high score
                                                                                    inc
                                                                                                     de
de
                                                                                    inc
                                                                                                     de
loc 0 15A0
                                                                                    qŗ
                                               loc_0_15C6:
                                                                                                                                                                                             ; CODE XREF: 0000:14E7 j
0000:15C6
0000:15C6 ED 5B 38 60
0000:15C6 AF
0000:15CB 12
0000:15CC 21 09 60
0000:15CC 21 09 60
0000:15D1 23
0000:15D2 35
0000:15D2 35
                                                                                                                                                                                             ; 0000:1550↑j
; point to high score
                                                                                    ld
                                                                                                     de, (unk_0_6038)
                                                                                    xor
ld
                                                                                                     a
(de), a
                                                                                   ld
ld
                                                                                                     hl, eight_bit_countdown (hl), 80h; 'Ç'
                                                                                                    hl
(hl)
                                                                                    inc
                                                                                    dec
0000:15D2 35
0000:15D5 21 E8 75
0000:15D5 21 E0 75
0000:15D6 11 E0 FF
0000:15DF
                                                                                                    b, OCh
hl, VRAM_start+1E8h
iy, (unk_0_603A)
de, OFFE0h
                                                                                    1d
                                                                                    ld
ld
                                                                                    ld
                                                 loc_0_15DF:
                                                                                                                                                                                            ; CODE XREF: 0000:15E6|j
                                                                                                     a, (hl)
(iy+0), a
 0000:15DF
                                                                                    ld
0000:15DF 7E
0000:15E0 FD 77 00
0000:15E3 FD 23
0000:15E5 19
0000:15E6 10 F7
                                                                                    ld
                                                                                    inc
add
                                                                                                     loc_0_15DF
b, 5
                                                                                    djnz
 0000:15E8 06 05
0000:15EA 11 14 03
0000:15ED
                                                                                                     de, 314h
                                                                                                                                                                                           ; CODE XREF: 0000:15F1-i
 0000:15ED
                                                loc 0 15ED:
 0000:15ED CD 9F 30
                                                                                   call
                                                                                                    sub_0_309F
```

```
0000:15F1 10 FA
0000:15F3 11 1A 03
0000:15F6 CD 9F 30
0000:15F9
                                                                                                loc_0_15ED
                                                                               dinz
                                                                                               de, 31Ah
sub_0_309F
                                                                               call
0000:15F9
0000:15F9 C9
0000:15F9
0000:15FA
                                                                                                                                                                                  ; CODE XREF: 0000:158E<sup>†</sup>j; 0000:15B5<sup>†</sup>j
                                             locret_0_15F9:
                                                                             SUBROUTINE I
0000:15FA
0000:15FA
0000:15FA
0000:15FA
                                             sub_0_15FA:
                                                                                                                                                                                  ; CODE XREF: 0000:14D91p
0000:15FA D5
0000:15FA
0000:15FB E5
0000:15FC CB 21
                                                                                                                                                                                  ; 0000:1533<sup>p</sup>
                                                                               push
                                                                                               de
hl
                                                                              push
                                                                               sla
0000:15FC CB 21
0000:15FE 21 0F 36
0000:1601 09
0000:1602 EB
                                                                                               hl, letter_coords
hl, bc
de, hl
                                                                               ld
                                                                               add
                                                                               ex
ld
0000:1603 21 74 69
0000:1606 1A
0000:1607 13
0000:1608 77
                                                                                              hl, soft_sprite_ram+74h
a, (de)
de
(hl), a
                                                                                                                                                                                 ; sprite for initials entry
                                                                              ld
inc
                                                                                                                                                                                  ; X coordinate
0000:1609 23
                                                                                              hl
0000:1609 23
0000:160A 36 72
0000:160C 23
0000:160D 36 0C
0000:1610 1A
0000:1611 77
0000:1612 E1
                                                                                               (hl), 72h; 'r'
hl
(hl), 0Ch
                                                                              ld
inc
                                                                                                                                                                                  ; tile
                                                                                                                                                                                  ; palette
                                                                                               hl
                                                                              ld
ld
                                                                                               a, (de)
(hl), a
                                                                                                                                                                                  ; Y coordinate
                                                                              pop
0000:1613 D1
0000:1614 C9
0000:1614
0000:1614
                                                                                               de
                                              ; End of function sub_0_15FA
0000:1615
0000:1615
0000:1615
                                              mario_pauline_reunion:
                                                                                                                                                                                  ; DATA XREF: 0000:072E↑o
0000:1615
0000:1615
0000:1618
3A 27 62
0000:161B
0F
0000:161C
0D 2F 16
0000:161F
3A 88 63
0000:1622
0000:1622
0000:1623
0000:1623
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
0000:1628
                                                                                             sub_0_30BD
a, (level_type)
                                                                               call
                                                                              ld
                                                                               rrca
                                                                                              nc, loc_0_162F
a, (unk_0_6388)
                                                                               jp
ld
                                                                                               a,
28h
                                                                               rst
                                                                                                                                                                                  ; go!
                                                                               .dw loc_0_1654
                                                                                                                                                                                  ; Jump table
                                                                               .dw loc_0_1670
.dw loc_0_168A
.dw loc_0_1732
.dw loc_0_1757
0000:162D 8E 17
0000:162F
0000:162F
                                                                                .dw loc_0_178E
0000:162F

0000:162F 0F

0000:1630 D2 41 16

0000:1633 3A 88 63

0000:1636 EF

0000:1637 A3 16

0000:1637 BB 16

0000:1638 32 17

0000:163B 32 17

0000:163F 8E 17

0000:163F 8E 17
                                              loc 0 162F:
                                                                                                                                                                                  ; CODE XREF: 0000:161C14
                                                                              rrca
                                                                                              nc, loc_0_1641
a, (unk_0_6388)
28h
                                                                               jp
ld
                                                                               rst
                                                                                                                                                                                  ; go!
                                                                               .dw loc_0_16A3
                                                                                                                                                                                  ; Jump table
                                                                               .dw loc_0_16BB .dw loc_0_1732
                                                                                .dw loc_0_1757
.dw loc_0_178E
0000:163F 8E 17

0000:1641

0000:1641

0000:1641 CD BD 1D

0000:1644 3A 88 63

0000:1647 EF

0000:1647

0000:1648 BG 17

0000:1648 BG 30
                                              loc_0_1641:
                                                                                                                                                                                  ; CODE XREF: 0000:1630<sup>†</sup>j
                                                                               call
                                                                                              sub_0_1DBD
                                                                               ld
                                                                                               a, (unk_0_6388)
28h
                                                                               rst
                                                                                                                                                                                  ; gol
                                                                               .dw unk_0_17B6
                                                                                                                                                                                  ; Jump table
0000:164A 69 30
0000:164C 39 18
0000:164E 6F 18
0000:1650 80 18
                                                                                .dw loc_0_3069
.dw loc_0_1839
.dw loc_0_186F
.dw loc_0_1880
                                                                               .dw
.dw
0000:1652 C6 18

0000:1654

0000:1654

0000:1654

0000:1654 CD 08 17

0000:1657 21 5C 38

0000:165A CD 4E 00
                                                                                .dw loc_0_18C6
                                                                                                                                                                                  ; DATA XREF: 0000:16231o
                                             loc 0 1654:
                                                                              call
ld
call
                                                                                               sub_0_1708
hl, kong_normal_spr
                                                                                               copy sprites 2 11 data
0000:165D 3E 20
0000:165F 32 09 60
0000:1662
                                                                               ld
                                                                               ld
                                                                                                (eight_bit_countdown), a
0000:1662
0000:1662 21 88 63
0000:1665 34
0000:1666 3E 01
0000:1668 F7
                                                                                                                                                                                  ; CODE XREF: 0000:16A0-1
                                              loc 0 1662:
                                                                               ld
                                                                                               hl, unk_0_6388
                                                                                               (hl)
a, 1
30h
                                                                               ld
                                                                                                                                                                                  ; return if level bit not set
                                                                               rst
UUUU:1668 F7
0000:1669 21 0B 69
0000:166C 0E FC
0000:166E FF
0000:166F C9
                                                                                               hl, soft_sprite_ram+0Bh c, 0FCh; '3'
                                                                               1d
                                                                                                                                                                                  ; sprite #2, x coord
; -4
                                                                               ld
                                                                                                                                                                                  ; subtract 4 from x coord for 10 sprites
                                                                               rst
                                                                               ret
0000:1670
0000:1670
0000:1670
                                                                                                                                                                                  ; DATA XREF: 0000:1625\u00e10 o ; wait for 8-bit countdown
                                             loc_0_1670:
0000:1670 DF
0000:1671 21 32 39
0000:1674 CD 4E 00
0000:1677 3E 20
0000:1679 32 09 60
0000:1670 21 88 63
0000:167F 34
0000:167F 34
                                                                               rst
                                                                              ld
call
ld
ld
                                                                                               hl, dk_throw_barrel_spr
copy_sprites_2_11_data
                                                                                               a, 20h; ' ' (eight_bit_countdown), a
                                                                              ld
inc
                                                                                               hl, unk_0_6388
(hl)
0000:1680 3E 04
0000:1682 F7
                                                                                               a, 4
30h
                                                                               rst
                                                                                                                                                                                  ; return if level bit not set
                                                                                                                                                                                  , recurn it level bit
; sprite #2, x coord
; +4
0000:1683 21 0B 69
0000:1686 0E 04
                                                                               ld
ld
                                                                                               hl, soft_sprite_ram+0Bh
                                                                                               c, 4
                                                                                                                                                                                  ; add 4 to x coord for 10 sprites
0000:1688 FF
                                                                               rst
 0000:1689 C9
0000:168A
0000:168A
                                                                                                                                                                                  ; DATA XREF: 0000:1627\u00f3o ; wait for 8-bit countdown
                                             loc_0_168A:
0000:1682
0000:168A DF
                                                                              rst
```

```
hl, kong_climbing_spr
copy_sprites_2_11_data
a, 66h; 'f'
 0000:168B 21 8C 38
                                                                                                                                ld
 0000:168E CD 4E 00
                                                                                                                                call
0000:168E CD 4E 00
0000:1691 3E 66
0000:1693 32 0C 69
0000:1696 AF
0000:1697 32 24 69
0000:169A 32 2C 69
0000:169A 32 2C 69
0000:169A 32 2F 62
0000:16A0 33 62 16
                                                                                                                               ld
ld
                                                                                                                                                           a, 66h; 'f'
(soft_sprite_ram+0Ch), a
                                                                                                                                                                                                                                                                                            ; sprite #3, y coord
                                                                                                                                xor
                                                                                                                                                         (soft_sprite_ram+24h), a
(soft_sprite_ram+2Ch), a
(unk_0_62AF), a
loc_0_1662
                                                                                                                                1d
                                                                                                                                ld
                                                                                                                                jр
 0000:16A3
 0000:16A3
0000:16A3
0000:16A3 CD 08 17
0000:16A6 3A 10 69
0000:16A6 B 21 5C 38
0000:16AB CD 4E 00
                                                                                                                                                                                                                                                                                                 ; DATA XREF: 0000:1637\o
                                                                           loc_0_16A3:
                                                                                                                                call
                                                                                                                                                          sub_0_1708
                                                                                                                                                         sub___1/\u00f3
a, (soft_sprite_ram+10h)
3Bh; ';'
hl, kong_normal_spr
copy_sprites_2_11_data
hl, soft_sprite_ram+8
C, a
                                                                                                                                1d
                                                                                                                                                                                                                                                                                                ; sprite #4, y coord
                                                                                                                               sub
ld
call
0000:16AE CD 4E 00
0000:16B1 21 08 69
0000:16B4 4F
0000:16B5 FF
0000:16B9 34
0000:16B9 C9
0000:16BB
                                                                                                                                1d
                                                                                                                                                                                                                                                                                                ; sprite #2, y coord
                                                                                                                                ld
                                                                                                                                                           c, a
                                                                                                                                                                                                                                                                                                  ; add C to y coord for 10 sprites
                                                                                                                                rst
                                                                                                                                ld
                                                                                                                                                          hl. unk 0 6388
                                                                                                                                                           (h1)
 0000:16BB
0000:16BB
0000:16BB AF
0000:16BB AF
0000:16BC 32 AO 62
0000:16BF 3A A3 63
0000:16C2 4F
0000:16C3 3A 10 69
0000:16C6 FE 5A
                                                                           loc_0_16BB:
                                                                                                                                                                                                                                                                                                  ; DATA XREF: 0000:163910
                                                                                                                                                         a
  (unk_0_62A0), a
a, (unk_0_63A3)
C, a
a, (soft_sprite_ram+10h)
5Ah; 'Z'
                                                                                                                                ld
                                                                                                                                14
                                                                                                                                ld
ld
                                                                                                                                                                                                                                                                                                ; sprite #4, y coord
                                                                                                                                ср
                                                                                                                                                           nc, loc_0_16E1
0000:16C8 D2 E1 16
0000:16CB CB 79
0000:16CD CA D5 16
0000:16D0
                                                                                                                                jp
bit
                                                                                                                                                           z, loc_0_16D5
                                                                                                                                jр
 0000:16D0
0000:16D0 3E 01
0000:16D2 32 A0 62
                                                                          loc_0_16D0:
                                                                                                                                                                                                                                                                                                 ; CODE XREF: 0000:16E8+j
                                                                                                                                                           (unk_0_62A0), a
                                                                                                                                ld
 0000:16D5
 0000:16D5
0000:16D5
0000:16D5 CD 02 26
0000:16D5
                                                                                                                                                                                                                                                                                                 ; CODE XREF: 0000:16CD<sup>†</sup>j; 0000:16EB<sup>†</sup>j
                                                                          loc_0_16D5:
                                                                                                                               call
ld
ld
ld
                                                                                                                                                           sub_0_2602
0000:16D5
0000:16D8 3A A3 63
0000:16DB 4F
0000:16DC 21 08 69
0000:16DF FF
0000:16ED C9
0000:16EI
0000:16EI
                                                                                                                                                          a, (unk_0_63A3)
c, a
hl, soft_sprite_ram+8
                                                                                                                                                                                                                                                                                                 ; sprite #2, y coord
; add C to y coord for 10 sprites
                                                                                                                                rst
                                                                                                                                                           38h
0000:16E1
0000:16E1 FE 5D
0000:16E3 DA EE 16
0000:16E6 CB 79
0000:16E8 CA DO 16
                                                                                                                                                                                                                                                                                                 ; CODE XREF: 0000:16C8<sup>†</sup>j
                                                                          loc_0_16E1:
                                                                                                                                                          5Dh; ']'
c, loc_0_16EE
7, c
                                                                                                                                jp
bit
                                                                                                                                                          z, loc_0_16D0
loc_0_16D5
                                                                                                                                qį
qį
 0000:16EB C3 D5 16
0000:16EE
0000:16EE
0000:16EE
0000:16EE 21 8C 38
0000:16F1 CD 4E 00
0000:16F4 3E 66
0000:16F6 32 0C 69
                                                                          loc_0_16EE:
                                                                                                                                                                                                                                                                                                 ; CODE XREF: 0000:16E311
                                                                                                                                                          hl, kong_climbing_spr
copy_sprites_2_11_data
a, 66h; 'f'
                                                                                                                               ld
call
                                                                                                                                ld
ld
                                                                                                                                                           (soft_sprite_ram+OCh), a
                                                                                                                                                                                                                                                                                                ; sprite #4, x coord
0000:16F6 32 0C 69
0000:16F9 AF
0000:16FA 32 24 69
0000:16FD 32 2C 69
0000:1700 32 AF 62
0000:1703 21 88 63
                                                                                                                                xor
ld
                                                                                                                                                            (soft_sprite_ram+<mark>24h</mark>), a
                                                                                                                                                           (soft_sprite_ram+2Ch), a (unk_0_62AF), a
                                                                                                                                ld
ld
                                                                                                                                                          hl, unk_0_6388
(hl)
                                                                                                                                ld
 0000:1707 C9
                                                                                                                               ret
 0000:1708
0000:1708
0000:1708
                                                                                                                                SUBROUTINE
 0000:1708
0000:1708
0000:1708
0000:1708 CD 1C 01
0000:1708
                                                                                                                                                                                                                                                                                                  ; CODE XREF: 0000:1654<sup>p</sup>; 0000:16A3<sup>p</sup>
                                                                           sub_0_1708:
                                                                                                                                call
                                                                                                                                                          stop sound
0000:1708

0000:170B 21 20 6A

0000:170E 36 80

0000:1710 23

0000:1711 36 76
                                                                                                                               ld
ld
                                                                                                                                                            hl, soft_sprite_ram+120h (hl), 80h; 'C'
                                                                                                                                                          h1
                                                                                                                                                         hl
(hl), 76h; 'v'
                                                                                                                                ld
 0000:1711 30 70
0000:1713 23
0000:1714 36 09
0000:1716 23
                                                                                                                                                          hl
(hl), 9
                                                                                                                                ld
0000:1716 23 0000:1717 36 20 0000:1717 36 20 0000:1712 21 05 69 0000:1712 21 C4 75 0000:1721 11 20 00 0000:1724 3E 10 0000:1726 CD 14 05 0000:1726 23 6 07 0000:1727 36 07 0000:1727 36 03 0000:1731 9 0000:1731
                                                                                                                                inc
ld
                                                                                                                                                          hl
                                                                                                                                                           (hl), 20h; ''
                                                                                                                                ld
ld
                                                                                                                                                          hl, soft_sprite_ram+5
(hl), 13h
                                                                                                                                                                                                                                                                                                ; sprite #1, flipy & code
; pauline, front-on
                                                                                                                                                          hl, VRAM_start+1C4h
de, 20h; ''
                                                                                                                                ld
ld
                                                                                                                               ld
call
ld
                                                                                                                                                                    10h
                                                                                                                                                          display_3_tiles_HL
hl, unk_0_608A
(hl), 7
                                                                                                                                1d
                                                                                                                                ld
                                                                                                                                ret
 0000:1731
0000:1731
0000:1731
0000:1732
                                                                           ; End of function sub_0_1708
 0000:1732
0000:1/32
0000:1732 CD 6F 30
0000:1732 CD 6F 30
0000:1735 3A 13 69
0000:1738 FE 2C
0000:173A DO
                                                                                                                                                                                                                                                                                                  ; DATA XREF: 0000:1629\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\dagger\
                                                                          loc_0_1732:
                                                                                                                                call
ld
                                                                                                                                                          sub 0 306F
                                                                                                                                                         a, (sore
                                                                                                                                                                    (soft_sprite_ram+13h)
                                                                                                                                cp
ret
0000:173A DO
0000:173B AF
0000:173C 32 00 69
0000:173F 32 04 69
0000:1745 3E 6B
0000:1747 32 24 69
0000:1748 3D
0000:1748 32 2C 69
0000:174B 32 2C 69
0000:174B 32 2C 69
0000:174B 34
                                                                                                                                xor
ld
                                                                                                                                                          a
(soft_sprite_ram), a
(soft_sprite_ram+4), a
(soft_sprite_ram+0Ch), a
                                                                                                                                                                                                                                                                                                ; sprite #0, y coord
; sprite #1, y coord
; sprite #3, y coord
                                                                                                                                ld
ld
                                                                                                                                ld
                                                                                                                                ld
dec
                                                                                                                                                            (soft_sprite_ram+24h), a
                                                                                                                                                         (soft_sprite_ram+2Ch), a hl, soft_sprite_ram+121h (hl)
                                                                                                                                1d
```

```
hl, unk_0_6388 (hl)
 0000:1752 21 88 63
                                                                                                                                            ld
 0000:1755 34
                                                                                                                                            inc
 0000:1756 C9
 0000:1757
0000:1757 CD 6F 30
0000:1757
0000:175A CD 6C 17
                                                                                loc_0_1757:
                                                                                                                                                                                                                                                                                                                            ; DATA XREF: 0000:162B\u00e90
                                                                                                                                                                                                                                                                                                                            : 0000:163Dto
                                                                                                                                                                         sub_0_306F
sub_0_176C
                                                                                                                                            call
0000:175A CD 6C 17

0000:175D 23

0000:175E 13

0000:175F CD 83 17

0000:176C 3E 40

0000:176A 32 09 60

0000:176A 34

0000:176B C9
                                                                                                                                            inc
inc
                                                                                                                                                                        hl
                                                                                                                                                                         de
                                                                                                                                           call
ld
ld
ld
                                                                                                                                                                        sub_0_1783
a, 40h;
                                                                                                                                                                        (eight_bit_countdown), a
hl, unk_0_6388
(hl)
                                                                                                                                           ret
 0000:176C
 0000:176C
0000:176C
0000:176C
                                                                                                                                             SUBROUTINE
 0000:176C
0000:176C 11 03 00
0000:176F 21 2F 69
0000:1772 06 0A
                                                                                  sub_0_176C:
                                                                                                                                                                                                                                                                                                                            ; CODE XREF: 0000:175A p
                                                                                                                                                                        hl, soft_sprite_ram+2Fh b, 0Ah
                                                                                                                                            ld
                                                                                                                                            ld
0000:1772 06 0A

0000:1774

0000:1774 A7

0000:1775 7E

0000:1776 ED 52

0000:1778 FE 19

0000:177A D2 7F 17

0000:177D 36 00

0000:177F

0000:177F

0000:177F 2B

0000:177F 2B

0000:177E 10
                                                                                                                                                                                                                                                                                                                            ; CODE XREF: sub_0_176C+14 | j
                                                                                  loc_0_1774:
                                                                                                                                                                       a, (hl)
hl, de
19h
nc, loc_0_177F
(hl), 0
                                                                                                                                            ld
                                                                                                                                           cp
jp
ld
                                                                                 loc_0_177F:
                                                                                                                                                                                                                                                                                                                         ; CODE XREF: sub_0_176C+E^j
 0000:1777 2B
0000:1780 10 F2
0000:1782 C9
0000:1782
                                                                                                                                            djnz
                                                                                                                                                                        loc_0_1774
                                                                                  ; End of function sub_0_176C
 0000:1782
0000:1782
0000:1783
0000:1783
0000:1783
0000:1783
0000:1783
0000:1783
0000:1783
                                                                                                                                         SUBROUTINE
                                                                                sub_0_1783:
                                                                                                                                                                                                                                                                                                                            ; CODE XREF: 0000:175f<sup>p</sup>
                                                                                                                                                                        b, OAh
 0000:1785
 0000:1785
                                                                                 loc_0_1785:
                                                                                                                                                                                                                                                                                                                           ; CODE XREF: sub 0 1783+8 1
0000:1785

0000:1785 7E

0000:1786 A7

0000:1787 C2 26 00

0000:178A 19

0000:178B 10 F8

0000:178D C9
                                                                                                                                                                        a, (hl)
                                                                                                                                            ld
                                                                                                                                            and
                                                                                                                                                                        nz, pop_hl_ret
hl, de
loc_0_1785
                                                                                                                                            jp
add
                                                                                                                                            ret
                                                                                 ; End of function sub_0_1783
 0000:178D
 0000:178D
0000:178D
0000:178E
0000:178E
 0000:178E
0000:178E DF
0000:178E DF
0000:178E
0000:178F 2A 2A 62
                                                                                 loc_0_178E:
                                                                                                                                                                                                                                                                                                                            ; DATA XREF: 0000:162D o
                                                                                                                                                                                                                                                                                                                                  0000:163F↑o
wait for 8-bit countdown
                                                                                                                                                                        hl, (seq_data)
                                                                                                                                            ld
0000:178F 2A 2A 62

0000:1792 23

0000:1793 7E

0000:1794 FE 7F

0000:1796 C2 9D 17

0000:1799 21 73 3A

0000:179D 75

0000:179D 75
                                                                                                                                                                        hl
                                                                                                                                                                       hl
a, (hl)
7Fh; '
nz, loc_0_179D
hl, level_seq_2
a, (hl)
                                                                                                                                            ld
                                                                                                                                                                                                                                                                                                                            ; restart repeating levels?
                                                                                                                                            ср
                                                                                                                                                                                                                                                                                                                           ; no, skip
; repeating levels
                                                                                                                                            jp
ld
                                                                                                                                                                                                                                                                                                                            ; get new level
                                                                                                                                                                                                                                                                                                                           ; CODE XREF: 0000:1796 i
 0000:179D
                                                                                loc 0 179D:
0000:179D
0000:179D
22 2A 62
0000:17A0 32 27 62
0000:17A3 11 00 05
0000:17A6 CD 9F 30
0000:17AA 32 88 63
0000:17AD 21 09 60
0000:17AD 36 30
0000:17B3 36 08
0000:17B3 36 08
0000:17B5 C9
                                                                                                                                                                        (seq_data), hl
(level_type), a
                                                                                                                                            ld
                                                                                                                                           ld
ld
                                                                                                                                                                        de, 500h
                                                                                                                                            call
xor
ld
ld
                                                                                                                                                                        sub_0_309F
                                                                                                                                                                          (unk_0_6388), a
                                                                                                                                                                        hl, eight_bit_countdown (hl), 30h; '0'
                                                                                                                                           ld
inc
ld
                                                                                                                                                                        hl (hl), 8
                                                                                                                                                                                                                                                                                                                           ; sequencer = how high screen
                                                                                                                                            ret
 0000:17B5
0000:17B5
0000:17B6 00
0000:17B7
                                                                                  unk_0_17B6:
                                                                                                                                            .db
                                                                                                                                                                                                                                                                                                                           ; DATA XREF: 0000:1648 o
 0000:17B7
0000:17B7 CD 1C 01
0000:17BA 21 8A 60
0000:17BD 36 0E
                                                                                                                                                                        stop_sound
hl, unk_0_608A
(hl), OEh
                                                                                                                                            call
                                                                                                                                            ld
ld
0000:17BD 36 0E
0000:17BF 23
0000:17C2 3E 10
0000:17C2 3E 10
0000:17C4 11 20 00
0000:17CA CD 14 05
0000:17CA CD 14 05
0000:17CD 21 83 75
0000:17D0 CD 14 05
0000:17D0 CD 14 05
0000:17D0 CD 14 05
0000:17D0 CD 26 18
0000:17D0 CD 37 06
0000:17D0 CD 37 06
0000:17D0 CD 37 07
0000:17E8 CD 37 07
0000:17E8 CD 37 07
0000:17EE CD 26 18
                                                                                                                                            inc
                                                                                                                                                                        hl (hl), 3
                                                                                                                                           ld
ld
ld
                                                                                                                                                                        a, 10h
de, 20h; 'hl, VRAM_start+223h
                                                                                                                                                                                                                                                                                                                            ; <space>
; inc by column
                                                                                                                                           call
ld
call
ld
                                                                                                                                                                        display_3_tiles_HL
hl, VRAM_start+183h
display_3_tiles_HL
hl, VRAM_start+2DAh
0000:17D3 21 DA
0000:17D6 CD 26
0000:17D9 11 47
0000:17D9 CD A7
0000:17D7 21 D5
0000:17E2 CD 26
0000:17E5 11 4D
0000:17E8 CD A7
0000:17E8 CD A7
0000:17E8 CD A7
0000:17EB 21 D0
0000:17EB 11 D3
0000:17F1 11 53
0000:17F4 CD A7
0000:17F4 CD A7
0000:17F4 D A7
0000:17F4 D 56
0000:17F5 D 56
0000:1
                                                                                                                                           call
ld
call
ld
                                                                                                                                                                        clear_14x5_HL
de, draw_data_rivet_end1
sub_0_DA7
                                                                                                                                                                       SUD_U_DA7
hl, VRAM_start+2D5h
clear_14x5_HL
de, draw_data_rivet_end2
sub_0_DA7
hl_UDM_
                                                                                                                                           call
ld
call
ld
                                                                                                                                                                        hl. VRAM start+2D0h
                                                                                                                                                                      hl, VRAM_start+2DOh
clear_14x5_HL
de, draw_data_rivet_end3
sub_0_DA7
hl, VRAM_start+2CBh
clear_14x5_HL
de, draw_data_rivet_end4
sub_0_DA7
hl, kong_normal_spr
copy_sprites_2_ll_data
hl, soft_sprite_ram+8
c, 68
38h
                                                                                                                                           call
ld
call
ld
                                                                                                                                            call
ld
 0000:1800 CD A7
                                                           0D
                                                                                                                                            call
 0000:1803 21 5C 38
0000:1806 CD 4E 00
0000:1809 21 08 69
0000:180C 0E 44
                                                                                                                                            ld
                                                                                                                                            call
                                                                                                                                                                                                                                                                                                                           ; sprite #2, y coord
                                                                                                                                            ld
                                                                                                                                            1d
 0000:180E FF
                                                                                                                                                                                                                                                                                                                           ; add 68 to y coord for 10 sprites
```

```
hl, soft_sprite_ram+5
(hl), 13h
a, 20h; ''
                                                                                                                                                                                        ; sprite #1, yflip & code
; pauline, straight-on
0000:180F 21 05 69
                                                                                 ld
0000:1812 36 13
0000:1814 3E 20
0000:1816 32 09 60
0000:1819 3E 80
                                                                                 ld
                                                                                 ld
ld
ld
                                                                                                  a, 20h; ' ' (eight_bit_countdown), a
                                                                                                  a, 80h ; 'C'
(kong_thrash_tmr), a
0000:1819 3E 80
0000:181B 32 90 63
0000:181E 21 88 63
0000:1821 34
0000:1822 22 CO 63
                                                                                 ld
                                                                                                  hl, unk_0_6388
(hl)
                                                                                 ld
inc
ld
                                                                                                  (unk_0_63C0), hl
0000:1825 C9
                                                                                 ret
0000:1826
0000:1826
0000:1826
                                                                                  SUBROUTINE
0000:1826
0000:1826
0000:1826 11 DB FF
0000:1826
                                                                                                                                                                                        ; CODE XREF: 0000:13221p; 0000:13731p ...
                                               clear_14x5_HL:
                                                                                                  de, OFFDBh
                                                                                 ld
0000:1829 OE OE
0000:182B 3E 10
0000:182D
                                                                                 1d
0000:182D
0000:182D 06 05
0000:182F
0000:182F
                                                                                                                                                                                        ; CODE XREF: clear_14x5_HL+F|j
                                               loc_0_182D:
                                                                                 ld
                                                                                                  b, 5
                                                                                                                                                                                        ; CODE XREF: clear_14x5_HL+B|j
                                               loc 0 182F:
0000:182F

0000:182F 77

0000:1830 23

0000:1831 10 FC

0000:1833 19

0000:1834 0D

0000:1835 C2 2D 18

0000:1838 C9

0000:1838
                                                                                                                                                                                        ; display space
; next row
; loop 5 times
                                                                                 ld
                                                                                                  (hl), a
                                                                                 inc
djnz
                                                                                                  hl
loc_0_182F
                                                                                                                                                                                        ; next column
                                                                                 add
                                                                                                  hl, de
                                                                                 dec
                                                                                 jр
                                                                                                  nz, loc_0_182D
                                                                                                                                                                                        ; loop through 14 columns
                                                                                 ret
                                               ; End of function clear_14x5_HL
0000:1838
0000:1839
0000:1839
0000:1839
                                                                                                                                                                                       ; DATA XREF: 0000:164C\u00f30
                                               loc 0 1839:
0000:1839
0000:1839 21 90 63
0000:183C 34
0000:183D CA 59 18
                                                                                 ld
inc
                                                                                                 hl, kong_thrash_tmr (hl)
                                                                                                 z, loc_0_1859
a, (hl)
                                                                                 jp
ld
0000:1840 7E
0000:1841 E6 07
0000:1841 E0 07
0000:1843 C0
0000:1844 11 CF 39
0000:1847 CB 5E
0000:1849 20 03
0000:1848 11 F7 39
                                                                                 and
                                                                                                 nz
de, 39CFh
3, (hl)
nz, loc_0_184E
de, 39F7h
                                                                                 ld
                                                                                 bit
                                                                                 jr
ld
0000:184E
0000:184E
0000:184E EB
0000:184F ED 4E 00
0000:1852 21 08 69
0000:1855 0E 44
0000:1857 FF
0000:1858 09
                                               loc 0 184E:
                                                                                                                                                                                       : CODE XREF: 0000:184914
                                                                                 ex
call
                                                                                                 copy_sprites_2_11_data
hl, soft_sprite_ram+8
c, 68
                                                                                                  de, hl
                                                                                 ld
                                                                                                                                                                                        ; sprite #2, y coord
                                                                                 ld
                                                                                                                                                                                        ; add 68 to y coord for 10 sprites
                                                                                 ret
0000:1859
0000:1859
0000:1859
0000:1859
0000:1859 21 5C 38
                                                                                                                                                                                        ; CODE XREF: 0000:183D↑j
                                                loc_0_1859:
                                                                                                  hl, kong_normal_spr
                                                                                 ld
0000:1859 21 5C 38 0000:185C CD 4E 00 0000:185F 21 08 69 0000:1864 FF 0000:1865 3E 20 0000:1867 32 09 60 0000:1865 21 88 63 0000:186E C9 0000:186F 0000:186F 0000:186F
                                                                                 call
ld
ld
                                                                                                  copy_sprites_2_11_data
h1, soft_sprite_ram+8
c, 68
38h
                                                                                                                                                                                        ; sprite #2, y coord
                                                                                                                                                                                        ; add 68 to y coord for 10 sprites
                                                                                 rst
ld
                                                                                                         20h ;
                                                                                                  (eight_bit_countdown), a
hl, unk_0_6388
(hl)
                                                                                 ld
ld
                                                                                 inc
0000:186F
0000:186F DF
0000:1870 DF 15 3A
0000:1873 CD 4E 00
0000:1876 3E 03
0000:1878 21 88 63
0000:187B 21 88 63
                                                                                                                                                                                        ; DATA XREF: 0000:164E<sup>†</sup>o ; wait for 8-bit countdown
                                               loc_0_186F:
                                                                                 rst
ld
call
                                                                                                  18h
hl, fk_falling_spr
copy_sprites_2_11_data
a, 3
                                                                                 ld
ld
ld
                                                                                                  a, 3 (digital_snd_tmr_kong_fall), a hl, unk_0_6388 (hl)
                                                                                                                                                                                        ; tmr=3
                                                                                 inc
0000:187E 34
0000:187F C9
0000:1880
0000:1880
                                                                                 ret
0000:1880
0000:1880 21 0B 69
0000:1883 0E 01
0000:1885 FF
                                                                                                                                                                                        ; DATA XREF: 0000:1650 o
                                               loc 0 1880:
                                                                                                 hl, soft_sprite_ram+0Bh c, 1 38h
                                                                                                                                                                                       ; sprite #2, x coord
; +1
                                                                                 ld
                                                                                 ld
0000:1885 FF
0000:1885 3A 1B 69
0000:1888 CD
0000:188B CD
0000:188B 32 19 69
0000:1891 21 24 6A
0000:1894 36 7F
0000:1896 2C
0000:1897 36 39
0000:1899 2C
0000:189A 36 01
0000:189A 36 01
0000:189B 2C
0000:189B 36 DB
                                                                                                                                                                                        ; add 1 to x coord for 10 sprites
                                                                                 rst
ld
                                                                                                  a, (soft_sprite_ram+1Bh)
0D0h ; 'ŏ'
                                                                                 cp
ret
                                                                                                 ODOh; '8'
nz
a, 20h; '
(soft_sprite_ram+19h), a
hl, soft_sprite_ram+124h
(hl), 7Fh; '
                                                                                 ld
ld
                                                                                 ld
ld
                                                                                 inc
                                                                                 ld
inc
ld
                                                                                                   (hl), 39h; '9'
                                                                                                  (hl), 1
                                                                                 inc
0000:189D 36 D8
0000:189F 21 C6 76
0000:18A2 CD 26 18
0000:18A5 11 5F 3A
                                                                                 ld
ld
call
ld
                                                                                                  (hl), OD8h; 'Ï'
hl, VRAM_start+2C6h
clear_14x5_HL
                                                                                                 clear_14x5_HL
de, draw_data_rivet_end5
sub_0_DA7
de, 4
bc, 228h
hl, soft_sprite_ram+3
lag 0.27
0000:18A5 11 5F 3A
0000:18A8 CD A7 0D
0000:18AB 11 04 00
0000:18AE 01 28 02
                                                                                 call
ld
ld
0000:18AE 01 28 02 0000:18BH 21 03 69 0000:18BH 21 03 69 0000:18BH 32 07 00000:18BC 3E 03 0000:18BC 3E 05 0000:18BC 3E 05 00000:18C5 C9 0000:18C6 0000:18C6 0000:18C6 0000:18C6
                                                                                 ld
                                                                                                                                                                                      ; sprite #0, x coord
                                                                                 call
ld
                                                                                                  loc_0_3D
                                                                                                  (unk_0_62AF), a
                                                                                 ld
                                                                                 ld
                                                                                                                                                                                        ; tmr=3
                                                                                                  d, 3
(digital_snd_tmr_thump), a
h1, unk_0_6388
(h1)
                                                                                 ld
ld
                                                                                 inc
                                                                                 ret
                                                                                                                                                                                       ; DATA XREF: 0000:165210
                                               loc 0 18C6:
0000:18C6 21 AF 62
                                                                                 ld
                                                                                                  hl, unk_0_62AF
```

```
jp
ld
and
ret
                                                                                                        z, loc_0_193D
a, (hl)
 0000:18CA CA 3D 19
 0000:18CD 7E
0000:18CE E6 07
0000:18D0 C0
0000:18D1 21 25 6A

0000:18D1 7E

0000:18D5 EE 80

0000:18D7 77

0000:18D8 21 19 69
                                                                                      ld
ld
xor
ld
                                                                                                        hl, soft_sprite_ram+125h
a, (hl)
80h; 'C'
(hl), a
                                                                                                        hl, soft_sprite_ram+19h
b, (hl)
5, b
                                                                                       ld
 0000:18DB 46
0000:18DC CB A8
0000:18DE AF
                                                                                      ld
res
                                                                                       xor
0000:18DE AF
0000:18DF CD 09 30
0000:18E2 F6 20
0000:18E4 77
0000:18E5 21 AF 62
                                                                                      call
or
ld
ld
                                                                                                        sub_0_3009
                                                                                                         20h ; (hl),
                                                                                                       (III), a
hl, unk_0_62AF
a, (hl)
0E0h; 'Ó'
nz, loc_0_1910
0000:18E5 21 AF 62
0000:18E8 FE 00
0000:18E9 FE 0
0000:18EB 25 FE 0
0000:18E0 32 4F 69
0000:18F0 32 4F 69
0000:18F3 3E 9F
0000:18F3 3E 9F
0000:18F3 3A 03 60
0000:18F3 3A 03 60
0000:19F3 3A 03 60
0000:19F3 3B 00
0000:19F3 3B 00
0000:1900 FE 80
0000:1900 5B 80
0000:1900 5B 80
0000:1900 5B 80
0000:1900 5B 80
                                                                                      ld
cp
jp
ld
ld
ld
ld
                                                                                                         (soft_sprite_ram+4Fh), a
                                                                                                        (soft_sprite_ram+4Dh), a
                                                                                                        a, 9fh; ; ;;

(soft_sprite_ram+4Ch), a

a, (mario_y_coord)

80h; ; ;

nc, loc_0_190F

a, 80h; ; ;

(soft_sprite_ram+4Dh), a
                                                                                      ld
ld
                                                                                      cp
jp
ld
ld
ld
UUUU:190A 3E 5F
0000:190C 32 4C 69
0000:190F
0000:190F
0000:190F 7E
                                                                                                        (soft_sprite_ram+4Ch), a
                                                                                       1d
                                                 loc_0_190F:
                                                                                                                                                                                                   ; CODE XREF: 0000:1902|j
                                                                                                        a, (hl)
                                                                                      ld
0000:190F 7E
0000:1910
0000:1910 FE CO
0000:1912 CO
0000:1913 21 8A 60
0000:1916 3A 29 62
0000:191B 0F
0000:191B 0F
0000:191C 38 02
0000:191E 36 05
0000:191E 0F
                                                                                                                                                                                                   ; CODE XREF: 0000:18EB†j
                                                  loc_0_1910:
                                                                                                        0C0h ; (L)
                                                                                       ср
                                                                                       ret
                                                                                                        nz
hl, unk_0_608A
(hl), OCh
a, (level)
                                                                                      ld
ld
ld
                                                                                       rrca
                                                                                                        c, loc_0_1920
(hl), 5
 0000:1920
0000:1920
0000:1920 23
0000:1921 36 03
0000:1921 36 03
0000:1923 21 23 6A
0000:1926 36 40
0000:1928 2B
0000:1929 36 09
                                                  loc_0_1920:
                                                                                                                                                                                                  ; CODE XREF: 0000:191C1 i
                                                                                      inc
ld
                                                                                                        hi
(h1), 3
hl, soft_sprite_ram+123h
(h1), 40h; '@'
h1
(h1), 9
                                                                                       1d
                                                                                      ld
dec
 0000:192B 2B
0000:192C 36 76
0000:192E 2B
0000:192F 36 8F
                                                                                      dec
ld
dec
ld
                                                                                                        h1
                                                                                                          (hl), <mark>76h</mark> ; 'v'
hl (hl), 8Fh; 'Å'
                                                                                      ld
cp
ret
ld
                                                                                                        a, (mario_y_coord)
80h; 'C'
nc
a, 6Fh; 'o'
                                                                                                        a, 6Fh ; 'o'
(soft_sprite_ram+120h), a
                                                                                       ld
                                                                                                                                                                                                    ; CODE XREF: 0000:18CA1i
                                                  loc_0_193D:
                                                                                                        hl, (seq_data)
hl
a, (hl)
7Fh; '
nz, loc_0_194B
hl, level_seq_2
                                                                                       inc
ld
                                                                                                                                                                                                   ; restart repeating levels?
; no, skip
; start repeating levels
; get new level
                                                                                       cp
jp
ld
                                                                                                        a, (hl)
                                                                                       ld
                                                  loc_0_194B:
                                                                                                                                                                                                   ; CODE XREF: 0000:1944<sup>†</sup>j
                                                                                                        (seq_data), hl
                                                                                       ld
                                                                                                        (level_type), a
hl, level
(hl)
de, 500h
                                                                                      ld
ld
                                                                                                                                                                                                  ; next level counter
                                                                                       inc
                                                                                       1d
                                                                                       call
xor
ld
                                                                                                         sub_0_309F
                                                                                                         a
(unk_0_622E), a
                                                                                                        (unk_0_6388), a
hl, eight_bit_countdown
(hl), 0E0h; 'Ó'
                                                                                       ld
                                                                                       ld
ld
                                                                                       inc
                                                                                                        hl
(hl), 8
                                                                                                                                                                                                   ; set how high screen
 0000:196A C9
0000:196B
0000:196B
0000:196B
0000:196B CD 52 08
0000:196E 3A 0E 60
0000:1971 C6 12
0000:1973 32 0A 60
0000:1977 C9
0000:1977
                                                                                                                                                                                                    ; DATA XREF: 0000:073010
                                                   loc_0_196B:
                                                                                                        clear_tiles_and_sprites
a, (current_player_E)
a, 18
                                                                                      call
ld
add
                                                                                                                                                                                                   ; 0/1
                                                                                       1d
                                                                                                         (main_sequencer), a
                                                                                                                                                                                                   ; 18/19
0000:1977

0000:1977 CD EE 21

0000:197A

0000:197A CD BD 1D

0000:197A CD BD 1D

0000:197D CD 8C 1E

0000:1980 CD C3 1A

0000:1983 CD 72 1F

0000:1986 CD 8F 2C

0000:1986 CD BF 2C

0000:198C CD ED 30
 0000:1977
                                                  attract_mode_gameplay:
                                                                                                                                                                                                   ; DATA XREF: 0000:074E10
                                                                                                        next_attract_action
                                                                                                                                                                                                    ; DATA XREF: 0000:071A o
                                                  gameplay:
                                                                                      call
                                                                                                        sub_0_1DBD
sub_0_1E8C
sub_0_1AC3
sub_0_1F72
                                                                                       call
                                                                                       call
                                    2C
2C
30
                                                                                      call
                                                                                                        sub_0_2C8F
sub_0_2C03
                                                                                                                                                                                                    ; process fireballs?
; process springs
 0000:198C CD ED
                                                                                       call
                                                                                                         sub 0 30ED
 0000:198F CD 04
0000:1992 CD EA
0000:1995 CD DB
                                    2E
24
2D
                                                                                       call
                                                                                                        sub_0_2E04
sub_0_24EA
sub_0_2DDB
                                                                                       call
 0000:1998 CD D4
                                                                                       call
                                                                                                         sub 0 2ED4
                                                                                                         sub_0_2207
 0000:199B CD 07 22
```

ld

and ret

pop

jр

1d

sub_0_1A33:

0000:1A33 0000:1A33 0000:1A33 0000:1A33

0000:1A33 3E 08

a nz

hl loc_0_19D2

SUBROUTINE

a, 8

a, (mario_jumping)

; CODE XREF: 0000:199E1p

```
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```

```
0000:1A35 F7
                                                                                                                                                                         ; return if level bit not set
                                                                                           30h
                                                                                          a, (mar...
4Bh; 'K'
z, loc_0_1A4B
0000:1A36 3A 03 62
                                                                           1d
                                                                                                (mario_y_coord)
0000:1A36 3A 03 62
0000:1A39 FE 4B
0000:1A3B CA 4B 1A
0000:1A3E FE B3
                                                                           cp
jp
cp
0000:1A3E FE B3
0000:1A40 CA 4B 1A
0000:1A43 3A 91 62
0000:1A46 3D
0000:1A47 CA 51 1A
                                                                                          z, loc_0_1A4B
a, (unk_0_6291)
                                                                           jp
ld
dec
jp
                                                                                          z, loc_0_1A51
0000:1A4A C9
0000:1A4B
0000:1A4B
0000:1A4B
                                           loc_0_1A4B:
                                                                                                                                                                          ; CODE XREF: sub_0_1A33+8<sup>†</sup>j
0000:1A4B 3E 01
0000:1A4B
0000:1A4D 32 91 62
0000:1A50 C9
                                                                                                                                                                          ; sub_0_1A33+D<sup>†</sup> j
                                                                          ld
ld
                                                                                          (unk_0_6291), a
                                                                           ret
0000:1A50 C9
0000:1A51
0000:1A51
0000:1A51
0000:1A51 32 91 62
0000:1A54 47
0000:1A55 3A 05 62
0000:1A58 3D
                                           loc_0_1A51:
                                                                                                                                                                         ; CODE XREF: sub_0_1A33+14 j
                                                                           ld
                                                                                           (unk_0_6291), a
                                                                           ld
ld
                                                                                          b, a
a, (mario_x_coord)
0000:1A58 3D
0000:1A59 FE DO
0000:1A5E DO
0000:1A5C 07
0000:1A5D D2 62 1A
0000:1A60 CB DO
0000:1A62
0000:1A62
                                                                           dec
                                                                           cp
ret
rlca
                                                                                          0D0h ; 'ð'
                                                                                          nc, loc_0_1A62
2, b
                                                                           jр
                                           loc_0_1A62:
                                                                                                                                                                         ; CODE XREF: sub_0_1A33+2A1j
                                                                           rlca
0000:1A63 07
0000:1A64 D2 69 1A
0000:1A67 CB C8
0000:1A69
                                                                           rlca
                                                                           jp
set
                                                                                          nc, loc_0_1A69
0000:1A69
0000:1A69 E6 07
0000:1A6B FE 06
0000:1A6B FE 06
0000:1A70 CB C8
0000:1A70 CB 08
0000:1A72 0000:1A72
0000:1A72 3A 03 62
0000:1A75 07
0000:1A76 D2 7B 1A
0000:1A78 CB CO
                                           loc_0_1A69:
                                                                                                                                                                         ; CODE XREF: sub_0_1A33+31 j
                                                                           and
                                                                           ср
                                                                           jp
set
                                                                                          nz, loc_0_1A72
                                                                                           1, b
                                           loc 0 1A72:
                                                                                                                                                                         ; CODE XREF: sub_0_1A33+3A1j
                                                                           ld
                                                                                          a, (mario_y_coord)
                                                                           rlca
                                                                                          nc, loc_0_1A7B
0, b
                                                                           qį
                                                                           set
0000:1A7B
0000:1A7B
0000:1A7B 21 92 62
0000:1A7E 78
0000:1A7E 75
0000:1A80 6F
0000:1A81 7E
                                           loc_0_1A7B:
                                                                                                                                                                         ; CODE XREF: sub_0_1A33+43 j
                                                                           ld
                                                                                          hl, unk_0_6292
                                                                                          a, b
a, 1
1, a
a, (h1)
                                                                           1d
                                                                           add
                                                                           ld
ld
0000:1A82 A7
0000:1A83 C8
0000:1A84 36 00
0000:1A86 21 90 62
                                                                           and
ret
ld
ld
                                                                                           (hl),
                                                                                          h1, unk_0_6290
(h1)
0000:1A89 35
0000:1A8A 78
0000:1A8B 01 05 00
0000:1A8E 1F
                                                                           dec
ld
ld
                                                                                          a, b
bc, 5
                                                                           rra
0000:1A0E 1F
0000:1A8F DA BD 1A
0000:1A92 21 CB 02
0000:1A95
                                                                                          c, loc_0_1ABD
hl, 2CBh
                                                                           jp
ld
                                           loc 0 1A95:
                                                                                                                                                                        ; CODE XREF: sub 0 1A33+8D-j
0000:1A95
0000:1A95 A7
0000:1A96 CA 9E 1A
0000:1A99
                                                                           and
                                                                                          z, loc_0_1A9E
                                                                           jр
0000:1A99
                                           loc 0 1A99:
                                                                                                                                                                         ; CODE XREF: sub 0 1A33+68-j
0000:1A99 09
                                                                           add
                                                                                          hl, bc
0000:1A99 09
0000:1A9A 3D
0000:1A9B C2 99 1A
                                                                                          nz, loc_0_1A99
                                                                           jр
0000:1A9E
0000:1A9E
0000:1A9E 01 00 74
0000:1AA1 09
                                           loc_0_1A9E:
                                                                                                                                                                         ; CODE XREF: sub_0_1A33+63<sup>†</sup>j
                                                                                          bc, VRAM_start
                                                                           ld
UUUU:1AA1 09
0000:1AA2 3E 10
0000:1AA4 77
0000:1AA5 2D
0000:1AA6 77
                                                                           add
                                                                           ld
ld
dec
                                                                                                10h
                                                                                           a, 10h
(hl), a
                                                                                           (hl), a
0000:1AA6 77
0000:1AA7 2C
0000:1AA8 2C
0000:1AA8 2C
0000:1AA8 3E 01
0000:1AA6 3Z 40 63
0000:1AAF 3Z 42 63
0000:1AB2 3Z 25 62
0000:1AB5 3A 16 62
0000:1AB6 A7
0000:1AB9 CC 95 1D
0000:1ABB C9
                                                                           inc
inc
                                                                                          l
(hl), a
                                                                                           a, 1
(unk_0_6340), a
(unk_0_6342), a
                                                                           ld
                                                                           ld
ld
                                                                           ld
ld
                                                                                           (unk 0 6225)
                                                                                           a, (mario_jumping)
                                                                           call
                                                                                          z, sub_0_1D95
                                                                           ret
0000:1ABD
0000:1ABD
0000:1ABD
0000:1ABD 21 2B 01
                                           loc_0_1ABD:
                                                                                                                                                                         ; CODE XREF: sub_0_1A33+5C<sup>†</sup>j
                                           ld hl, 12Bh
jp loc_0_1A95; End of function sub_0_1A33
0000:1AC0 C3 95 1A
0000:1AC0
0000:1AC0
0000:1AC3
0000:1AC3
                                           ; SUBROUTINE
0000:1AC3
0000:1AC3
0000:1AC3
0000:1AC3 3A 16 62
0000:1AC6 3D
0000:1AC7 CA B2 1B
0000:1ACA 3A 1E 62
0000:1ACA 3A 1E 62
0000:1ACB A7
0000:1ACB A7
0000:1AD1 3A 17 62
0000:1AD1 3D
0000:1AD3 CA E6 1A
0000:1AD8 3A 15 62
0000:1ADB 3D
0000:1ADB 3D
                                                                                                                                                                        ; CODE XREF: 0000:1980 p
                                           sub_0_1AC3:
                                                                          ld
dec
                                                                                          a, (mario_jumping)
                                                                                          z, loc_0_1BB2
                                                                           jp
ld
                                                                                          a, (unk_0_621E)
                                                                                          nz, loc_0_1B55
                                                                           jp
ld
                                                                                          a, (unk_0_6217)
a
                                                                           jp
ld
                                                                                          z, loc_0_1AE6
a, (mario_climbing)
0000:1ADC CA 38 1B
                                                                                           z, loc_0_1B38
```

```
0000:1ADF 3A 10 60
                                                                                         a, (controller_in)
                                                                          ld
                                                                                                                                                                       ; jump pressed?
; yes, skip
 0000:1AE2 17
                                                                          rla
 0000:1AE3 DA 6E 1B
                                                                                        c, loc 0 1B6E
                                                                                                                                                                        ; CODE XREF: sub_0_1AC3+12<sup>†</sup>j
                                           loc_0_1AE6:
                                                                          call
                                                                                         sub 0 241F
 0000:1AE6 CD 1F 24
 0000:1AE0 CD 1F 24
0000:1AE9 3A 10 60
0000:1AEC 1D
0000:1AED CA F5 1A
                                                                                         a, (controller_in)
e
z, loc_0_1AF5
                                                                          ld
dec
                                                                          jp
bit
 0000:1AF0 CB 47
0000:1AF2 C2 8F 1C
0000:1AF5
0000:1AF5
                                                                          jp
                                                                                         nz, loc_0_1C8F
                                           loc_0_1AF5:
                                                                                                                                                                       ; CODE XREF: sub_0_1AC3+2A1j
 0000:1AF5 15
0000:1AF6 CA FE 1A
0000:1AF9 CB 4F
0000:1AFB C2 AB 1C
                                                                          dec
                                                                                         d
z, loc_0_1AFE
                                                                          jp
bit
                                                                                         1, a
nz, loc_0_1CAB
                                                                          jр
 0000:1AFE
 0000:1AFE
0000:1AFE 3A 17 62
                                           loc_0_1AFE:
                                                                                                                                                                        ; CODE XREF: sub_0_1AC3+33 j
                                                                          ld
                                                                                         a, (unk_0_6217)
 0000:1B01 3D
0000:1B02 C8
0000:1B03 3A 05 62
0000:1B06 C6 08
                                                                          dec
                                                                          ret
ld
                                                                                         a, (mario_x_coord)
                                                                          add
1d
0000:1B06 C6 08
0000:1B08 57
0000:1B09 3A 03 62
0000:1B0C F6 03
0000:1B0E CB 97
0000:1B10 01 15 00
0000:1B16 F5
0000:1B17 21 07 62
                                                                                         a, 8
d, a
                                                                                         a, (mario_y_coord)
                                                                          ld
or
                                                                          res
ld
                                                                                         2, a
bc, 15h
                                                                          call
                                                                                          sub_0_236E
                                                                          push
1d
                                                                                         af
hl, mario_flipy_sprite_tile
0000:1B1A 7E
0000:1B1B E6 80
0000:1B1D F6 06
0000:1B1F 77
                                                                          ld
and
                                                                                         a, (hl)
80h; 'Ç'
                                                                                                                                                                       ; mario climbing character
                                                                          or
ld
                                                                                         (hl), a
 0000:1B1F 77
0000:1B20 21 1A 62
0000:1B23 3E 04
0000:1B25 B9
                                                                          ld
ld
                                                                                         hl, unk_0_621A
a, 4
                                                                                         (hl), 1
nc, loc_0_1B2C
(hl)
0000:1B25 B9
0000:1B26 36 01
0000:1B28 D2 2C 1B
0000:1B2B 35
0000:1B2C
0000:1B2C
0000:1B2C F1
0000:1B2D A7
                                                                          cp
ld
                                                                                                                                                                       ; set as broken ladder
                                                                          jp
dec
                                                                                                                                                                        ; set as normal ladder
                                                                                                                                                                        ; CODE XREF: sub_0_1AC3+651j
                                           loc_0_1B2C:
                                                                          pop
and
0000:1B2D A7

0000:1B2E CA 4E 1B

0000:1B31 7E

0000:1B32 A7

0000:1B33 CD

0000:1B34 2C

0000:1B35 72

0000:1B36 2C

0000:1B37 70

0000:1B38 8
                                                                                         z, loc_0_1B4E
                                                                          jp
ld
                                                                                          a, (hl)
                                                                          ret
                                                                                         nz
                                                                          ld
                                                                                          (hl), d
                                                                                                                                                                        ; set top coordinate of ladder
; set bottom Y coordinate of ladder
                                                                          inc
ld
                                                                                         (hl), b
 0000:1B38
0000:1B38
0000:1B38 3A 10 60
0000:1B3B CB 5F
                                           loc_0_1B38:
                                                                                                                                                                        ; CODE XREF: sub_0_1AC3+191j
                                                                                         a, (controller_in)
3, a
                                                                          ld
                                                                          bit
                                                                                         nz, doc_0_1CF2
a, (mario_climbing)
a
                                                                                                                                                                        ; down?
0000:1B3D C2 F2 1C
0000:1B40 3A 15 62
0000:1B43 A7
0000:1B44 C8
                                                                          jp
ld
and
                                                                                                                                                                        ; yes, go
                                                                          ret
                                                                                         z
0000:1B44 C8
0000:1B45
0000:1B45 3A 10 60
0000:1B48 CB 57
0000:1B4A C2 03 1D
0000:1B4D C9
0000:1B4E
                                           loc_0_1B45:
                                                                                                                                                                        ; CODE XREF: sub_0_1AC3+8F|j
                                                                                         a, (controller_in)
                                                                                                                                                                        ; up?
; yes, go
                                                                          bit
                                                                                         2, a
nz, loc_0_1D03
                                                                          jp
ret
 0000:1B4E
 0000:1B4E
0000:1B4E
0000:1B4F
                                           loc_0_1B4E:
                                                                                                                                                                        ; CODE XREF: sub_0_1AC3+6Bfj
                   2C
70
                                                                          inc
ld
                                                                                         l
(hl), b
 0000:1B50 2C
0000:1B51 72
0000:1B52 C3 45 1B
0000:1B55
                                                                                                                                                                        ; set top Y corordinate of ladder
; set bottom coordinate of ladder
                                                                          ld
                                                                                           (hl), d
                                                                                          loc_0_1B45
                                                                          jр
0000:1B55
0000:1B55
0000:1B55
0000:1B55 21 1E 62
0000:1B58 35
0000:1B59 C0
0000:1B50 32 17 62
0000:1B60 21 07 62
0000:1B60 21 07 62
0000:1B64 E6 80
0000:1B66 77
0000:1B66 77
0000:1B67 AF
                                            loc_0_1B55:
                                                                                                                                                                        ; CODE XREF: sub_0_1AC3+B<sup>†</sup>j
                                                                                         hl, unk_0_621E
(hl)
                                                                          ld
                                                                          dec
                                                                                        (h1)
nz
a, (unk_0_6218)
(unk_0_6217), a
hl, mario_flipy_sprite_tile
a, (h1)
80h; 'C'
(h1), a
                                                                          ret
ld
ld
                                                                          ld
                                                                          ld
and
ld
                                                                                                                                                                       ; h-flip mario
                                                                          xor
                                                                                         (unk_0_6202), a
loc_0_1DA6
 0000:1B68 32 02 62
0000:1B6B C3 A6 1D
0000:1B6E
                                                                          ld
                                                                          jр
0000:1B6E
0000:1B6E
0000:1B6E 3E 01
0000:1B70 32 16 62
0000:1B73 21 10 62
0000:1B76 3A 10 60
0000:1B79 01 80 00
0000:1B7C 1F
                                           loc_0_1B6E:
                                                                                                                                                                       ; CODE XREF: sub_0_1AC3+20 j
                                                                          ld
                                                                                                                                                                        ; start_jump
; set mario jumping
                                                                                         (mario_jumping), a
hl, unk_0_6210
a, (controller_in)
bc, 80h; 'C'
                                                                          ld
                                                                          ld
ld
ld
                                                                          rra
                                                                                                                                                                       ; right?
; yes, skip
0000:1B7C 1F
0000:1B7D DA 8A 1B
0000:1B80 01 80 FF
0000:1B83 1F
                                                                          jp
ld
                                                                                         c, loc_0_1B8A
bc, 0FF80h
                                                                                                                                                                       ; left?
; yes, skip
                                                                          rra
 0000:1B84 DA 8A 1B
0000:1B87 01 00 00
0000:1B8A
                                                                                         c, loc_0_1B8A
bc, 0
                                                                                                                                                                       ; CODE XREF: sub_0_1AC3+BA^j; sub_0_1AC3+C1^j;
 0000:1B8A
                                           loc 0 1B8A:
 0000:1B8A AF
 0000:1B8A
0000:1B8B 70
                                                                          xor
ld
                                                                                          (hl), b
 0000:1B8C 2C
0000:1B8D 71
0000:1B8E 2C
0000:1B8F 36 01
                                                                          inc
                                                                          ld
inc
                                                                                           (hl), c
                                                                                          (hl), 1
 0000:1B91 2C
 0000:1B92 36 48
                                                                                          (hl), 48h; 'H'
                                                                          ld
```

```
0000:1B95 77
0000:1B96 32 04 62
0000:1B99 32 06 62
0000:1B97 38 07 62
0000:1B81 P6 0E
0000:1BA1 P6 0E
0000:1BA3 32 07 62
0000:1BA6 3A 05 62
0000:1BA9 32 0E 62
0000:1BAF 36 03
0000:1BAF 36 03
                                                                             ld
ld
ld
                                                                                             (unk_0_6204), a
(unk_0_6206), a
a, (mario_flipy_sprite_tile)
80h; 'C'
                                                                             and
                                                                             or
ld
                                                                                             OEh
                                                                                                                                                                              ; mario jumping character
                                                                                              (mario_flipy_sprite_tile), a
                                                                             ld
                                                                                             a, (mario_x_coord)
(unk 0 620E), a
                                                                             ld
                                                                                             hl, digital_snd_tmr_jump (hl), 3
                                                                             ld
ld
                                                                                                                                                                              ; tmr=3
                                                                             ret
; CODE XREF: sub_0_1AC3+4^j
                                                                             ld
                                                                                            ix, mario alive flag
0000:1BB2 DD 21 00
0000:1BB6 3A 03 62
0000:1BB9 DD 77 0B
0000:1BBC 3A 05 62
0000:1BBF DD 77 0C
0000:1BC2 CD 9C 23
0000:1BC5 CD 1F 24
0000:1BC8 15
                                                                                             a, (mario_y_coord)
(ix+0Bh), a
a, (mario_x_coord)
(ix+0Ch), a
                                                                             ld
                                                                             ld
ld
                                                                                                                                                                             ; store X position before a jump
                                                                             ld
                                                                                                                                                                             ; store Y position before a jump
                                                                             call
                                                                                             sub_0_239C
sub_0_241F
0000:1BC8 15

0000:1BC9 C2 F2 1B

0000:1BCC DD 36 10 00

0000:1BD0 DD 36 11 80

0000:1BD4 DD CB 07 FE
                                                                             dec
                                                                                             nz, loc_0_1BF2
                                                                             jp
ld
ld
                                                                                             (ix+10h), 0
(ix+11h), 80h; 'Ç'
7, (ix+7)
                                                                                                                                                                             ; h-flip sprite
                                                                             set
0000:1BD8
0000:1BD8
0000:1BD8
0000:1BD8 3A 20 62
0000:1BDB 3D
                                           loc_0_1BD8:
                                                                                                                                                                              ; CODE XREF: sub_0_1AC3+13F|j
                                                                             ld
                                                                                             a, (unk_0_6220)
                                                                             dec
0000:1BDB 3D
0000:1BDC CA EC 1B
0000:1BDF CD 07 24
0000:1BE2 DD 74 12
0000:1BE5 DD 75 13
                                                                                             z, loc_0_1BEC
sub_0_2407
                                                                             jp
call
ld
ld
                                                                                             (ix+12h), h
(ix+13h), l
0000:1BE8 DD 36 14 00
0000:1BEC
0000:1BEC
                                                                             ld
                                                                                             (ix+14h), 0
                                            loc_0_1BEC:
                                                                                                                                                                             ; CODE XREF: sub_0_1AC3+119<sup>†</sup>j
0000:1BEC CD 9C 23
                                                                             call
                                                                                             sub_0_239C
loc_0_1C05
0000:1BEF C3 05 1C
0000:1BF2
0000:1BF2
                                                                                                                                                                              ; CODE XREF: sub 0 1AC3+106 i
0000:1BF2
                                            loc_0_1BF2:
0000:1BF2 1D
0000:1BF2 1D
0000:1BF3 C2 05 1C
0000:1BF6 DD 36 10 FF
0000:1BFA DD 36 11 80
0000:1CD2 C3 D8 1B
0000:1CD5
                                                                                             nz, loc_0_1C05
                                                                             jp
ld
                                                                                             (ix+10h), 0FFh
(ix+11h), 80h; 'C'
7, (ix+7)
loc_0_1BD8
                                                                             14
                                                                                                                                                                              ; un-hflip sprite
                                                                             res
                                                                             jр
0000:1C05
0000:1C05
0000:1C05 CD 1C 2B
                                                                                                                                                                              ; CODE XREF: sub_0_1AC3+12C<sup>†</sup>j; sub_0_1AC3+130<sup>†</sup>j
                                            loc_0_1C05:
                                                                             call
dec
0000:1005
                                                                                             sub_0_2B1C
0000:1C05
0000:1C08 3D
0000:1C09 CA 3A 1C
0000:1C0C 3A 1F 62
                                                                                                                                                                              ; are we jumping?
                                                                                             z, loc_0_1C3A
a, (unk_0_621F)
                                                                             jp
ld
0000:1C0C 3A 1F 62

0000:1C10 CA 76 1C

0000:1C13 3A 14 62

0000:1C18 D6 14

0000:1C18 C2 33 1C

0000:1C1B 3E 01

0000:1C1D 32 1F 62
                                                                             dec
                                                                                             z, loc_0_1C76
a, (unk_0_6214)
14h
                                                                             jp
ld
                                                                             sub
                                                                                             nz, loc_0_1C33
                                                                             jp
ld
ld
                                                                                                                                                                              ; peak of the jump
                                                                                             a, 1
(unk_0_621F), a
0000:1C1D 32 1F 62
0000:1C20 CD 53 28
0000:1C23 A7
0000:1C24 CA A6 1D
0000:1C27 32 42 63
0000:1C2A 3E 01
                                                                                                                                                                              ; check for bonus points?
                                                                             call
                                                                                             sub_0_2853
                                                                                             a
z, loc_0_1DA6
(unk_0_6342), a
                                                                                                                                                                              ; any bonus points? ; no, exit
                                                                             jp
ld
                                                                             ld
                                                                                                                                                                              ; register bonus
                                                                                             a, 1
(unk_0_6340), a
(unk_0_6225), a
0000:1C2C 32 40 63
0000:1C2F 32 25 62
0000:1C32 00
                                                                             ld
ld
                                                                             nop
0000:1C32 00
0000:1C33
0000:1C33 3C
0000:1C33 3C
0000:1C34 CC 54 29
0000:1C37 C3 A6 1D
0000:1C3A
0000:1C3A
                                             loc_0_1C33:
                                                                                                                                                                              ; CODE XREF: sub_0_1AC3+155<sup>†</sup> j
                                                                             inc
call
                                                                                              z. sub 0 2954
                                                                             jp
                                                                                             loc_0_1DA6
                                                                                                                                                                              ; CODE XREF: sub 0 1AC3+146 i
0000:1C3A
0000:1C3A 05
0000:1C3B CA 4F 1C
0000:1C3E 3C
0000:1C3E 3C
0000:1C42 AF
0000:1C42 AF
0000:1C46 06 05
0000:1C48
0000:1C3A
                                            loc 0 1C3A:
                                                                             jp
inc
ld
                                                                                              z, loc_0_1C4F
                                                                                             (unk 0 621F), a
                                                                                             hl, 6210h
                                                                                             b, 5
                                                                             ld
0000:1C48
0000:1C48 77
0000:1C49 2C
                                            loc_0_1C48:
                                                                                                                                                                              ; CODE XREF: sub_0_1AC3+187|j
                                                                             ld
                                                                                              (hl), a
UUUU:1C49 2C
0000:1C4A 10 FC
0000:1C4C C3 A6 1D
0000:1C4F
0000:1C4F
                                                                                             loc_0_1C48
loc_0_1DA6
                                                                             djnz
0000:1C4F
0000:1C4F 32 16 62
0000:1C5E 3A 20 62
0000:1C5E EE 01
0000:1C5F 32 00 62
0000:1C5F 32 00 62
0000:1C5D 7E
0000:1C5E E6 80
0000:1C5E E6 80
0000:1C5E 77
0000:1C6C 77
0000:1C6S 3E 04
0000:1C6S AF
                                            loc_0_1C4F:
                                                                                                                                                                              ; CODE XREF: sub_0_1AC3+178 j
                                                                                            (mario_jumping), a
a, (unk_0_6220)
                                                                             ld
ld
                                                                             xor
                                                                                            (mario_alive_flag), a
hl, mario_flipy_sprite_tile
a, (hl)
80h; 'C'
                                                                             ld
ld
ld
                                                                                                                                                                              ; set whether mario survives a jump
                                                                             and
                                                                             or
ld
                                                                                                                                                                             ; mario landing character
                                                                                              (hl), a
                                                                             ld
                                                                                             a, 4
(unk_0_621E), a
                                                                             ld
0000:1C68 AF
0000:1C69 32 1F 62
0000:1C6C 3A 25 62
0000:1C6F 3D
                                                                             xor
ld
                                                                                             (unk_0_621F)
                                                                                             a, (unk_0_6225)
                                                                             ld
0000:1C07 3D
0000:1C70 CC 95 1D
0000:1C73 C3 A6 1D
                                                                             call
                                                                                             z, sub_0_1D95
loc_0_1DA6
                                                                             qį
0000:1076
0000:1C76
```

```
; CODE XREF: sub_0_1AC3+14D^j
                                        loc_0_1C76:
0000:1C76 3A 05 62
                                                                                        (mario x coord)
0000:1C76 3A 05 62
0000:1C79 21 0E 62
0000:1C7C D6 0F
0000:1C7E BE
0000:1C7F DA A6 1D
0000:1C82 3E 01
0000:1C84 32 20 62
0000:1C87 21 84 60
                                                                                    hl, unk_0_620E
                                                                      1d
                                                                      sub
                                                                                    OFh
(hl)
                                                                      ср
                                                                                    c, loc_0_1DA6
a, 1
                                                                      jp
ld
ld
                                                                                      (unk_0_6220), a
                                                                      ld
                                                                                    hl, 6084h (hl), 3
0000:1C8A 36 03
                                                                      ld
0000:1C8A 36 03
0000:1C8C C3 A6 1D
0000:1C8F
0000:1C8F
                                                                                    loc_0_1DA6
                                                                      jp
0000:1C8F
0000:1C8F 06 01
0000:1C91 3A 0F 62
0000:1C94 A7
                                        loc_0_1C8F:
                                                                                                                                                               ; CODE XREF: sub_0_1AC3+2F<sup>†</sup>j
                                                                      ld
ld
                                                                                    b, 1
a, (unk_0_620F)
                                                                      and
0000:1C94 A7

0000:1C95 C2 D2 1C

0000:1C98 3A 02 62

0000:1C9B 47

0000:1C9C 3E 05

0000:1C9E CD 09 30

0000:1CA1 32 02 62

0000:1CA4 E6 03
                                                                                    nz, loc_0_1CD2
a, (unk_0_6202)
b, a
a, 5
                                                                      jp
ld
ld
                                                                      ld
                                                                      call
ld
                                                                                     sub 0 3009
                                                                                      (unk_0_6202), a
                                                                      and
                                                                                     80h ; 'C
0000:1CA6 F6 80
                                                                      or
0000:1CA8 C3 C2 1C
0000:1CAB
0000:1CAB
0000:1CAB
                                                                                    loc_0_1CC2
                                                                      jр
                                                                                                                                                             ; CODE XREF: sub 0 1AC3+381i
                                         loc_0_1CAB:
0000:1CAB
0000:1CAB 06 FF
0000:1CAD 3A 0F 62
0000:1CBO A7
                                                                      ld
ld
and
                                                                                    a, (unk_0_620F)
                                                                                    nz, loc_0_1CD2
a, (unk_0_6202)
b, a
a, 1
0000:1CB0 A/
0000:1CB1 C2 D2 1C
0000:1CB4 3A 02 62
0000:1CB7 47
0000:1CB8 3E 01
                                                                      jp
ld
ld
                                                                      ld
0000:1CBA CD 09 30
0000:1CBD 32 02 62
0000:1CCO E6 03
0000:1CC2
                                                                     call
ld
and
                                                                                     sub 0 3009
                                                                                      (unk_0_6202), a
                                                                                                                                                              ; animate mario running
0000:1CC2

0000:1CC2 21 07 62

0000:1CC5 77

0000:1CC6 1F

0000:1CC7 DC 8F 1D

0000:1CCA 3E 02

0000:1CCC 32 0F 62

0000:1CCC 32 0F 62
                                         loc_0_1CC2:
                                                                                                                                                              ; CODE XREF: sub_0_1AC3+1E5 j
                                                                                    hl, mario_flipy_sprite_tile
(hl), a
                                                                                                                                                              ; set amrio character
                                                                      ld
                                                                      rra
                                                                      call
ld
                                                                                    c, sub_0_1D8F
                                                                                     (unk_0_620F), a
                                                                      ld
                                                                      jр
                                                                                    loc 0 1DA6
0000:1CD2
0000:1CD2
                                                                                                                                                              ; CODE XREF: sub_0_1AC3+1D2<sup>†</sup>j; sub_0_1AC3+1EE<sup>†</sup>j
0000:1CD2
                                        loc_0_1CD2:
0000:1CD2 21 03 62
0000:1CD2
0000:1CD5 7E
                                                                                    hl, mario_y_coord
                                                                                    a, (hl)
a, b
(hl), a
                                                                      ld
0000:1CD6 80
0000:1CD7 77
0000:1CD8 3A 27 62
0000:1CDB 3D
                                                                      add
ld
ld
                                                                                    a, (level_type)
                                                                      dec
0000:1CDC C2 EB 1C
0000:1CDF 66
0000:1CE0 3A 05 62
0000:1CE3 6F
                                                                      jp
ld
ld
                                                                                    nz, loc_0_1CEB
h, (hl)
a, (mario_x_coord)
l, a
                                                                      ld
0000:1CE4 CD 33 23
                                                                      call
                                                                                     sub_0_2333
0000:1CE7 7D
0000:1CE8 32 05 62
                                                                      ld
ld
                                                                                     a, 1
(mario_x_coord), a
0000:1CEB
0000:1CEB
0000:1CEB 21 0F 62
0000:1CEE 35
                                         loc_0_1CEB:
                                                                                                                                                              ; CODE XREF: sub_0_1AC3+219 j
                                                                                    hl, unk_0_620F (hl)
                                                                      ld
                                                                      dec
0000:1CEE 33
                                                                                    loc_0_1DA6
                                                                      jр
0000:1CF2
0000:1CF2
0000:1CF2
                                                                                                                                                               ; CODE XREF: sub_0_1AC3+7Afj
                                         loc_0_1CF2:
0000:1CF2
0000:1CF2 3A 0F 62
0000:1CF5 A7
0000:1CF6 C2 8A 1D
0000:1CF9 3E 03
0000:1CFB 32 0F 62
0000:1CFB 32 0F 62
0000:1CFB 32 0F 62
                                                                      1d
                                                                                    a, (unk_0_620F)
                                                                                                                                                              ; check timer
                                                                       and
                                                                                                                                                               ; expired?
                                                                                    nz, loc_0_1D8A
                                                                                                                                                              ; no, skip
                                                                      jp
ld
                                                                                     (unk_0_620F), a
                                                                      1d
                                                                                                                                                              ; reset timer
                                                                                     loc_0_1D11
                                                                      jр
0000:1D03
0000:1D03
0000:1D03 3A 0F 62
0000:1D06 A7
0000:1D07 C2 76 1D
0000:1D0C 32 0F 62
0000:1D0C 32 0F 62
                                                                                                                                                               ; CODE XREF: sub_0_1AC3+87<sup>†</sup> j
                                         loc_0_1D03:
                                                                      ld
                                                                                    a, (unk 0 620F)
                                                                                                                                                               ; check timer
                                                                      and
                                                                                                                                                               ; expired?
                                                                      jp
ld
                                                                                    nz, loc_0_1D76
                                                                                    (unk_0_620F), a
a, OFEh; '\|
                                                                                                                                                              ; reset timer
                                                                      ld
ld
0000:1D11
0000:1D11
0000:1D11 21 05 62
                                         loc_0_1D11:
                                                                                                                                                              ; CODE XREF: sub_0_1AC3+23D|j
                                                                      ld
                                                                                    hl, mario_x_coord
0000:1D14 86
0000:1D15 77
0000:1D16 47
0000:1D17 3A 22 62
                                                                      add
ld
ld
ld
                                                                                    a, (hl)
(hl), a
                                                                                    b, a
a, (unk_0_6222)
0000:1D17 3A 22 02
0000:1D1A EE 01
0000:1D1C 32 22 62
0000:1D1F C2 51 1D
                                                                                      (unk_0_6222)
                                                                                    nz, loc_0_1D51
a, b
a, 8
                                                                      jp
ld
0000:1D22 78
0000:1D22 78
0000:1D23 C6 08
0000:1D25 21 1C 62
0000:1D28 BE
                                                                      add
1d
                                                                                    hl, unk_0_621C
(hl)
                                                                                                                                                              ; bottom y coordinate of ladder ; stop from climbing
                                                                      cp
jp
dec
sub
0000:1D20 BE
0000:1D20 CA 67 1D
0000:1D2C 2D
0000:1D2D 96
                                                                                     z, loc_0_1D67
                                                                                     (hl)
                                                                                                                                                              ; top y coordinate of ladder
; stop from climbing
0000:1D2D 96
0000:1D2E CA 67 1D
0000:1D31 06 05
0000:1D33 D6 08
0000:1D35 CA 3F 1D
                                                                                    z, loc_0_1D67
b, 5
                                                                      jp
ld
                                                                      sub
                                                                                    8
z, loc_0_1D3F
                                                                      jp
dec
0000:1D38 05
                                                                                    b
 0000:1D39 D6 04
                                                                      sub
0000:1D39 D0 04
0000:1D3B CA 3F 1D
0000:1D3E 05
                                                                      jp
dec
                                                                                     z, loc_0_1D3F
0000:1D3F
0000:1D3F
                                       loc_0_1D3F:
                                                                                                                                                              ; CODE XREF: sub_0_1AC3+272 j
```

```
a, 80h; 'C'
hl, mario_flipy_sprite_tile
(hl)
80h; 'C'
b
 0000:1D3F 3E 80
                                                                                                                                                                           ; sub_0_1AC3+278<sup>†</sup>j
0000:1D3F 3E 80

0000:1D3F

0000:1D41 21 07 62

0000:1D45 EE 80

0000:1D47 B0

0000:1D48 77

0000:1D49

0000:1D49
                                                                            ld
and
xor
                                                                                                                                                                          ; hflip mario
                                                                            or
                                                                                            (hl), a
                                                                            ld
                                            loc_0_1D49:
                                                                                                                                                                           ; CODE XREF: sub_0_1AC3+2A1|j
0000:1D49 3E 01
0000:1D4B 32 15 62
0000:1D4E C3 A6 1D
0000:1D51
                                                                            ld
                                                                                                                                                                            ; flag mario climbing a ladder
                                                                            ld
                                                                                           (mario_climbing), a loc_0_1DA6
                                                                            jр
0000:1D51
0000:1D51
0000:1D51
0000:1D51 2D
0000:1D52 2D
                                            loc_0_1D51:
                                                                                                                                                                           ; CODE XREF: sub_0_1AC3+25C<sup>†</sup>j
0000:1D52 2D
0000:1D53 7E
0000:1D54 F6 03
0000:1D56 CB 97
0000:1D58 77
0000:1D59 3A 24 62
0000:1D5C EE 01
0000:1D5E 32 24 62
0000:1D61 CC 8F 1D
0000:1D64 C3 49 1D
0000:1D67
                                                                            ld
                                                                                           a, (hl)
                                                                            or
                                                                            res
                                                                                            2, a (hl), a
                                                                            ld
                                                                                            . -,, a
a, (unk_0_6224)
1
                                                                            ld
xor
                                                                                            (unk_0_6224), a
                                                                            ld
                                                                            call
                                                                                            z, sub_0_1D8F
                                                                                           loc_0_1D49
                                                                                                                                                                           ; CODE XREF: sub_0_1AC3+266<sup>†</sup>j
; sub_0_1AC3+26B<sup>†</sup>j
; mario climbing character
 0000:1067
                                            loc_0_1D67:
 0000:1D67
0000:1D67 3E 06
0000:1D67
0000:1D69 32 07 62
                                                                            ld
ld
                                                                                           a, 6
(mario_flipy_sprite_tile), a
0000:1D69 32 07 62
0000:1D6C AF
0000:1D6D 32 19 62
0000:1D70 32 15 62
0000:1D73 C3 A6 1D
0000:1D76
0000:1D76
0000:1D76
0000:1D76
0000:1D76 A7
0000:1D70 A7
0000:1D70 A7
0000:1D70 A7
0000:1D70 A7
0000:1D70 A7
0000:1D70 A7
0000:1D80 A1 IC 62
0000:1D80 A1 IC 62
0000:1D83 D6 13
0000:1D85 21 05 62
0000:1D89 D0
                                                                            xor
ld
ld
                                                                                             (unk_0_6219), a
                                                                                           (mario_climbing), a loc_0_1DA6
                                                                                                                                                                           ; flaf not climbing a ladder
                                                                            jр
                                            loc_0_1D76:
                                                                                                                                                                           ; CODE XREF: sub_0_1AC3+244↑j
                                                                            1d
                                                                                           a, (unk_0_621A)
                                                                            and
jp
ld
                                                                                           a z, loc_0_1D8A (unk_0_6219), a a, (unk_0_621C) 13h
                                                                            ld
                                                                            sub
                                                                                           hl, mario_x_coord (hl)
                                                                            cp
ret
 0000:1D89 D0
 0000:1D8A
0000:1D8A
                                                                                                                                                                           ; CODE XREF: sub_0_1AC3+233<sup>†</sup>j
; sub_0_1AC3+2B7<sup>†</sup>j
                                            loc_0_1D8A:
 0000:1D8A 21 OF 62
 0000:1D8A
0000:1D8D 35
0000:1D8E C9
                                                                           ld
dec
ret
                                                                                           hl, unk_0_620F (hl)
 0000:1D8E
0000:1D8E
0000:1D8F
0000:1D8F
                                            ; End of function sub_0_1AC3
                                                                         SUBROUTINE
 0000:1D8F
0000:1D8F
0000:1D8F
0000:1D8F 3E 03
                                                                                                                                                                           ; CODE XREF: sub_0_1AC3+204\uparrow p ; sub_0_1AC3+29E\uparrow p ; tmr=3
                                            sub_0_1D8F:
 0000:1D8F
0000:1D8F
0000:1D91 32 80 60
0000:1D94 C9
0000:1D94
0000:1D95
0000:1D95
                                                                           ld
ret
                                                                                           (digital_snd_tmr_walk), a
                                            ; End of function sub_0_1D8F
                                            ; SUBROUTINE
 0000:1D95
 0000:1D95
 0000:1D95
0000:1D95
0000:1D95 32 25 62
                                                                                                                                                                           ; CODE XREF: sub_0_1A33+86<sup>p</sup>; sub_0_1AC3+1AD<sup>p</sup>
                                            sub 0 1D95:
 0000:1D95
0000:1D98 3A 27 62
0000:1D98 3D
0000:1D9C C8
                                                                                           (unk 0 6225)
                                                                            ld
dec
                                                                                            a, (level_type)
                                                                            ret
0000:1D9D 21 8A 60
0000:1DAO 36 0D
0000:1DA2 2C
0000:1DA3 36 03
                                                                                           hl, unk_0_608A
(hl), ODh
                                                                            1d
                                                                                           (hl), 3
                                                                            ld
 0000:1DA5 C9
0000:1DA5
0000:1DA5
                                            ret; End of function sub_0_1D95
 0000:1DA6
 0000:1DA6
0000:1DA6
0000:1DA6 21 4C 69
0000:1DA6
                                                                                                                                                                           ; CODE XREF: sub_0_1AC3+A8<sup>†</sup>j; sub_0_1AC3+161<sup>†</sup>j ...
                                            loc_0_1DA6:
                                                                                           hl, soft_sprite_ram+4Ch
 0000:1DA9 3A 03 62
0000:1DAC 77
0000:1DAD 3A 07 62
                                                                            ld
ld
                                                                                                  (mario_y_coord)
                                                                                            (hl)
                                                                                            (n1), a
a, (mario_flipy_sprite_tile)
                                                                            ld
0000:1DAD 3A 07 62

0000:1DB0 2C

0000:1DB1 77

0000:1DB2 3A 08 62

0000:1DB5 2C

0000:1DB6 77

0000:1DB7 3A 05 62

0000:1DBA 2C

0000:1DBB 77
                                                                            inc
ld
ld
                                                                                            (hl), a
                                                                                           a, (mario_flipx_colour)
                                                                            inc
                                                                                           a, (mario_x_coord)
                                                                            1d
                                                                                           (hl), a
                                                                            1d
 0000:1DBD 77
0000:1DBC C9
0000:1DBD
0000:1DBD
                                                                           SUBROUTINE
 0000:1DBD
                                                                                                                                                                           ; CODE XREF: 0000:127C<sup>p</sup>; 0000:1641<sup>p</sup> ...
                                            sub_0_1DBD:
 0000:1DBD 3A 40 63
                                                                                           a,
28h
 0000:1DBD
                                                                            ld
                                                                                                 (unk_0_6340)
 0000:1DC0 EF
0000:1DC0
                                                                            rst
0000:1DC0
0000:1DC1 49 1E
0000:1DC3 C9 1D
0000:1DC5 4A 1E
0000:1DC7 00
                                                                            .dw ret
                                                                            .dw loc_0_1DC9
.dw loc_0_1E4A
                                                                            .db
                                                                                         0 ;
0 ;
 0000:1DC8 00
 0000:1DC9
```

```
0000:1DC9
                                       loc 0 1DC9:
                                                                                                                                                          ; DATA XREF: sub 0 1DBD+61o
0000:1DC9 3E 40 0000:1DCB 32 41 63 0000:1DCB 32 40 63 0000:1DCB 3E 02 0000:1DD0 32 40 63 0000:1DD3 3A 42 63 0000:1DD6 1F 0000:1DD7 DA 70 3E 0000:1DD7 1B
                                                                                  a, 40h; '@'
(unk_0_6341), a
                                                                    ld
ld
                                                                                  (unk_0_6340),
                                                                    ld
                                                                    ld
rra
                                                                                  a, (unk_0_6342)
                                                                                 c, loc_0_3E70
                                                                    jp
rra
jp
rra
0000:1DDA 1F
0000:1DDA 1F
0000:1DDB DA 00 1E
0000:1DDE 1F
0000:1DDF DA F5 1D
                                                                                 c, loc_0_1E00
                                                                    jp
ld
ld
ld
                                                                                   c, loc_0_1DF5
0000:1DE2 21 85 60
0000:1DE5 36 03
0000:1DE7 3A 29 62
0000:1DEA 3D
                                                                                 hl, digital_snd_tmr_barrel_jump_priz (hl), 3
a, (level)
                                                                                                                                                          ; tmr=3
                                                                    dec
0000:1DEA 3D
0000:1DEB CA 00 1E
0000:1DEE 3D
0000:1DEF CA 08 1E
                                                                                  z, loc_0_1E00
                                                                    jp
dec
                                                                                  z, award_500_pts
                                                                    jр
0000:1DF2 C3 10 1E
                                                                                  award 800 pts
0000:1DF5
                                       loc 0 1DF5:
                                                                                                                                                          ; CODE XREF: sub 0 1DBD+221j
0000:1DF5 3A 18 60
                                                                    ld
                                                                                 a, (random_no)
0000:1DF8 1F
0000:1DF9 DA 08 1E
0000:1DFC 1F
0000:1DFD DA 10 1E
                                                                                                                                                          ; 50% chance for 500 pts
; award 500 pts
; 25% chance for 800 pts
                                                                    rra
jp
                                                                                 c, award_500_pts
                                                                    rra
                                                                    jр
                                                                                  c, award_800_pts
                                                                                                                                                          ; award 800 pts
0000:1DFD DA 10
0000:1E00
0000:1E00
0000:1E00 06 7D
                                                                                                                                                          ; CODE XREF: sub_0_1DBD+1Efj
; sub_0_1DBD+2Efj
; '300' sprite tile
; award 3 (300) points
                                       loc_0_1E00:
0000:1E00
                                                                    1d
                                                                                  b, 7Dh; '}'
0000:1E00
0000:1E02 11 03 00
0000:1E05 C3 15 1E
0000:1E08
                                                                    ld
                                                                                  award_points
                                                                    jр
0000:1E08
0000:1E08
0000:1E08
0000:1E08 06 7E
                                                                                                                                                          ; CODE XREF: sub_0_1DBD+32\frac{1}{j}
; sub_0_1DBD+3C\frac{1}{j}
; '500' sprite tile
; award 5 (500) points
                                        award_500_pts:
                                                                                  b. 7Eh ; '~'
0000:1E08
                                                                    ld
0000:1E0A 11 05 00
0000:1E0D C3 15 1E
0000:1E10
                                                                    1d
                                                                                  award_points
                                                                    jp
0000:1E10
0000:1E10
0000:1E10 06 7F
0000:1E10
0000:1E12 11 08 00
                                                                                                                                                          ; CODE XREF: sub_0_1DBD+35<sup>†</sup>j
; sub_0_1DBD+40<sup>†</sup>j
; '800' sprite tile
; award 8 (800) points
                                       award_800_pts:
                                                                                  b, 7Fh ; ' '
                                                                    ld
                                                                    14
0000:1E12
0000:1E15
0000:1E15
                                                                                                                                                           ; CODE XREF: sub_0_1DBD+48 j
                                       award_points:
0000:1E15 CD 9F 30
                                                                                                                                                           ; sub 0 1DBD+501 j
0000:1E15
0000:1E15
0000:1E18 2A 43 63
0000:1E1B 7E
                                                                                  sub_0_309F
hl, (unk_0_6343)
a, (hl)
(hl), 0
                                                                    call
                                                                                                                                                              schedule award points
                                                                    ld
ld
                                                                                                                                                          ; ptr x position
; prize x position
0000:1E1B 7E
0000:1E1C 36 00
0000:1E1E 2C
0000:1E1F 2C
0000:1E20 2C
                                                                                                                                                          ; erase prize
; go to y position
                                                                    1d
                                                                    inc
                                                                    inc
0000:1E21 4E
0000:1E22 C3 36 1E
0000:1E25
0000:1E25 11 01 00
                                                                    1d
                                                                                       (h1)
                                                                                                                                                          ; get y position
; program award sprite
                                                                                  loc_0_1E36
                                                                                                                                                          ; award 1 (100) pts
                                                                    ld
                                                                                  de, 1
0000:1E28
0000:1E28
0000:1E28 CD 9F 30
                                                                                                                                                          ; CODE XREF: 0000:3E76|j; 0000:3E7E|j ...
                                       loc_0_1E28:
                                                                                                                                                          ; schedule award points
                                                                    call
                                                                                  sub 0 309F
0000:1E28
                                                                                 a, (mario_x_coord)
a, 14h
0000:1E28

0000:1E2B 3A 05 62

0000:1E2E C6 14

0000:1E30 4F

0000:1E31 3A 03 62
                                                                    14
                                                                    add
                                                                    ld
                                                                    1d
                                                                                  a, (mario_y_coord)
0000:1E34 00
0000:1E35 00
0000:1E36
                                                                    nop
nop
0000:1E36
0000:1E36 21 30 6A
0000:1E39 77
0000:1E3A 2C
                                                                                                                                                          ; CODE XREF: sub_0_1DBD+65fj
; add bonus points sprite to display
                                       loc_0_1E36:
                                                                    ld
ld
                                                                                 hl, soft_sprite_ram+130h
(hl), a
                                                                                   (hl), b
0000:1E3B 70
                                                                    ld
0000:1E3B 70
0000:1E3C 2C
0000:1E3D 36 07
0000:1E3F 2C
0000:1E41 3E 05
0000:1E43 F7
                                                                    inc
                                                                                   (hl), 7
                                                                    inc
                                                                    1d
                                                                                   (hl), c
                                                                    ld
                                                                                   a, 5
30h
                                                                                                                                                          ; return if level bit not set
                                                                    rst
0000:1E47 F/
0000:1E47 21 85 60
0000:1E47 36 03
0000:1E49
                                                                                  hl, digital_snd_tmr_barrel_jump_priz
(hl), 3
                                                                    ld
                                                                                                                                                          ; tmr=3
                                                                                                                                                          ; DATA XREF: sub 0 1DBD+41o
0000:1E49
0000:1E49 C9
                                       ret:
                                                                    ret
0000:1E49
0000:1E49
0000:1E4A
                                       ; End of function sub_0_1DBD
0000:1E4A
0000:1E4A
0000:1E4A
0000:1E4A 21 41 63
0000:1E4D 35
                                       loc_0_1E4A:
                                                                                                                                                         ; DATA XREF: sub_0_1DBD+8 o
                                                                                 hl, unk_0_6341
(hl)
                                                                    ld
                                                                    dec
0000:1E4D 35
0000:1E4F AF
0000:1E55 32 30 6A
0000:1E53 32 40 63
0000:1E56 C9
0000:1E57
                                                                    ret
xor
ld
                                                                                  nz
                                                                                   (soft_sprite_ram+130h), a
                                                                    1d
                                                                                  (unk_0_6340), a
                                                                   SUBROUTINE
0000:1E57
0000:1E57
0000:1E57
0000:1E57
0000:1E57 3A 27 62
0000:1E5A CB 57
                                                                                                                                                          ; CODE XREF: 0000:19B91p
                                       sub_0_1E57:
                                                                                 a, (level_type)
2, a
                                                                    1d
                                                                    bit
0000:1E5A GB 5/
0000:1E5C C2 80 1E
0000:1E5F 1F
                                                                                  nz, loc_0_1E80
                                                                    jp
                                                                    rra
0000:1E5F 1F
0000:1E60 3A 05 62
                                                                                  a, (mario_x_coord)
                                                                    ld
0000:1E63 DA 7A 1E
0000:1E66 FE 51
0000:1E68 D0
                                                                                  c, loc_0_1E7A
51h ; 'Q'
                                                                    jp
                                                                    ср
                                                                    ret
                                                                                 nc
a, (mario_y_coord)
0000:1E69 3A 03 62
0000:1E6C 17
                                                                    1d
```

```
; CODE XREF: sub 0 1E57+26-i
0000:1E6D
                                        loc 0 1E6D:
0000:1E6D
0000:1E6D 3E 00
0000:1E6F DA 74 1E
0000:1E72 3E 80
0000:1E74
0000:1E74 0000:1E74
0000:1E74 32 4D 69
0000:1E74 38 5 1E
                                                                                     a, 0
c, loc_0_1E74
a, 80h; 'Ç'
                                                                      1d
                                                                      jp
ld
                                         loc_0_1E74:
                                                                                                                                                               ; CODE XREF: sub_0_1E57+18 j
                                                                                     (soft_sprite_ram+4Dh), a
loc_0_1E85
                                                                      ld
                                                                      jр
0000:1E7A
0000:1E7A
0000:1E7A
0000:1E7A
0000:1E7A FE 31
                                                                                                                                                               ; CODE XREF: sub_0_1E57+C^j
                                         loc_0_1E7A:
                                                                                     31h ; '1'
                                                                      ср
0000:1E7C D0
0000:1E7D C3 6D 1E
0000:1E80
0000:1E80
                                                                      ret
                                                                                     loc_0_1E6D
0000:1E80
                                         loc_0_1E80:
                                                                                                                                                              ; CODE XREF: sub_0_1E57+5 j
0000:1E80 3A 90 62
0000:1E83 A7
                                                                                     a, (unk_0_6290)
                                                                      ld
                                                                      and
0000:1E84 C0
                                                                      ret
                                                                                     nz
0000:1E84 CO
0000:1E85
0000:1E85 3E 16
0000:1E87 32 0A 60
0000:1E8A E1
0000:1E8B C9
0000:1E8B
                                         loc_0_1E85:
                                                                                                                                                              ; CODE XREF: sub_0_1E57+20 j
                                                                      ld
                                                                                           16h
                                                                      ld
                                                                                     (main_sequencer), a
                                                                      pop
ret
                                         ; End of function sub_0_1E57
0000:1E8C
0000:1E8C
0000:1E8C
                                         ; SUBROUTINE
0000:1E8C
0000:1E8C
0000:1E8C
0000:1E8C 3A 50 63
0000:1E8F A7
                                         sub_0_1E8C:
                                                                                                                                                               ; CODE XREF: 0000:197D p
                                                                      ld
                                                                                     a, (unk_0_6350)
                                                                      and
0000:1E8F A7

0000:1E90 C8

0000:1E91 CD 96 1E

0000:1E94 E1

0000:1E95 C9

0000:1E95

0000:1E95
                                                                      ret
                                                                                      -
sub_0_1E96
                                                                      pop
                                                                                     hl
                                                                      ret
                                         ; End of function sub_0_1E8C
0000:1E96
0000:1E96
0000:1E96
                                                                     SUBROUTINE
0000:1E96
                                         sub 0 1E96:
                                                                                                                                                               ; CODE XREF: sub 0 1E8C+5<sup>p</sup>
0000:1E96 3A 45 63
0000:1E99 EF
0000:1E99
                                                                      14
                                                                                     a,
28h
                                                                                          (unk_0_6345)
                                                                      rst
                                                                      .dw loc_0_1EA0 .dw loc_0_1F09 .dw loc_0_1F23
0000:1E9A A0 1E
0000:1E9C 09 1F
0000:1E9E 23 1F
0000:1EA0
                                                                                                                                                               ; Jump table
0000:1EA0
0000:1EA0
0000:1EA0
0000:1EA0 3A 52 63
0000:1EA3 FE 65
                                        loc_0_1EA0:
                                                                                                                                                               ; DATA XREF: sub_0_1E96+4\u00e10 o ; hammer just hit something
                                                                                     a, (unk_0_6352)
65h; 'e'
                                                                      ld
                                                                      cp
ld
jp
ld
                                                                                    hl, soft_sprite_ram+0B8h
z, loc_0_1EB4
hl, soft_sprite_ram+0D0h
c, loc_0_1EB4
hl, soft_sprite_ram+80h
0000:1EA5 21 B8 69
0000:1EA8 CA B4 1E
0000:1EAB 21 D0 69
0000:1EAE DA B4 1E
                                                                                                                                                               ; process hammer hit effect (start)
                                                                                                                                                               ; fireball area in sprite ram
                                                                      jp
ld
0000:1EB1 21 80 69
0000:1EB4
0000:1EB4
0000:1EB4 DD 2A 51 63
0000:1EB4
                                                                                                                                                              ; CODE XREF: sub_0_1E96+12<sup>†</sup> j ; sub_0_1E96+18<sup>†</sup> j
                                         loc_0_1EB4:
                                                                                     ix, (unk_0_6351) d, 0 a, (unk_0_6353)
                                                                      14
0000:1EB4
0000:1EB8 16 00
0000:1EBA 3A 53 63
0000:1EBD 5F
0000:1EBE 01 04 00
0000:1EC1 3A 54 63
0000:1EC4 A7
                                                                      ld
ld
                                                                      ld
                                                                      ld
ld
                                                                                     bc, 4
a, (unk_0_6354)
                                                                      and
0000:1EC4 A/
0000:1EC5 CA CF 1E
0000:1EC8
0000:1EC8
0000:1EC8 09
                                                                      jp
                                                                                     z, loc_0_1ECF
                                        loc_0_1EC8:
                                                                                                                                                              ; CODE XREF: sub_0_1E96+36|j
                                                                                    hl. bc
                                                                      add
0000:1EC9 DD 19
0000:1ECB 3D
0000:1ECC C2 C8 1E
0000:1ECF
                                                                      add
dec
                                                                                     ix, de
                                                                                     nz, loc_0_1EC8
                                                                      jр
0000:1ECF
0000:1ECF DD 36 00 00
0000:1ED3 DD 7E 15
0000:1ED6 A7
0000:1ED7 3E 02
0000:1ED6 A7
0000:1ED6 A DE 1E
0000:1ED6 A
                                        loc_0_1ECF:
                                                                                                                                                               ; CODE XREF: sub_0_1E96+2F1j
                                                                                    a, (ix+15h)
a
                                                                      1d
                                                                      and
                                                                                     a a, 2 z, loc_0_1EDE
                                                                      ld
                                                                      jp
ld
0000:1EDE
0000:1EDE 32 42 63
0000:1EE1 01 2C 6A
                                         loc_0_1EDE:
                                                                                                                                                               ; CODE XREF: sub_0_1E96+43 j
                                                                                    (unk_0_6342), a
bc, soft_sprite_ram+12Ch
a, (h1)
(h1), 0
                                                                      ld
                                                                      ld
0000:1EE4 7E
0000:1EE5 36 00
0000:1EE7 02
0000:1EE8 0C
                                                                      ld
ld
ld
                                                                                     (hl), 0
(bc), a
                                                                                                                                                              ; flash sprite x coord
                                                                      inc
0000:1EE9 2C
0000:1EEA 3E 60
0000:1EEC 02
0000:1EED 0C
                                                                      inc
                                                                                     1
                                                                      ld
ld
                                                                                                                                                               ; initial hit sprite character
; flash sprite character
                                                                                          60h ; '`'
                                                                                     (bc), a
                                                                      inc
                                                                      inc
ld
ld
                                                                                     1
0000:1EEE 20
0000:1EEF 2C
0000:1EEF 3E 0C
0000:1EF1 02
                                                                                     a, 0Ch (bc), a
0000:1EF2 0C
0000:1EF3 2C
0000:1EF4 7E
0000:1EF5 02
                                                                      inc
                                                                      inc
                                                                                          (hl)
                                                                                    (bc), a
hl, unk_0_6345
(hl)
                                                                      ld
                                                                                                                                                              ; flash sprite y coord
0000:1EF5 02
0000:1EF6 21 45 63
0000:1EF9 34
0000:1EFA 2C
0000:1EFB 36 06
                                                                      ld
                                                                                     l
(hl), 6
                                                                      1d
0000:1EFB 36 06
0000:1EFD 2C
0000:1EFE 36 05
0000:1F00 21 8A 60
0000:1F03 36 06
0000:1F05 2C
                                                                      ld
                                                                                      (hl),
                                                                                     hl, unk_0_608A (hl), 6
                                                                      ld
                                                                      1d
```

```
0000:1F06 36 03
                                                                                   ld
                                                                                                    (hl), 3
0000:1F08 C9
                                                                                   ret
0000:1F08
0000:1F08
0000:1F09
                                                ; End of function sub_0_1E96
0000:1F09
0000:1F09
0000:1F09
0000:1F09 21 46 63
0000:1F0C 35
0000:1F0D C0
                                                loc_0_1F09:
                                                                                                                                                                                           ; DATA XREF: sub_0_1E96+6↑o ; process hammer hit effect (middle)
                                                                                                   hl, unk_0_6346
(hl)
                                                                                   ret
                                                                                                    nz
0000:1F0E 36 06
0000:1F10 2C
0000:1F11 35
                                                                                                     (hl), 6
                                                                                   ld
                                                                                  inc
dec
                                                                                                    1
(hl)
                                                                                                   z, loc_0_1F1D
hl, 6A2Dh
a, (hl)
0000:1F12 CA 1D 1F
0000:1F15 21 2D 6A
0000:1F18 7E
0000:1F19 EE 01
                                                                                   jp
ld
ld
                                                                                                                                                                                           ; animate hit flash
                                                                                   xor
0000:1F19 EE 01
0000:1F1B 77
0000:1F1C C9
0000:1F1D
0000:1F1D
0000:1F1D 36 04
0000:1F1F 2D
                                                                                                    (hl), a
                                                                                   1d
                                                loc_0_1F1D:
                                                                                                                                                                                           ; CODE XREF: 0000:1F12<sup>†</sup> †
                                                                                   ld
                                                                                                    (hl), 4
                                                                                   dec
dec
0000:1F20 2D
0000:1F20 2D
0000:1F21 34
0000:1F22 C9
0000:1F23
0000:1F23
0000:1F23
0000:1F23 21 46 63
                                                                                                    (hl)
                                                                                                                                                                                           ; DATA XREF: sub_0_1E96+8\u00e10 o ; process hammer hit effect (end)
                                                loc_0_1F23:
                                                                                   ld
                                                                                                    hl, unk_0_6346
(hl)
                                                                                   dec
                                                                                                    nz
(hl), OCh
0000:1F27 C0
0000:1F28 36 0C
0000:1F2A 2C
0000:1F2B 35
                                                                                   ret
ld
                                                                                   inc
                                                                                                    l
(hl)
0000:1F2B 35

0000:1F2C CA 34 1F

0000:1F2C CA 34 1F

0000:1F32 34

0000:1F33 39

0000:1F34 09

0000:1F34 2D

0000:1F34 2D

0000:1F35 2D

0000:1F36 AF

0000:1F36 AF

0000:1F38 3C

0000:1F38 3C

0000:1F38 3C

0000:1F38 3C

0000:1F38 3C

0000:1F38 3C

0000:1F36 3C

0000:1F36 3C

0000:1F36 3C

0000:1F42 22 43 63

0000:1F45 69

0000:1F46 0000:1F46
                                                                                                    z, loc_0_1F34
hl, soft_sprite_ram+12Dh
(hl)
                                                                                   jp
ld
                                                                                                                                                                                           ; animate hit flash
                                                                                   ret
                                                loc 0 1F34:
                                                                                                                                                                                           ; CODE XREF: 0000:1F2C<sup>†</sup>j
                                                                                   dec
                                                                                   ld
                                                                                                    (hl), a
                                                                                                     (unk_0_6350), a
                                                                                   ld
                                                                                                                                                                                          ; stop effect process
                                                                                   inc
ld
                                                                                                     unk_0_6340), a
                                                                                                    hl, soft sprite ram+12Ch
                                                                                   ld
                                                                                   ld
                                                                                                     (unk_0_6343), hl
                                                                                   ret
0000:1F46
0000:1F46
0000:1F46
0000:1F46
                                                                                 SUBROUTINE
0000:1F46
0000:1F46 3A 21 62
0000:1F4A C8
0000:1F4A AF
0000:1F4A AF
0000:1F4B AF
0000:1F55 32 10 62
0000:1F55 32 10 62
0000:1F5B 32 11 62
0000:1F5B 32 11 62
0000:1F5B 32 13 62
0000:1F5B 32 13 62
0000:1F5B 32 14 62
0000:1F65 32 16 62
0000:1F65 34 05 62
0000:1F65 34 05 62
0000:1F71 09
                                                                                                                                                                                          ; CODE XREF: 0000:19A41p
                                                sub_0_1F46:
                                                                                                   a, (unk_0_6221)
a
z
                                                                                  1d
                                                                                  and
ret
                                                                                   xor
                                                                                                    (unk_0_6204), a
(unk_0_6206), a
(unk_0_6221), a
                                                                                   ld
                                                                                  ld
ld
ld
ld
ld
                                                                                                    (unk_0_6210),
(unk_0_6211),
(unk_0_6212),
(unk_0_6213),
                                                                                   ld
                                                                                                    (unk_0_6214), a
                                                                                   ind
                                                                                                    (mario_jumping), a (unk_0_621F), a
                                                                                   ld
                                                                                                    a, (mario_x_coord)
(unk_0_620E), a
                                                                                   1d
                                                                                   ld
                                                                                   ret
                                                ; End of function sub_0_1F46
0000:1F71
0000:1F72
0000:1F72
0000:1F72
0000:1F72
0000:1F72
0000:1F72 3A 27 62
                                                                               S U B R O U T I N E
                                                sub_0_1F72:
                                                                                                                                                                                           ; CODE XREF: 0000:19831p
                                                                                   ld
                                                                                                    a, (level type)
                                                                                   dec
0000:1F75 3D
0000:1F76 C0
0000:1F77 DD 21 00 67
0000:1F7B 21 80 69
0000:1F7E 11 20 00
0000:1F81 06 0A
0000:1F83
0000:1F83
                                                                                   ret
ld
                                                                                                    nz
ix, unk_0_6700
                                                                                                    hl, soft_sprite_ram+80h de, 20h; ''
                                                                                   ld
ld
                                                                                   ld
                                                                                                         OAh
                                                loc_0_1F83:
                                                                                                                                                                                          ; CODE XREF: sub_0_1F72+1E|j
0000:1F83 DD 7E 00
0000:1F86 3D
0000:1F87 CA 93 1F
0000:1F8A 2C
                                                                                   1d
                                                                                                    a, (ix+0)
a
                                                                                                   z, loc_0_1F93
                                                                                   jp
inc
0000:1F8B 2C
0000:1F8B 2C
0000:1F8C 2C
0000:1F8D
                                                                                   inc
                                                                                                                                                                                          ; CODE XREF: 0000:21CE-i
0000:1F8D
                                               loc 0 1F8D:
0000:1F8D
0000:1F8D 2C
0000:1F8E DD 19
0000:1F90 10 F1
0000:1F92 C9
0000:1F93
0000:1F93
                                                                                   add
                                                                                                    ix, de
loc_0_1F83
                                                                                   djnz
                                                                                                                                                                                          ; CODE XREF: sub 0 1F72+15 † j
                                                loc 0 1F93:
0000:1F93 DD 7E 01
                                                                                   ld
                                                                                                    a, (ix+1)
                                                                                                    z, loc_0_20EC
                                                                                   jp
ld
0000:1F9A DD 7E 02
                                                                                                    a, (ix+2)
                                                                                   rra
jp
 0000:1F9D
0000:1F9E DA AC 1F
0000:1FA1 1F
                                                                                                    c, loc_0_1FAC
                                                                                   rra
0000:1FA2 DA E5 1F
                                                                                   jp
rra
                                                                                                    c, loc 0 1FE5
0000:1FA5 1F
```

```
0000:1FA6 DA EF 1F
0000:1FA9 C3 53 20
                                                                                                  c, loc_0_1FEF
loc_0_2053
0000:1FAC
                                                                                                                                                                                         ; CODE XREF: sub_0_1F72+2C|j
                                               loc_0_1FAC:
0000:1FAC D9
0000:1FAC D9
0000:1FAD DD 34 05
0000:1FBO DD 7E 17
0000:1FB3 DD BE 05
                                                                                  exx
                                                                                                  (ix+5)
a, (ix+17h)
(ix+5)
                                                                                  ld
                                                                                 cp
jp
ld
rlca
                                                                                                  nz, loc_0_1FCE
a, (ix+15h)
0000:1FB6 C2 CE 1F
0000:1FB9 DD 7E 15
0000:1FBC 07
0000:1FBD 07
                                                                                  rlca
0000:1FBD 07
0000:1FBE C6 15
0000:1FC0 DD 77 07
0000:1FC3 DD 76 02
0000:1FC6 EE 07
0000:1FCB DD 77 02
0000:1FCB C3 BA 21
0000:1FCE
                                                                                                  a, 15h
(ix+7), a
a, (ix+2)
                                                                                  add
ld
ld
                                                                                                                                                                                       ; switch downwards (sideways) barrel to rolling barrel
                                                                                  xor
                                                                                                   (ix+2)
                                                                                  1d
                                                                                                  loc_0_21BA
0000:1FCE
0000:1FCE
0000:1FCE DD 7E 0F
0000:1FCE
                                                                                                                                                                                         ; CODE XREF: sub_0_1F72+44\uparrow j; sub_0_1F72+199 \nmid j
                                               loc_0_1FCE:
                                                                                                  a, (ix+0Fh)
                                                                                  ld
0000:1FD1 3D
                                                                                  dec
0000:1FD1 3D
0000:1FD2 C2 DF 1F
0000:1FD5 DD 7E 07
0000:1FD8 EE 01
0000:1FDD DD 77 07
0000:1FDD 3E 04
0000:1FDF
0000:1FDF DD 3E 077 0F
                                                                                                  nz, loc_0_1FDF
a, (ix+7)
                                                                                  jp
ld
                                                                                                                                                                                         ; animate sideways barrel sprite
                                                                                  xor
ld
                                                                                                   (ix+7), a
                                               loc_0_1FDF:
                                                                                                                                                                                        ; CODE XREF: sub_0_1F72+60 j
UUUU:1FDF
0000:1FDF DD 77 0F
0000:1FE2 C3 BA 21
0000:1FE5
0000:1FE5
                                                                                                  (ix+0Fh), a loc_0_21BA
                                                                                  1d
0000:1FE5
0000:1FE5 D9
0000:1FE6 D9
0000:1FE6 01 00 01
0000:1FEC C3 F6 1F
0000:1FEF
0000:1FEF
                                               loc_0_1FE5:
                                                                                                                                                                                        ; CODE XREF: sub_0_1F72+30 j
                                                                                                  bc, 100h
                                                                                  ld
                                                                                  inc
                                                                                                    (ix+3)
                                                                                                  loc 0 1FF6
0000:1FEF
0000:1FEF D9
0000:1FF0 01 04 FF
0000:1FF3 DD 35 03
0000:1FF6
                                                                                                                                                                                         ; CODE XREF: sub 0 1F72+341 i
                                               loc_0_1FEF:
                                                                                  exx
ld
                                                                                                  bc, 0FF04h
                                                                                 dec
                                                                                                  (ix+3)
0000:1FF6
0000:1FF6 DD 66 03
0000:1FF9 DD 6E 05
0000:1FF7 7C
0000:1FFF FE 03
                                               loc_0_1FF6:
                                                                                                                                                                                        ; CODE XREF: sub_0_1F72+7A j
                                                                                                  h, (ix+3)
1, (ix+5)
                                                                                  1d
                                                                                 ld
and
                                                                                  ср
0000:2001 CA 5F 21
                                                                                 jp
dec
dec
dec
                                                                                                  z, loc_0_215F
0000:2001 CA
0000:2004 2D
0000:2005 2D
0000:2006 2D
0000:2007 CD 33 23
0000:200A 2C
0000:200B 2C
0000:200C 2C
                                                                                 call
inc
inc
                                                                                                  sub_0_2333
                                                                                  inc
ld
0000:200D 7D
0000:200E DD 77 05
0000:2011 CD DE 23
0000:2011 CD DE 23
0000:2014 CD B4 24
0000:2017 DD 7E 03
0000:201A FE 1C
0000:201C DA 2F 20
0000:201F FE E4
0000:2021 DA BA 21
0000:2021 DA BA 21
0000:2024 AF
0000:2025 DD 77 10
0000:2025 DD 76 11 60
0000:2025 C3 38 20
0000:202F
0000:202F
0000:202F
0000:200D 7D
                                                                                                   a. 1
                                                                                                  a, 1
(ix+5), a
sub_0_23DE
sub_0_24B4
a, (ix+3)
1Ch
c, loc_0_202F
0E4h; 'ô'
                                                                                 ld
call
                                                                                  call
ld
                                                                                  ср
                                                                                  jp
cp
jp
xor
                                                                                                   c, loc_0_21BA
                                                                                                  (ix+10h), a
(ix+10h), a
                                                                                  ld
                                                                                  1d
                                                                                                  loc_0_2038
0000:202F
                                             loc_0_202F:
                                                                                                                                                                                       ; CODE XREF: sub_0_1F72+AA j
xor
ld
                                                                                                  a
(ix+10h), 0FFh
(ix+11h), 0A0h; 'á'
                                                                                  1d
                                                                                                                                                                                        ; CODE XREF: sub_0_1F72+BA j
                                                                                                  (ix+12h), OFFh
(ix+13h), OFOh; '-'
(ix+14h), a
(ix+0Eh), a
                                                                                  ld
0000:2038 DD 36 12 FF
0000:2032 DD 36 13 F0
0000:2040 DD 77 14
0000:2043 DD 77 04
0000:2046 DD 77 04
0000:2040 DD 77 06
0000:204C DD 36 02 08
0000:2050 C3 BA 21
0000:2053
                                                                                  ld
                                                                                 ld
ld
                                                                                  ld
ld
                                                                                                   (ix+4), a (ix+6), a
                                                                                  ld
                                                                                                   (ix+2), 8
loc_0_21BA
                                                                                  jp
0000:2053
0000:2053
0000:2053
0000:2053
0000:2054
0000:2057
0D 2F 2A
0000:205A A7
0000:205B C2 83 20
0000:205B C2 83 20
0000:205B C5 08 79 20
0000:2065 DA 79 20
0000:2065 DA 79 20
0000:2065 DA 79 10
                                              loc_0_2053:
                                                                                                                                                                                       ; CODE XREF: sub_0_1F72+37 j
                                                                                  exx
                                                                                  call
                                                                                                  sub 0 239C
                                                                                 call
and
                                                                                                   sub_0_2A2F
                                                                                                  nz, loc_0_2083
                                                                                  jp
ld
                                                                                                  a, (ix+3)
a, 8
10h
c, loc_0_2079
sub_0_24B4
                                                                                 add
cp
                                                                                  jp
call
                                                                                  ld
and
 0000:2070 07
                                                                                  rlca
0000:2071 07
                                                                                  rlca
0000:2071 07
0000:2072 4F
0000:2073 CD DE 23
0000:2076 C3 BA 21
                                                                                 ld
call
                                                                                                  c, a sub_0_23DE
                                                                                  jр
                                                                                                   loc 0 21BA
0000:2079
0000:2079
0000:2079
                                               loc_0_2079:
                                                                                                                                                                                        ; CODE XREF: sub_0_1F72+F3 j
0000:2079 AF
                                                                                                   (ix+0), a
0000:207A DD 77 00
```

```
0000:207D DD 77 03
                                                                        ld
                                                                                       (ix+3), a
loc_0_21BA
0000:2080 C3 BA 21
0000:2083
                                                                        jр
                                         loc_0_2083:
                                                                                                                                                                   ; CODE XREF: sub_0_1F72+E9 j
0000:2083 DD 34 0E
0000:2086 DD 7E 0E
                                                                                       (ix+0Eh)
                                                                        ld
dec
                                                                                       a, (ix+0Eh)
0000:2080 BB 7E 0E
0000:2089 3D
0000:208A CA A2 20
                                                                                       z, loc_0_20A2
                                                                        jp
dec
0000:208D 3D
0000:208E CA C3 20
0000:2091 DD 7E 10
0000:2094 3D
                                                                        jp
ld
                                                                                       z, loc_0_20C3
a, (ix+10h)
                                                                        dec
0000:2095 3E 04
0000:2097 C2 9C 20
0000:209A 3E 02
0000:209C
                                                                        1d
                                                                                       nz, loc_0_209C
a, 2
                                                                        jp
ld
0000:209C
                                         loc_0_209C:
                                                                                                                                                                   ; CODE XREF: sub_0_1F72+125 j
0000:209C DD 77 02
0000:209F C3 BA 21
                                                                                       (ix+2), a
loc_0_21BA
                                                                        ld
                                                                        jр
0000:20A2
0000:20A2
0000:20A2
0000:20A2 DD 7E 15
                                         loc_0_20A2:
                                                                                                                                                                   ; CODE XREF: sub_0_1F72+118\uparrow j
                                                                                       a, (ix+15h)
                                                                        1d
0000:20A2 DD 7E 15
0000:20A5 A7
0000:20A6 C2 B5 20
0000:20A9 21 05 62
0000:20AC DD 7E 05
0000:20AF D6 16
                                                                        and
                                                                                       nz, loc_0_20B5
hl, mario_x_coord
                                                                        jp
ld
                                                                        ld
                                                                                       a, (ix+5)
16h
                                                                        sub
                                                                                                                                                                   ; check har far mario has fallen when jumping
0000:20AF D6 16
0000:20B1 BE
0000:20B2 D2 C3 20
0000:20B5
                                                                        ср
                                                                                        (hl)
                                                                                       nc, loc_0_20C3
                                                                        jр
0000:20B5
0000:20B5 DD 7E 10
0000:20B8 A7
0000:20B9 C2 E1 20
                                         loc_0_20B5:
                                                                                                                                                                   ; CODE XREF: sub 0 1F72+134 j
                                                                        ld
                                                                                       a, (ix+10h)
                                                                        and
                                                                                       nz, loc_0_20E1
                                                                        jp
ld
0000:20BC DD 77 11
0000:20BF DD 36 10 FF
0000:20C3
                                                                                       (ix+11h), a
(ix+10h), 0FFh
                                                                                                                                                                   ; CODE XREF: sub_0_1F72+11C†j; sub_0_1F72+140†j ...
0000:20C3
                                         loc 0 20C3:
0000:20C3
0000:20C3 CD 07 24
0000:20C3
0000:20C6 CB 3C
0000:20C8 CB 1D
                                                                        call
                                                                                       sub_0_2407
                                                                        srl
                                                                                       h
1
                                                                        rr
0000:20CA CB 3C
0000:20CC CB 1D
0000:20CE DD 74 12
0000:20D1 DD 75 13
                                                                        srl
rr
                                                                                       (ix+12h), h
(ix+13h), l
                                                                        ld
                                                                        14
0000:20D1 DD 75 13
0000:20D4 AF
0000:20D5 DD 77 14
0000:20D8 DD 77 04
0000:20DB DD 77 06
0000:20DE C3 BA 21
                                                                        xor
ld
                                                                                       a
(ix+14h), a
                                                                        ld
                                                                                       (ix+4), a
                                                                                       (ix+6), a
loc_0_21BA
                                                                        ld
                                                                        jр
0000:20E1
0000:20E1
0000:20E1
0000:20E1 DD 36 10 01
0000:20E5 DD 36 11 00
                                         loc_0_20E1:
                                                                                                                                                                   ; CODE XREF: sub_0_1F72+147\uparrow j
                                                                                       (ix+10h), 1
(ix+11h), 0
                                                                        ld
                                                                        ld
0000:20E9 C3 C3 20
0000:20EC
0000:20EC
                                                                                       loc_0_20C3
                                                                        jр
                                         loc 0 20EC:
                                                                                                                                                                   ; CODE XREF: sub 0 1F72+25 † †
0000:20EC D9
                                                                        exx
0000:20EC D9

0000:20ED CD 9C 23

0000:20F0 7C

0000:20F1 D6 1A

0000:20F3 DD 46 19
                                                                                       sub_0_239C
a, h
1Ah
                                                                        call
ld
                                                                        sub
                                                                        ld
                                                                                       b, (ix+19h)
0000:20F3 DD 40 19
0000:20F6 B8
0000:20F7 DA 04 21
                                                                        ср
                                                                                           loc_0_2104
                                                                        jр
0000:20FA CD 2F 2A
                                                                        call
                                                                                       sub_0_2A2F
0000:20FD A7
0000:20FE C2 18 21
0000:2101 CD B4 24
                                                                        and
                                                                                       nz, loc_0_2118
sub_0_24B4
                                                                        jр
                                                                        call
0000:2104
0000:2104
0000:2104 DD 7E 03
0000:2107 C6 08
                                         loc_0_2104:
                                                                                                                                                                  ; CODE XREF: sub_0_1F72+185<sup>†</sup>j
                                                                                      a, (ix+3)
a, 8
10h
                                                                        ld
                                                                        add
0000:2107 C0 00
0000:2109 FE 10
0000:210B D2 CE 1F
0000:210E AF
                                                                        cp
jp
                                                                                       nc, loc_0_1FCE
UUUU:210E AF
0000:210F DD 77 00
0000:2112 DD 77 03
0000:2115 C3 BA 21
0000:2118
                                                                        xor
                                                                                       a (ix+0), a
                                                                        1d
                                                                                       (ix+3), a
loc_0_21BA
                                                                        ld
                                                                        jр
0000:2118
0000:2118
0000:2118 DD 7E 05
                                         loc_0_2118:
                                                                                                                                                                   ; CODE XREF: sub_0_1F72+18C<sup>†</sup>j
                                                                                      a, (ix+5)

0E0h; 'Ó'

c, loc_0_2146

a, (ix+7)

0FCh; '3'
                                                                        ld
0000:211B FE E0
0000:211D DA 46 21
0000:2120 DD 7E 07
0000:2123 E6 FC
0000:2125 F6 01
                                                                        cp
jp
ld
and
                                                                                                                                                                   ; switch falling (sideways) barrel to rolling bounce barrel
                                                                        or
0000:2127 DD 77 07
0000:212A AF
0000:212B DD 77 01
0000:212E DD 77 02
                                                                                       (ix+7), a
                                                                        1d
                                                                        xor
ld
ld
                                                                                       (ix+1), a
(ix+2), a
0000:212E DD 77 02
0000:2131 DD 36 10 FF
0000:2135 DD 77 11
0000:2138 DD 77 12
0000:213B DD 36 13 BO
0000:213F DD 36 0E 01
0000:2146 3 C3 53 21
                                                                        ld
ld
ld
                                                                                       (ix+10h), 0FFh
(ix+11h), a
(ix+12h), a
(ix+13h), 0B0h;
                                                                        ld
                                                                                       (ix+0Eh),
loc_0_2153
                                                                        1d
                                                                        jр
0000:2146
0000:2146
0000:2146
0000:2146 CD 07 24
0000:2149 CD CB 22
0000:214F DD 77 19
0000:2152 AF
                                         loc_0_2146:
                                                                                                                                                                   ; CODE XREF: sub_0_1F72+1AB j
                                                                                       sub_0_2407
                                                                        call
                                                                                       sub_0_22CB
a. (ix+5)
                                                                        ld
                                                                        xor
0000:2153
 0000:2153
                                         loc_0_2153:
                                                                                                                                                                  ; CODE XREF: sub_0_1F72+1D1 j
0000:2153
0000:2153 DD 77 14
0000:2156 DD 77 04
0000:2159 DD 77 06
                                                                                       (ix+14h), a
(ix+4), a
                                                                        ld
                                                                        1d
                                                                                        (ix+6)
0000:215C C3 BA 21
                                                                                       loc_0_21BA
```

```
0000:215F
0000:215F
                                          loc_0_215F:
                                                                                                                                                                         ; CODE XREF: sub_0_1F72+8F<sup>†</sup> j
                                                                                          a, 1
a, 5
d, a
a, h
bc, 15h
sub_0_216D
0000:215F 7D
0000:2160 C6 05
                                                                           ld
add
ld
ld
0000:2162 57
0000:2163 7C
0000:2164 01 15 00
0000:2167 CD 6D 21
                                                                           call
0000:216A C3 BA 21
                                           jp; End of function :
                                                                               loc_0_21BA
sub 0 1F72
0000:216A
0000:216A
0000:216D
0000:216D
0000:216D
0000:216D
0000:216D
                                                                         SUBROUTINE
                                           sub 0 216D:
                                                                                                                                                                         ; CODE XREF: sub 0 1F72+1F5 p
0000:216D

0000:216D CD 6E 23

0000:2170 3D

0000:2171 CO

0000:2172 78

0000:2173 D6 05

0000:2178 3A 48 63

0000:217B A7
                                                                           call
dec
ret
                                                                                        sub_0_236E
                                                                                          nz
                                                                           1d
                                                                                           a, b
                                                                           sub
ld
                                                                                           (ix+17h)
                                                                                          a, (unk_0_6348)
                                                                           ld
                                                                           and
                                                                                          z, loc_0_21B2
a, (mario_x_coord)
4
0000:2178 A7
0000:217C CA B2 21
0000:217F 3A 05 62
0000:2182 D6 04
                                                                           jp
ld
                                                                           sub
                                                                           cp
ret
ld
0000:2184 BA
                                                                                          А
0000:2184 BA
0000:2185 D8
0000:2186 3A 80 63
0000:2189 1F
                                                                                          a, (unk_0_6380)
                                                                           rra
                                                                           inc
ld
ld
ld
0000:218A 3C
0000:218B 47
0000:218C 3A 18 60
0000:218F 4F
                                                                                          b, a
a, (random_no)
0000:210F 4F
0000:2190 E6 03
0000:2192 B8
0000:2193 D0
                                                                           and
                                                                           cp
ret
ld
                                                                                          nc
0000:2193 D0
0000:2194 21 10 60
0000:2197 3A 03 62
0000:2198 BB
0000:2198 CA B2 21
0000:2195 D2 A9 21
0000:21A1 CB 46
0000:21A3 CA AE 21
0000:21A6 C3 B2 21
                                                                                          hl, controller in
                                                                           ld
cp
jp
jp
bit
jp
                                                                                                (mario_y_coord)
                                                                                           z, loc_0_21B2
                                                                                          nc, loc_0_21A9

0, (h1)

z, loc_0_21AE
                                                                                                                                                                          ; right?
; no, skip
                                                                                           loc_0_21B2
 0000:2149
0000:21A9
0000:21A9
0000:21A9
0000:21A9 CB 4E
0000:21AB C2 B2 21
0000:21AE
0000:21AE
                                                                                                                                                                             CODE XREF: sub_0_216D+31 j
                                            loc_0_21A9:
                                                                                          1, (hl)
nz, loc_0_21B2
                                                                           bit
                                                                                                                                                                          ; left?
                                                                           jр
                                                                                                                                                                          ; yes, skip
                                           loc_0_21AE:
                                                                                                                                                                         ; CODE XREF: sub_0_216D+36 j
0000:21AE 79
                                                                           1d
                                                                                          a, c
18h
0000:21AE 79
0000:21AF E6 18
0000:21B1 C0
0000:21B2
                                                                           and
                                                                           ret
                                                                                          nz
0000:21B2
0000:21B2 DD 34 07
0000:21B2
0000:21B5 DD CB 02 C6
                                                                                                                                                                         ; CODE XREF: sub_0_216D+F<sup>†</sup>j
; sub_0_216D+2E<sup>†</sup>j ...
; sprite tile #
; switch rolling barrel to going-down-ladder barrel
                                           loc_0_21B2:
                                                                                           (ix+7)
                                                                                          0, (ix+2)
                                                                           set
0000:21B9 C9
                                                                           ret
0000:21B9
0000:21B9
                                           ; End of function sub_0_216D
0000:21BA
 0000:21BA
0000:21BA
0000:21BA
0000:21BA D9
                                                                                                                                                                          ; CODE XREF: sub_0_1F72+59<sup>†</sup>j; sub_0_1F72+70<sup>†</sup>j ...
                                           loc_0_21BA:
0000:21BA
                                                                           exx
0000:21BB DD 7E 03
0000:21BE 77
0000:21BF 2C
                                                                           ld
ld
                                                                                          a, (ix+3) (hl), a
                                                                                                                                                                         ; set sprite X
                                                                                          1
a, (ix+7)
                                                                           inc
0000:21C0 DD 7E 07
0000:21C3 77
0000:21C4 2C
0000:21C5 DD 7E 08
                                                                           1d
                                                                                                                                                                         ; set sprite tile #
                                                                           ld
                                                                                           (hl), a
                                                                           inc
ld
                                                                                          l
a, (ix+8)
                                                                                                                                                                         ; set sprite vflip & palette
                                                                                           (hl), a
0000:21C8 77
                                                                           ld
0000:21C8 77
0000:21C9 2C
0000:21CA DD 7E 05
0000:21CD 77
0000:21CE C3 8D 1F
0000:21CE
                                                                           inc
ld
                                                                                          a, (ix+5)
                                                                                                                                                                         ; set sprite Y
                                                                                           (hl).
                                                                           ld
                                                                                          loc_0_1F8D
                                                                                                                                                                         ; DATA XREF: next_attract_action or is lst byte is input, 2nd is timer
                                           attract mario inputs:.dw OFE80h
0000:21D1
0000:21D1
0000:21D3 01 C0
0000:21D5 04 50
0000:21D7 02 10
0000:21D9 82 60
                                                                             dw 0C001h
                                                                           .dw
                                                                            .dw
                                                                                   1002h
6082h
0000:21DB 02 10
0000:21DD 82 CA
0000:21DF 01 10
                                                                                  1002h
0CA82h
1001h
                                                                           .dw
                                                                           .dw
0000:21E1 81 FF
0000:21E3 02 38
0000:21E5 01 80
0000:21E7 02 FF
                                                                           .dw
.dw
.dw
                                                                                  0FF81h
                                                                                    3802h
                                                                                  8001h
0FF02h
                                                                            .dw
0000:21E7 02 FF
0000:21E9 04 80
0000:21EB 00
0000:21EE
0000:21EE
0000:21EE
0000:21EE
                                                                           .dw 8004h
.dw 6004h
.db 80h
                                                                        SUBROUTINE
                                                                                                                                                                         ; CODE XREF: 0000:19771p
0000:21EE
                                           next_attract_action:
                                                                                          de, attract_mario_inputs
hl, attract_movement_entry
a, (hl)
0000:21EE 11 D1 21
0000:21F1 21 CC 63
0000:21F4 7E
0000:21F5 07
0000:21F6 83
0000:21F7 5F
                                                                           ld
ld
                                                                                                                                                                         ; get entry
; convert to word
; add to base
; ptr to entry
; lst byte of entry
                                                                           ld
                                                                           rlca
                                                                           add
ld
                                                                                           e, a
a, (de)
0000:21F8 1A
0000:21F9 32 10 60
0000:21FC 2C
0000:21FD 7E
                                                                           ld
                                                                           ld
inc
ld
                                                                                            (controller_in), a
                                                                                                                                                                          ; store simulated inputs
                                                                                          a, (hl) (hl)
                                                                                                                                                                         ; get movement timer
; done?
0000:21FE 35
                                                                           dec
0000:21FF A7
                                                                           and
```

```
0000:2259*
0000:2259*E1
0000:225A 2C
                                                                            pop
                                                                                            1
0000:225B 2C
                                                                            inc
0000:225C 2C
0000:225C 2C
0000:225D 2C
0000:225E 35
0000:225F C0
                                                                            inc
                                                                                            (hl)
                                                                            dec
                                                                                            nz
a, 4
(hl), a
                                                                            ret
0000:2260 3E 04
0000:2262 77
0000:2263 2D
                                                                            ld
ld
                                                                            dec
                                                                                            (hl)
0000:2264 34
                                                                            inc
0000:2264 34
0000:2265 CD BD 22
0000:2268 3E 78
0000:226A BE
                                                                            call
ld
                                                                                            sub_0_22BD
                                                                                            a, 78h; 'x' (hl)
                                                                                            nz, loc_0_2275
0000:226A BE
0000:226B C2 75 22
0000:226F 2D
0000:2270 2D
0000:2271 34
0000:2272 2C
0000:2273 2C
0000:2274 2C
0000:2275 0000:2275
0000:2275 D
                                                                            cp
jp
dec
dec
                                                                            dec
                                                                            inc
                                                                                            (hl)
                                                                            inc
                                                                            inc
                                            loc_0_2275:
                                                                                                                                                                           ; CODE XREF: 0000:226B<sup>†</sup>j
0000:2275 2D
                                                                            dec
0000:2276 CD 43 22
0000:2279 3A 05 62
0000:227C FE 68
0000:227E D2 8A 22
                                                                            call
ld
                                                                                            sub 0 2243
                                                                                            a, (mario_x_coord)
68h; 'h'
nc, loc_0_228A
                                                                            ср
0000:2281
0000:2281
0000:2281
0000:2281 21 05 62
                                            loc_0_2281:
                                                                                                                                                                           ; CODE XREF: 0000:228B|j
                                                                            ld
                                                                                           hl, mario_x_coord (hl)
0000:2284 34
0000:2285 CD C0 3F
                                                                                            sub_0_3FC0
                                                                            call
```

```
0000:2289 C9
0000:228A
0000:228A
0000:228A
                                                                                                                                                                                ; CODE XREF: 0000:227E↑j
                                             loc_0_228A:
0000:228A 1F
0000:228B DA 81 22
0000:228E 1F
0000:228F 3E 01
                                                                              rra
                                                                              jp
rra
ld
                                                                                             c, loc_0_2281
0000:2291 DA 95 22
0000:2294 AF
0000:2295
0000:2295
                                                                              jp
xor
                                                                                              c, loc_0_2295
                                             loc_0_2295:
                                                                                                                                                                               ; CODE XREF: 0000:2291<sup>†</sup>j
0000:2295 32 22 62
0000:2298 C9
0000:2299
0000:2299 E1
                                                                              1d
                                                                                             (unk_0_6222), a
                                                                             pop
ld
and
                                                                                             hl
0000:2299 E1
0000:229D 3A 18 60
0000:229D E6 3C
0000:229F C0
0000:22A0 34
0000:22A1 C9
0000:22A2*
0000:22A2*
                                                                                             a, (random_no)
3Ch; '<'
                                                                              ret
                                                                                             nz
                                                                              inc
                                                                                              (hl)
                                            loc_0_22A2:
                                                                                                                                                                              ; DATA XREF: sub 0 2207+19 w
0000:22A2*

0000:22A2*E1

0000:22A3 2C

0000:22A4 2C

0000:22A5 2C

0000:22A6 2C

0000:22A7 35

0000:22A8 CO
                                                                                             hl
1
1
                                                                             pop
inc
                                                                              inc
                                                                              inc
                                                                                              1
(hl)
0000: 22A7 35
0000: 22A8 C0
0000: 22AB CD
0000: 22AB CD
0000: 22AC 35
0000: 22AC 35
0000: 22AD CD BD 22
0000: 22B2 3E 68
0000: 22B3 C0
0000: 22B4 AF
0000: 22B5 06 80
0000: 22B4 AF
0000: 22B5 06 80
0000: 22B7 2D
0000: 22B8 77
0000: 22BB 77
0000: 22BB 77
0000: 22BB 77
0000: 22BB 0000: 22BD
0000: 22BD
0000: 22BD
                                                                              ret
                                                                                             nz
                                                                             ld
dec
                                                                                              (hl), 2
                                                                                              (hl)
                                                                                             sub 0 22BD
                                                                              call
                                                                             ld
cp
                                                                                             a, 68h;
(hl)
                                                                              ret
                                                                                             nz
                                                                              xor
                                                                             ld
dec
dec
                                                                                             b, 80h; 'Ç'
                                                                                              (hl), b
                                                                              ld
                                                                              dec
ld
                                                                                              (hl), a
                                                                             ret
                                                                              SUBROUTINE
0000:22BD
0000:22BD
0000:22BD
0000:22BD 7E
0000:22BD
                                                                                                                                                                               ; CODE XREF: 0000:2265<sup>p</sup>; 0000:22AD<sup>p</sup>
                                            sub_0_22BD:
                                                                                             a, (hl)
                                                                              ld
0000:22BE CB 5D
0000:22C0 11 4B 69
0000:22C3 C2 C9 22
0000:22C6 11 47 69
                                                                                             de, soft_sprite_ram+4Bh
nz, loc_0_22C9
de, soft_sprite_ram+47h
                                                                             bit
ld
                                                                              jp
ld
0000:22C6 11
0000:22C9
0000:22C9
0000:22C9 12
0000:22CA C9
0000:22CA
0000:22CB
                                             loc_0_22C9:
                                                                                                                                                                               ; CODE XREF: sub_0_22BD+6<sup>†</sup>j
                                                                             ld
                                                                              ret
                                             ; End of function sub_0_22BD
 0000:22CB
                                                                          SUBROUTINE
0000:22CB
0000:22CB
0000:22CB
                                             sub_0_22CB:
                                                                                                                                                                               ; CODE XREF: sub_0_1F72+1D7↑p
ld
                                                                                             a, (unk_0_6348)
                                                                              and
                                                                              jp
ld
                                                                                             z, loc_0_22E1
a, (unk_0_6380)
                                                                              dec
                                                                                              28h
                                                                                                                                                                                ; go!
                                                                              .dw loc_0_22F6
                                                                                                                                                                                ; Jump table
0000:22D7 F6 22
0000:22D9 F6 22
0000:22DB 03 23
0000:22DF 1A 23
0000:22E1
0000:22E1
                                                                              .dw loc_0_22F6
.dw loc_0_2303
.dw loc_0_2303
                                                                              .dw loc 0 231A
                                             loc_0_22E1:
                                                                                                                                                                               ; CODE XREF: sub_0_22CB+4^j
0000:22E1
0000:22E1 3A 29 62
0000:22E5 47
0000:22E5 05
0000:22E6 3E 01
0000:22E8 CA F9 22
0000:22E8 CA F9 22
0000:22EC 3E B1
0000:22EC CA F9 22
0000:22F1 3E E9
0000:22F6
0000:22F6
                                                                              ld
                                                                                             a. (level)
                                                                             ld
dec
                                                                                             a, 1
z, loc_0_22F9
                                                                              jp
dec
                                                                                             a, 0B1h; '" 'z, loc_0_22F9
                                                                              jp
ld
                                                                                                    0E9h
                                                                                             loc_0_22F9
0000:22F6
0000:22F6 3A 18 60
0000:22F6
0000:22F9
                                                                                                                                                                               ; DATA XREF: sub_0_22CB+C<sup>o</sup>; sub_0_22CB+E<sup>o</sup>
                                             loc_0_22F6:
                                                                             ld
                                                                                             a, (random_no)
                                                                                                                                                                               ; CODE XREF: sub_0_22CB+1D^{\dagger}j; sub_0_22CB+23^{\dagger}j ...
0000:22F9
                                             loc_0_22F9:
0000:22F9 DD 77 11
0000:22F9
                                                                                              (ix+11h), a
                                                                              ld
0000:22FC E6 01
                                                                              and
0000:22FE 3D
0000:22FF DD 77 10
                                                                              ld
                                                                                              (ix+10h), a
 0000:2302 C9
                                                                              ret
 0000:2302
                                             ; End of function sub 0 22CB
0000:2303
0000:2303
0000:2303 3A 18 60
0000:2303
                                                                                                                                                                               ; DATA XREF: sub_0_22CB+10\uparrow o ; sub_0_22CB+12\uparrow o
                                             loc_0_2303:
                                                                              ld
                                                                                                    (random_no)
0000:2306 DD 77 11
                                                                                             (ix+11h), a
a, (mario_y_coord)
                                                                              1d
0000:2309 3A 03 62
                                                                              ld
```

```
; CODE XREF: 0000:2311<sup>†</sup> i
                                                                                                                                                                                                                                                                                  ; DATA XREF: sub_0_22CB+14\u00e10
0000:2326

0000:2326

0000:2326

07

0000:2327

08

0000:2329

07

0000:232A

08

11

0000:232C

DD 71

10

0000:232F

DD 77

11

0000:232F

0000:252F

000000:252F

0000:252F

0000:252F

00000:252F

00000:252F

00000:252
                                                                                                                                                                                                                                                                                  ; CODE XREF: 0000:23221j
                                                                                                                         rlca
rl
ld
                                                                                                                                                   (ix+10h), c
                                                                                                                          ld
                                                                                                                                                   (ix+11h), a
0000:232F DD 77
0000:2332 C9
0000:2333
0000:2333
0000:2333
0000:2333
0000:2333
0000:2333 3E 0F
                                                                                                                         ret
                                                                                                                        SUBROUTINE
                                                                                                                                                                                                                                                                                  ; CODE XREF: sub_0_1AC3+221<sup>p</sup>
; sub_0_1F72+95<sup>p</sup> ...
                                                                      sub_0_2333:
 0000:2333
0000:2335 A4
0000:2336 05
0000:2337 CA 42 23
                                                                                                                         ld
and
dec
                                                                                                                                                 a, OFh
h
b
                                                                                                                          jp
cp
ret
ld
                                                                                                                                                   z. loc 0 2342
 0000:2337 CA 42
0000:233A FE 0F
0000:233C D8
0000:233D 06 FF
 0000:233F C3 47 23
                                                                                                                                                   loc 0 2347
                                                                                                                          jр
 0000:233F
0000:2342
0000:2342
                                                                      loc 0 2342:
                                                                                                                                                                                                                                                                                 ; CODE XREF: sub_0_2333+4 j
 0000:2342 FE 01
0000:2344 D0
0000:2345 06 01
                                                                                                                          ср
                                                                                                                         ret
ld
                                                                                                                                                  nc
b, 1
 0000:2347
0000:2347
0000:2347 3E F0
0000:2349 BD
0000:234A CA 60 23
0000:234D 3E 4C
0000:234F BD
0000:2350 7D 66 23
                                                                      loc_0_2347:
                                                                                                                                                                                                                                                                                 ; CODE XREF: sub 0 2333+C1i
                                                                                                                                                 a, OFOh ; '-'
                                                                                                                          ld
                                                                                                                          ср
                                                                                                                         jp
ld
cp
                                                                                                                                                  z, loc_0_2360
                                                                                                                                                  z, loc_0_2366
                                                                                                                          jp
ld
 0000:2353 7D
0000:2354 CB 6F
0000:2356 CA 5C 23
0000:2359
                                                                                                                          bit
                                                                                                                                                   z, loc_0_235C
                                                                                                                          jр
 0000:2359
0000:2359
0000:235A
0000:235A
                                                                      loc_0_2359:
                                                                                                                                                                                                                                                                                 ; CODE XREF: sub_0_2333+2F|j
                                                                                                                          sub
                                                                                                                                                  b
                                                                      loc 0 235A:
                                                                                                                                                                                                                                                                                  ; CODE XREF: sub 0 2333+2A-j
 0000:235A 6F
                                                                                                                         ld
                                                                                                                                                  1, a
0000:235A 6F
0000:235B C9
0000:235C
0000:235C
0000:235C
0000:235C
                                                                                                                                                                                                                                                                                  ; CODE XREF: sub_0_2333+23 j
                                                                      loc_0_235C:
                                                                                                                                                                                                                                                                                   ; sub_0_2333+38|j
                                                                                                                          add
                                                                                                                                                         , b
 0000:235C C3 5A 23
                                                                                                                                                   loc_0_235A
                                                                                                                          jр
 0000:2360
0000:2360
0000:2360
                                                                       loc_0_2360:
                                                                                                                                                                                                                                                                                   ; CODE XREF: sub_0_2333+17<sup>†</sup> j
0000:2360 CB 7C
0000:2362 C2 59 23
0000:2365 C9
0000:2366
                                                                                                                                                  7, h
nz, loc_0_2359
                                                                                                                         bit
0000:2366
0000:2366
0000:2366 7C
0000:2367 FE 98
0000:2369 D8
0000:236A 7D
0000:236B C3 5C 23
                                                                       loc_0_2366:
                                                                                                                                                                                                                                                                                  ; CODE XREF: sub_0_2333+1D<sup>†</sup> j
                                                                                                                          ld
                                                                                                                                                  a, h
98h; 'ÿ'
                                                                                                                         cp
ret
                                                                                                                                                   a, 1
loc_0_235C
                                                                                                                          jр
                                                                      ; End of function sub_0_2333
 0000:236B
 0000:236B
0000:236E
                                                                                                                      SUBROUTINE
 0000:236E
0000:236E
 0000:236E
0000:236E
0000:236E 21 00 63
                                                                      sub_0_236E:
                                                                                                                                                                                                                                                                                 ; CODE XREF: sub_0_1AC3+50<sup>p</sup>; sub_0_216D<sup>p</sup> ...
 0000:236E
                                                                                                                        ld
                                                                                                                                                 hl, unk 0 6300
 0000:2371
0000:2371
0000:2371
0000:2371 ED B1
0000:2371 ED B2
0000:2373 C2 9A 23
0000:2376 E5
0000:2377 C5
                                                                      loc_0_2371:
                                                                                                                                                                                                                                                                                  ; CODE XREF: sub_0_236E+1E|j
                                                                                                                          cpir
                                                                                                                         jp
push
                                                                                                                                                  nz, loc_0_239A
hl
bc
                                                                                                                          push
ld
                                                                                                                                                  bc. 14h
 0000:237B 09
0000:237C 0C
0000:237D 5F
                                                                                                                         add
inc
ld
ld
                                                                                                                                                  hl, bc
                                                                                                                                                  c
e, a
a, d
 0000:237E 7A
 0000:237F BE
0000:2380 CA 8F 23
                                                                                                                                                  (h1)
z, loc_0_238F
h1, bc
(h1)
                                                                                                                         cp
jp
add
cp
jp
ld
ld
 0000:2383 09
 0000:2384 BE
 0000:2385 CA 95 23
0000:2388 57
0000:2389 7B
                                                                                                                                                  z, loc_0_2395
d, a
                                                                                                                                                  a, e
bc
 0000:238A C1
0000:238B E1
0000:238C C3 71 23
                                                                                                                         pop
                                                                                                                                                   loc_0_2371
                                                                                                                          jр
 0000:238F
```

0000:238F

```
loc_0_238F:
                                                                                                                                                                  ; CODE XREF: sub_0_236E+12<sup>†</sup>j
0000:238F 09
                                                                       add
                                                                                      hl, bc
0000:2390 3E 01
0000:2392 C3 98 23
0000:2395
                                                                       ld
                                                                                      loc_0_2398
0000:2395
0000:2395
                                                                                                                                                                 ; CODE XREF: sub_0_236E+17<sup>†</sup> j
                                         loc_0_2395:
0000:2395 AF
0000:2396 ED 42
                                                                                      hl, bc
                                                                       sbc
0000:2398
0000:2398
0000:2398 C1
0000:2399 46
                                         loc_0_2398:
                                                                                                                                                                 ; CODE XREF: sub_0_236E+24 j
                                                                                      bc
b, (hl)
                                                                       pop
ld
0000:239A
0000:239A
0000:239A E1
0000:239B C9
                                         loc_0_239A:
                                                                                                                                                                 ; CODE XREF: sub_0_236E+5<sup>†</sup>j
                                                                                      hl
                                                                       pop
                                                                       ret
0000:239B
0000:239B
0000:239C
0000:239C
                                         ; End of function sub_0_236E
                                                                     SUBROUTINE!
0000:239C
0000:239C
0000:239C
                                                                                                                                                                 ; CODE XREF: sub_0_1AC3+FF<sup>†</sup>p; sub_0_1AC3+129<sup>†</sup>p ...
                                         sub 0 239C:
0000:239C DD 7E 04
0000:239C DD 7E 04
0000:239F DD 86 11
0000:23A5 DD 7E 03
0000:23A5 DD 7E 03
0000:23A8 DD 8E 10
0000:23A8 DD 7E 03
                                                                                     a, (ix+4)
a, (ix+11h)
(ix+4), a
a, (ix+3)
a, (ix+10h)
(ix+3), a
a, (ix+6)
(ix+13h)
1, a
a, (ix+5)
a, (ix+12h)
h, a
                                                                       ld
add
ld
ld
                                                                       adc
ld
                                                                       ld
                                                                       sub
ld
ld
0000:23B1 DD 96 13
0000:23B4 6F
0000:23B4 OF
0000:23B5 DD 7E 05
0000:23B8 DD 9E 12
                                                                       sbo
0000:23BB 67
0000:23BC DD 7E 14
0000:23BF A7
                                                                                     h, a
a, (ix+14h)
                                                                       ld
                                                                        ld
                                                                       and
                                                                                      а
                                                                       rla
0000:23C0 17
                                                                       inc
                                                                                      a
b, 0
0000:23C1 3C
0000:23C1 3C
0000:23C2 06 00
0000:23C4 CB 10
0000:23C6 CB 27
                                                                       rl
sla
                                                                                      b
0000:23C8 CB 10
0000:23CA CB 27
0000:23CC CB 10
                                                                       rl
sla
                                                                                      b
                                                                                      a
b
                                                                       rl
0000:23CE CB 27
                                                                       sla
0000:23CE CB
0000:23D0 CB
0000:23D2 4F
                                                                       rl
ld
                                                                                      c, a
hl, bc
0000:23D3 09
                                                                       add
0000:23D4 DD 74 05
0000:23D7 DD 75 06
0000:23DA DD 34 14
                                                                                      (ix+5), h
(ix+6), l
(ix+14h)
                                                                       ld
ld
                                                                       inc
0000:23DD C9
0000:23DD
0000:23DD
0000:23DE
                                                                       ret
                                         ; End of function sub_0_239C
0000:23DE
0000:23DE
0000:23DE
                                          ; SUBROUTINE
                                                                                                                                                                 ; CODE XREF: sub_0_1F72+9F^p; sub_0_1F72+101^p
                                         sub 0 23DE:
 0000:23DE
0000:23DE DD 7E 0F
0000:23DE
0000:23E1 3D
                                                                                      a, (ix+0Fh)
0000:23E1 3D
0000:23E2 C2 03 24
0000:23E5 AF
0000:23E6 DD CB 07 26
0000:23EA 17
                                                                                      nz, loc 0 2403
                                                                       jp
xor
                                                                                                                                                                 ; animate rolling barrels
; toggle H & V flips
                                                                                      (ix+7)
                                                                       rla
0000:23EB DD CB 08 26
                                                                                      (ix+8)
                                                                                                                                                                 ; toggle H & V flips
                                                                       sla
0000:23EF 17
0000:23F0 47
0000:23F1 3E 03
                                                                       rla
ld
ld
                                                                                     b, a
a, 3
0000:23F3 B1
0000:23F4 CD 09 30
0000:23F7 1F
0000:23F8 DD CB 08 1E
                                                                       or
call
                                                                                      sub_0_3009
                                                                       rra
                                                                                      (ix+8)
                                                                                                                                                                 ; toggle H & V flips
                                                                       rr
0000:23FC 1F
0000:23FD DD CB 07 1E
0000:2401 3E 04
0000:2403
                                                                       rra
rr
ld
                                                                                      (ix+7)
                                                                                                                                                                 ; toggle H & V flips
                                                                                      a, 4
0000:2403
0000:2403
0000:2403 DD 77 OF
0000:2406 C9
                                         loc_0_2403:
                                                                                                                                                                 ; CODE XREF: sub_0_23DE+4 j
                                                                       ld
                                                                                      (ix+0Fh), a
                                                                       ret
                                         ; End of function sub_0_23DE
0000:2406
0000:2400
0000:2406
0000:2407
0000:2407
                                                                     SUBROUTINE
0000:2407
0000:2407
0000:2407 DD 7E 14
                                                                                                                                                                 ; CODE XREF: sub_0_1AC3+11C\p; sub_0_1F72+151\p ...
                                         sub_0_2407:
0000:2407
                                                                                     a, (ix+14h)
0000:2407
0000:240A 07
0000:240B 07
0000:240C 07
                                                                       rlca
rlca
0000:240C 07

0000:240D 07

0000:240E 4F

0000:240F E6 0F

0000:2411 67

0000:2412 79

0000:2413 E6 F0

0000:2415 6F

0000:2416 DD 4E 13

0000:2416 DD 46 12

0000:2416 ED 42

0000:241E C9

0000:241E 0000:241E
                                                                       rlca
                                                                       rlca
                                                                       ld
and
                                                                                      c, a
0Fh
                                                                       1d
                                                                                      h, a a, c
                                                                       ld
and
ld
                                                                                      a, c
0F0h ; '-'
                                                                                      1, a
c, (ix+13h)
b, (ix+12h)
hl, bc
                                                                       ld
                                                                       ld
sbc
                                                                       ret
                                         ; End of function sub_0_2407
                                                                     SUBROUTINE
0000:241F
0000:241F
0000:241F
                                                                                                                                                                 ; CODE XREF: sub_0_1AC3+23<sup>p</sup>; sub_0_1AC3+102<sup>p</sup> ...
                                         sub_0_241F:
0000:241F 11 00 01
0000:241F
                                                                       1d
                                                                                      de, 100h
```

0000:24B4 0000:24B4

0000:24B4 0000:24B4 DD 7E 05

0000:24BA DD 7E 03 0000:24BD FE 2A 0000:24BF D0

0000:24B4 0000:24B7 FE E8

0000:24C0 FE 20

0000:24C2 D8

0000:24B9 D8

sub 0 24B4:

a, (ix+5) 0E8h; 'b'

a, (ix+3) 2Ah; '*'

nc 20h ; ' '

ср ret ld

ср ret

cp ret

```
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```

; CODE XREF: sub_0_1F72+A2^p; sub_0_1F72+F6^p ...

```
0000:24C3 DD 7E 15
0000:24C6 A7
0000:24C7 CA DO 24
0000:24CC 32 B9 62
0000:24CF AF
0000:24D0
0000:24D0 DD 77 00
0000:24D0 DD 77 03
                                         loc_0_24D0:
                                                                                                                                                                 ; CODE XREF: sub_0_24B4+13 j
                                                                       ld
                                                                                      (ix+0), a
                                                                       1d
                                                                                       (ix+3)
                                                                       ld
ld
                                                                                     hl, digital_snd_tmr_thump (hl), 3
                                                                                                                                                                 ; tmr=3
                                                                       pop
ld
and
jp
                                                                                      hl
                                                                                      a, (unk_0_6348)
0000:24DC 3A 48 63
0000:24DF A7
0000:24E0 C2 BA 21
0000:24E3 3C
                                                                                      nz, loc_0_21BA
0000:24E3 3C
0000:24E4 32 48 63
0000:24E7 C3 BA 21
0000:24E7
                                                                                       (unk 0 6348), a
                                                                       1d
                                                                                       loc_0_21BA
                                                                       jр
                                          ; End of function sub_0_24B4
0000:24E7
0000:24EA
0000:24EA
                                                                      SUBROUTINE
0000:24EA
0000:24EA
0000:24EA 3E 02
0000:24EC F7
0000:24ED CD 23 25
0000:24F0 CD 91 25
0000:24F7 DD 21 AO 65
0000:24F7 06 06
0000:24FP 21 B8 69
0000:24FC CD 7E 00
0000:24FC DD 7E 00
                                         sub_0_24EA:
                                                                                                                                                                 ; CODE XREF: 0000:1992 p
                                                                                      a, 2
30h
                                                                       ld
                                                                                                                                                                 ; return if level bit not set
                                                                       rst
                                                                                      sub_0_2523
sub_0_2591
ix, unk_0_65A0
b, 6
                                                                       call
                                                                       call
ld
ld
                                                                                                                                                                 ; 6 sprites to update
                                                                                      hl, soft_sprite_ram+0B8h
                                                                       1d
                                         loc_0_24FC:
                                                                                                                                                                 ; CODE XREF: sub_0_24EA+2F|j
                                                                                      a.(ix+0)
                                                                       1d
0000:24FF A7
0000:2500 CA 1C 25
0000:2503 DD 7E 03
                                                                       and
                                                                       jp
ld
                                                                                       z, loc_0_251C
                                                                                                                                                                 ; sprite X
                                                                                      a, (ix+3)
(hl), a
0000:2506
                                                                       1d
0000:2507
0000:2508 DD 7E 07
0000:250B 77
                                                                                      a, (ix+7)
(hl), a
                                                                                                                                                                 ; sprite tile #
                                                                       ld
0000:250C 2C
0000:250D DD 7E 08
0000:2510 77
                                                                       inc
                                                                       ld
ld
                                                                                      a, (ix+8)
(hl), a
                                                                                                                                                                 ; sprite v flip & palette
                                                                                     i
a, (ix+5)
0000:2511 2C
0000:2512 DD 7E 05
                                                                       inc
                                                                       14
                                                                                                                                                                 ; sprite Y
0000:2512 DD
0000:2515 77
0000:2516 2C
                                                                       ld
                                                                                       (hl), a
                                                                       inc
0000:2517
0000:2517
0000:2517 DD 19
0000:2519 10 E1
                                         loc_0_2517:
                                                                                                                                                                 ; CODE XREF: sub_0_24EA+36 | j
                                                                       add
                                                                                      ix, de
loc_0_24FC
                                                                       djnz
0000:251B C9
                                                                       ret
0000:251B
0000:251C
0000:251C
                                                                                                                                                                 ; CODE XREF: sub_0_24EA+16 j
                                         loc_0_251C:
0000:251C 7D
0000:251D C6 04
0000:251F 6F
0000:2520 C3 17 25
                                                                                      a, 1
a, 4
1, a
                                                                       1d
                                                                       add
ld
                                                                                       loc 0 2517
                                                                       jр
                                         ; End of function sub_0_24EA
0000:2520
0000:2520
0000:2520
0000:2523
0000:2523
0000:2523
0000:2523
0000:2523
0000:2523
0000:2526 7E
0000:2527 A7
0000:2528 C2 8F 25
0000:2528 3A 9A 63
                                                                    SUBROUTINE ...
                                         sub_0_2523:
                                                                                                                                                                 ; CODE XREF: sub_0_24EA+31p
                                                                                     hl, unk_0_639B
a, (hl)
                                                                       ld
                                                                       ld
and
                                                                                      nz, loc_0_258F
                                                                       jp
ld
and
                                                                                      a, (unk_0_639A)
0000:252B 3A 9A 63
0000:252E A7
0000:252F C8
0000:2530 06 06
                                                                       ret
ld
                                                                                      b, 6
0000:2532 11 10 00
0000:2535 DD 21 A0 65
0000:2539
                                                                                      de, 10h
ix, unk_0_65A0
                                                                       1d
0000:2539
0000:2539 DD CB 00 46
0000:2539 DD CB 00 46
0000:253D CA 45 25
0000:2540 DD 19
0000:2542 10 F5
                                         loc 0 2539:
                                                                                                                                                                ; CODE XREF: sub 0 2523+1F-i
                                                                                      0, (ix+0)
z, loc_0_2545
ix, de
loc_0_2539
                                                                       bit
                                                                       jp
add
                                                                       dinz
0000:2544 C9
0000:2545
0000:2545
0000:2545
                                         loc_0_2545:
                                                                                                                                                                 ; CODE XREF: sub 0 2523+1A1 j
0000:2545 CD 57 00
0000:2548 FE 60
0000:254A DD 36 05 7C
                                                                       call
                                                                                      rand
                                                                                     c, loc_0_2558
a, (unk_0_62A3)
                                                                       cp
ld
                                                                                                             100
                                                                       jp
ld
dec
0000:254E DA 58 25
0000:2551 3A A3 62
0000:2554 3D
0000:2555 C2 6E 25
                                                                                      nz. loc 0 256E
                                                                       jр
; CODE XREF: sub_0_2523+2B<sup>†</sup> j
                                                                                     (ix+5), OCCh;
a, (unk_0_62A6)
                                                                       ld
                                                                                                               ; 1
                                                                       ld
                                                                       rlca
                                                                                                                                                                 ; CODE XREF: sub_0_2523+50|j
0000:2560 DD 36 03 07
0000:2564 D2 76 25
0000:2567 DD 36 03 F8
0000:256B C3 76 25
                                                                                      (ix+3), 7
nc, loc_0_2576
(ix+3), 0F8h;
loc_0_2576
                                                                       ld
                                                                       jp
ld
                                                                       jр
0000:256E
                                         loc_0_256E:
                                                                                                                                                                 ; CODE XREF: sub_0_2523+32|j
0000:256E CD 57 00
                                                                       call
                                                                                      rand
0000:2571 FE 68
0000:2573 C3 60 25
0000:2576
                                                                                       68h :
                                                                                       loc_0_2560
0000:2576
0000:2576
                                         loc_0_2576:
                                                                                                                                                                  ; CODE XREF: sub_0_2523+41\uparrow j
```

```
0000:2576 DD 36 00 01
                                                                                                                                                                ; sub_0_2523+48<sup>†</sup>j
                                                                                     (ix+0), 1
(ix+7), 4Bh; 'K'
(ix+9), 8
(ix+0Ah), 3
 0000:2576
0000:2576

0000:257A DD 36 07 4B

0000:257E DD 36 09 08

0000:2582 DD 36 0A 03

0000:2588 3E 7C

0000:2588 32 9B 63

0000:258B 32 9A 63

0000:258C 32 9A 63
                                                                       ld
ld
ld
                                                                                                                                                               ; cement pie sprite tile
                                                                       ld
                                                                       ld
                                                                                      (unk_0_639B), a
                                                                       xor
ld
                                                                                     (unk_0_639A), a
 0000:258F
 0000:258F
0000:258F 35
0000:2590 C9
                                         loc_0_258F:
                                                                                                                                                               ; CODE XREF: sub_0_2523+5 j
                                                                       ret
 0000:2590
0000:2590
0000:2591
0000:2591
                                         ; End of function sub_0_2523
                                         ; UBROUTINE
 0000:2591
0000:2591
0000:2591
0000:2591 DD 21 A0 65
0000:2595 11 10 00
0000:2598 06 06
0000:2598
                                         sub_0_2591:
                                                                                                                                                                 ; CODE XREF: sub_0_24EA+6 p
                                                                                     ix, unk_0_65A0 de, 10h b, 6
                                                                       ld
                                                                       ld
                                                                                                                                                                ; CODE XREF: sub 0 2591+2C-i
 0000:259A
                                        loc_0_259A:
0000:259A DD CB 00 46
0000:259E CA BB 25
0000:25A1 DD 7E 03
0000:25A4 67
                                                                                     0, (ix+0)
z, loc_0_25BB
                                                                       bit
                                                                       jp
ld
ld
                                                                                     a, (ix+3)
h, a
a, 7
 0000:25A4 67
0000:25A5 C6 07
0000:25A7 FE 0E
0000:25A9 DA D6 25
                                                                                     a,
0Eh
                                                                       cp
jp
ld
                                                                                     0Eh
c, loc_0_25D6
a, (ix+5)
7Ch; '|'
z, loc_0_25C0
0000:25AC DD 7E 05
0000:25AF FE 7C
0000:25B1 CA C0 25
0000:25B4 3A A6 63
                                                                       cp
jp
ld
                                                                                     a, (unk_0_63A6)
a, h
(ix+3), a
 0000:25B7 84
0000:25B8 DD 77 03
0000:25BB
                                                                       add
ld
                                                                                                                                                                ; CODE XREF: sub_0_2591+D<sup>†</sup>j; sub_0_2591+42<sup>†</sup>j ...
0000:25BB
0000:25BB DD 19
0000:25BB
0000:25BB
0000:25BC DD DB
                                         loc 0 25BB:
                                                                       add
                                                                                     ix, de
loc_0_259A
                                                                       djnz
 0000:25C0
0000:25C0
 0000:2500
                                         loc 0 25C0:
                                                                                                                                                                ; CODE XREF: sub 0 2591+201 j
0000:25C0 7C
0000:25C1 FE 80
0000:25C3 CA D6 25
0000:25C6 3A A5 63
0000:25C9 D2 CF 25
0000:25CC 3A A4 63
0000:25CF
                                                                                     a, h

80h; 'C'

z, loc_0_25D6

a, (unk_0_63A5)

nc, loc_0_25CF

a, (unk_0_63A4)
                                                                       14
                                                                       ср
                                                                       jp
1d
 0000:25CF
                                         loc 0 25CF:
                                                                                                                                                                ; CODE XREF: sub 0 2591+381;
 0000:25CF 84
0000:25D0 DD 77 03
0000:25D3 C3 BB 25
                                                                                     a, h
(ix+3), a
loc_0_25BB
                                                                       add
                                                                       ld
                                                                       jр
 0000:25D6
0000:25D6
0000:25D6
0000:25D6 21 B8 69
                                                                                                                                                                ; CODE XREF: sub_0_2591+18<sup>†</sup>j; sub_0_2591+32<sup>†</sup>j
                                          loc_0_25D6:
 0000:25D6
0000:25D6
0000:25D9 3E 06
0000:25DB 90
                                                                       ld
                                                                                     hl, soft_sprite_ram+0B8h
                                                                                     a, 6
b
                                                                       ld
sub
 0000:25DC
 0000:25DC
0000:25DC CA E7 25
0000:25DF 2C
0000:25E0 2C
                                         loc_0_25DC:
                                                                                                                                                                ; CODE XREF: sub_0_2591+53-j
                                                                                      z, loc_0_25E7
                                                                       jр
                                                                       inc
                                                                       inc
 0000:25E1 2C
0000:25E2 2C
0000:25E3 3D
                                                                       inc
inc
dec
 0000:25E4 C3 DC 25
0000:25E7
0000:25E7
                                                                       jр
                                                                                      loc 0 25DC
                                         loc 0 25E7:
                                                                                                                                                                ; CODE XREF: sub 0 2591+4B1 i
0000:25E7 AF
0000:25E8 DD 77 00
0000:25EB DD 77 03
0000:25EE 77
0000:25EF C3 BB 25
0000:25EF
0000:25EF
                                                                       xor
ld
ld
                                                                                      (ix+0), a
                                                                                       (ix+3), a
                                                                       ld
                                                                                      (hl).
                                         jp loc_
; End of function sub_0_2591
                                                                                      loc_0_25BB
 0000:25F2
0000:25F2
0000:25F2
0000:25F2
0000:25F2
0000:25F2 3E 02
0000:25F4 F7
0000:25F5 CD 02 26
                                                                     SUBROUTINE
                                         sub_0_25F2:
                                                                                                                                                                ; CODE XREF: 0000:19AA1p
                                                                       1d
                                                                                     a, 2
30h
                                                                       rst
call
                                                                                                                                                                 ; return if level bit not set
                                                                                     sub_0_2602
0000:25F8 CD 2F 26
0000:25FB CD 79 26
0000:25FE CD D3 2A
0000:2601 C9
                                                                                     sub_0_262F
sub_0_2679
sub_0_2AD3
                                                                       call
                                                                       call
                                                                       call
                                                                       ret
 0000:2601
0000:2601
0000:2602
                                         ; End of function sub_0_25F2
                                                             SUBROUTINE ....
 0000:2602
 0000:2602
 0000:2602
0000:2602
                                                                                                                                                                 ; CODE XREF: 0000:16D51p
                                         sub 0 2602:
0000:2602 35 ...
0000:2602 0000:2602 0000:2605 0F
0000:2606 DA 16 26
0000:2609 21 A0 62
                                                                                                                                                                ; sub_0_25F2+31p
                                                                       ld
rrca
                                                                                     a, (gen_purpose_timer)
                                                                                     c, loc_0_2616
hl, unk ^ ^ ^
                                                                       jp
ld
                                                                                     hl, unk_0_62A0 (hl)
nz, loc_0_2616
 0000:260C 35
0000:260D C2 16 26
                                                                       jp
ld
 0000:2610 36 80
0000:2612 2C
0000:2613 CD DE 26
0000:2616
                                                                                      (hl), 80h;
                                                                       call
                                                                                     sub_0_26DE
                                         loc_0_2616:
                                                                                                                                                                 ; CODE XREF: sub 0 2602+41 j
 0000:2616 21 A1 62
                                                                                                                                                                 ; sub_0_2602+B1 j
```

```
File: E:\Projects\pace\pacedev.net\sw\re\platform\dkong\dkong.lst 21/11/2013, 11:26:09 PM
                                                                                             hl, unk_0_62A1
                                                                             ld
0000:2619 CD E9 26
0000:2619 CD E9 26
0000:261C 32 A3 63
0000:261F 3A 1A 60
0000:2622 E6 1F
0000:2624 FE 01
0000:2626 CO
0000:2627 11 E4 69
0000:262A EB
                                                                                             sub_0_26E9
(unk_0_63A3), a
a, (gen_purpose_timer)
1Fh
                                                                             call
                                                                             ld
ld
and
                                                                             cp
ret
                                                                             ld
                                                                                             de, soft_sprite_ram+0E4h
                                                                             ex
                                                                                             de
                                                                                                     hl
                                                                                             sub_0_26A6
0000:262B CD A6 26
                                                                             call
0000:262E C9
0000:262E
0000:262E
                                             ret; End of function sub_0_2602
0000:262F
0000:262F
0000:262F
0000:262F
                                                                          SUBROUTINE
0000:262F
0000:262F
0000:262F 21 A3 62
0000:2632 3A 05 62
0000:2635 FE CO
0000:2637 DA 6F 26
0000:2638 3A 1A 60
0000:263B DF
                                             sub_0_262F:
                                                                                                                                                                               ; CODE XREF: sub_0_25F2+61p
                                                                             ld
ld
                                                                                             hl, unk_0_62A3
                                                                                             a, (mario_x_coord)
OCOh ; 'L'
                                                                             cp
jp
ld
                                                                                             c, loc_0_266F
a, (gen_purpose_timer)
                                                                             rrca
0000:263E DA 4C 26
                                                                             jp
dec
                                                                                             c, loc_0_264C
0000:263E DA 4C 26
0000:2641 2D
0000:2642 35
0000:2643 C2 4C 26
0000:2646 36 C0
0000:2648 2C
0000:2640 CD DE 26
0000:2640 CD DE 26
                                                                                             l
(hl)
                                                                                             nz, loc_0_264C
(hl), OCOh; 'L'
                                                                             jp
ld
                                                                             call
                                                                                             sub_0_26DE
0000:264C
0000:264C 21 A3 62
0000:264C
0000:264F CD E9 26
                                                                                                                                                                              ; CODE XREF: sub_0_262F+F<sup>†</sup> j ; sub_0_262F+14<sup>†</sup> j ...
                                            loc_0_264C:
                                                                                             hl, unk_0_62A3
sub_0_26E9
                                                                             ld
                                                                             call
0000:264F CD E9 26

0000:2652 32 A5 63

0000:2655 ED 44

0000:2657 32 A4 63

0000:265B E6 1F

0000:265D E6 1F

0000:265D CO

0000:2660 2D

0000:2660 ED 66

0000:2664 EB

0000:2665 CD A6 26

0000:2668 E6 7F

0000:2668 21 ED 69
                                                                             ld
neg
                                                                                             (unk_0_63A5), a
                                                                                             (unk_0_63A4), a
                                                                             ld
                                                                                             a, (gen_purpose_timer)

1Fh
                                                                             1d
                                                                             and
ret
                                                                             dec
ld
                                                                                             de, soft_sprite_ram+0ECh
                                                                                             de, hl
sub_0_26A6
                                                                             ex
call
                                                                             and
ld
                                                                                              7Fh
0000:266A 21 ED 69
0000:266D 77
                                                                                             hl, soft_sprite_ram+0EDh (hl), a
0000:266D 77
0000:266E C9
                                                                             ld
                                                                             ret
0000:266F
0000:266F
0000:266F
0000:266F CB 7E
0000:2671 C2 4C 26
0000:2674 36 FF
0000:2676 C3 4C 26
                                                                                                                                                                               ; CODE XREF: sub_0_262F+8<sup>†</sup>j
                                             loc_0_266F:
                                                                             bit
                                                                                             7, (hl)
                                                                                             nz, loc_0_264C
(h1), OFFh
loc_0_264C
                                                                             jp
ld
                                                                             jр
                                             ; End of function sub_0_262F
0000:2676
0000:2679
0000:2679
0000:2679
                                                                             SUBROUTINE
0000:2679
0000:2679
0000:2679 3A 1A 60
0000:2670 DF
0000:267D DA 8D 26
0000:2680 21 A5 62
0000:2683 35
                                             sub_0_2679:
                                                                                                                                                                               ; CODE XREF: sub_0_25F2+9\p
                                                                             ld
                                                                                             a, (gen_purpose_timer)
                                                                             rrca
                                                                             jp
ld
                                                                                              c, loc_0_268D
                                                                                             c, loc_0_268D
hl, unk_0_62A5
(hl)
nz, loc_0_268D
(hl), 0FFh
0000:2683 35
0000:2684 C2 8D 26
0000:2687 36 FF
0000:2689 2C
0000:268A CD DE 26
                                                                             dec
                                                                             jp
ld
                                                                                             sub_0_26DE
                                                                             call
0000:268D
0000:268D
0000:268D 21 A6 62
0000:268D
                                                                                                                                                                              ; CODE XREF: sub_0_2679+4<sup>†</sup> j ; sub_0_2679+B<sup>†</sup> j
                                             loc_0_268D:
                                                                                             hl. unk 0 62A6
                                                                             ld
0000:268D

0000:2690 CD E9 26

0000:2693 32 A6 63

0000:2696 3A 1A 60

0000:2699 E6 1F
                                                                             call
ld
ld
                                                                                             sub_0_26E9
(unk_0_63A6), a
                                                                                             a, (gen_purpose_timer)
1Fh
                                                                             and
0000:269B FE 02
0000:269D C0
0000:269E 11 F4 69
                                                                             cp
ret
ld
                                                                                             de, soft_sprite_ram+0F4h
0000:26A1 EB
                                                                             ex
                                                                                             de, hl
0000:26A1 CD A6 26
0000:26A5 C9
0000:26A5
0000:26A5
                                                                             call
ret
                                                                                             sub_0_26A6
                                             ; End of function sub 0 2679
0000:26A6
0000:26A6
0000:26A6
                                                               SUBROUTINE
0000:26A6
0000:26A6
0000:26A6
0000:26A6 2C
0000:26A6
                                                                                                                                                                               ; CODE XREF: sub_0_2602+29\uparrowp ; sub_0_262F+36\uparrowp ...
                                             sub_0_26A6:
0000:26A7 1A
0000:26A8 17
0000:26A9 DA C5 26
                                                                             ld
                                                                                             a, (de)
                                                                                             c, loc_0_26C5
                                                                             jp
ld
0000:26A9 DA C5 26

0000:26AC 7E

0000:26AD 3C

0000:26AE FE 53

0000:26B3 3E 50

0000:26B5

0000:26B5
                                                                                             a, (hl)
                                                                                             a
53h; 'S'
nz, loc_0_26B5
a, 50h; 'P'
                                                                             inc
```

ср jp ld

ld

ld

add ld ld

ср

jp ld

(hl), a a, l a, 4 l, a

a, (hl)

0CFh ; '¤' nz, loc_0_26C3 a, 0D2h; 'Ê'

loc_0_26B5:

0000:26B5 77

0000:26B6 7D

0000:26B7 C6 04 0000:26B9 6F 0000:26BA 7E

0000:26C1 3E D2 0000:26C3

0000:26BB 3D 0000:26BC FE CF 0000:26BE C2 C3 26

; CODE XREF: sub_0_26A6+A1j

```
0000:26C3
                                                                                                                                                                   ; CODE XREF: sub_0_26A6+18 j
                                          loc_0_26C3:
0000:26C3 77
0000:26C4 C9
0000:26C5
0000:26C5
0000:26C5 7E
0000:26C6 7E
0000:26C7 FE 4F
0000:26C9 C2 CE 26
0000:26C6 3E 52
0000:26CE
0000:26CE 0000:26CE
 0000:26C3 77
                                                                        ld
                                                                                       (hl), a
                                                                        ret
                                                                                                                                                                   ; CODE XREF: sub 0 26A6+311
                                          loc_0_26C5:
                                                                        ld
dec
                                                                                       a, (hl)
                                                                                       a
4Fh ; 'O'
                                                                        ср
                                                                                       nz, loc_0_26CE
a, 52h; 'R'
                                                                        jp
ld
                                          loc_0_26CE:
                                                                                                                                                                  ; CODE XREF: sub_0_26A6+23 j
0000:26CE

0000:26CE 77

0000:26CF 7D

0000:26D2 66 4

0000:26D2 67

0000:26D3 7E

0000:26D5 FE D3

0000:26D5 FC D3
                                                                                       (hl), a
a, l
a, 4
l, a
                                                                        1d
                                                                        ld
add
ld
                                                                        ld
inc
                                                                                       a, (hl)
                                                                                       0D3h ; 'Ë'
                                                                        ср
                                                                                       nz, loc_0_26DC
a, 0D0h; 'ŏ'
                                                                        jp
ld
 0000:26DA 3E D0
0000:26DC
0000:26DC
                                          loc 0 26DC:
                                                                                                                                                                  ; CODE XREF: sub 0 26A6+311j
 0000:26DC 77
                                                                        ld
                                                                                       (hl), a
 0000:26DD C9
0000:26DD
0000:26DD
0000:26DD
                                          ret; End of function sub_0_26A6
 0000:26DE
0000:26DE
0000:26DE
0000:26DE
                                                                        SUBROUTINE
0000:26DE
0000:26DE CB 7E
0000:26DE CB 7E
0000:26DE CA E6 26
0000:26EB C9
0000:26EB C9
0000:26EB 0000:26EB 0000:26EB 0000:26EB
                                                                                                                                                                   ; CODE XREF: sub_0_2602+11\uparrowp ; sub_0_262F+1A\uparrowp ...
                                          sub_0_26DE:
                                                                                       7, (hl)
                                                                                       z. loc 0 26E6
                                                                        jp
ld
                                                                                       (hl), 2
0000:26E6
0000:26E6
0000:26E8 C9
0000:26E8
0000:26E8
0000:26E9
                                          loc_0_26E6:
                                                                                                                                                                   ; CODE XREF: sub_0_26DE+2|j
                   36 FE
                                                                        ld
                                                                                       (hl), OFEh ; '■'
                                                                        ret
                                          ; End of function sub_0_26DE
 0000:26E9
                                          ; SUBROUTINE
 0000:26E9
0000:26E9
0000:26E9
0000:26E9 3A 1A 60
0000:26E9 E6 01
0000:26EE E8
0000:26EF CB 7E
0000:26EF CB 7E
0000:26EF 3E FF
0000:26F3 C2 F8 26
0000:26F3 GB 01
                                                                                                                                                                   ; CODE XREF: sub_0_2602+17<sup>p</sup>; sub_0_262F+20<sup>p</sup> ...
                                          sub_0_26E9:
                                                                                       a, (gen_purpose_timer)
1
                                                                        ld
and
ret
                                                                                       7, (hl)
                                                                                       a, 0FFh
nz, loc_0_26F8
a, 1
                                                                        ld
                                                                        jp
ld
0000:26F8
0000:26F8
0000:26F8
77
0000:26F9
0000:26F9
0000:26F9
                                          loc_0_26F8:
                                                                                                                                                                   ; CODE XREF: sub_0_26E9+A1j
                                                                        ld
                                                                                       (hl), a
                                                                        ret
                                          ; End of function sub 0 26E9
 0000:26FA
                                                                      SUBROUTINE 
 0000:26FA
 0000:26FA
0000:26FA
                                          sub_0_26FA:
                                                                                                                                                                   ; CODE XREF: 0000:19A71p
0000:26FA
0000:26FA 3E 04
0000:26FC F7
0000:26FD 3A 05 62
0000:2700 FF F0
0000:2702 D2 7F 27
0000:2705 3A 29 62
0000:2708 3D
0000:2709 3A 1A 60
                                                                        1d
                                                                                       a, 4
30h
                                                                        rst
ld
                                                                                                                                                                   ; return if level bit not set
                                                                                       a, (mario_x_coord)
OFOh ; '-'
                                                                        ср
                                                                        jp
ld
dec
                                                                                       nc, mario_dies_on_elevator
a, (level)
                                                                                                                                                                   ; make mario die
                                                                                       a, (gen_purpose_timer)
0000:2709 3A 1A 60
0000:270C C2 1A 27
0000:270F E6 03
0000:2711 FE 01
0000:2713 CA 1E 27
0000:2716 DA 22 27
0000:2719 C9
                                                                        jp
and
                                                                                       nz, loc_0_271A
                                                                        ср
                                                                        jp
jp
ret
                                                                                       z, loc_0_271E
c, loc_0_2722
 0000:271A
 0000:271A
0000:271A OF
0000:271B DA 22 27
0000:271E
                                          loc_0_271A:
                                                                                                                                                                    ; CODE XREF: sub_0_26FA+12<sup>†</sup>j
                                                                        rrca
                                                                                       c, loc_0_2722
                                                                        jр
 0000:271E
0000:271E CD 45 27
0000:2721 C9
                                          loc_0_271E:
                                                                                                                                                                   ; CODE XREF: sub_0_26FA+19<sup>†</sup> j
                                                                        call
                                                                                       sub_0_2745
                                                                        ret
 0000:2722
 0000:2722
0000:2722
0000:2722
0000:2722 CD 97 27
                                                                                                                                                                   ; CODE XREF: sub_0_26FA+1C<sup>†</sup> j ; sub_0_26FA+21<sup>†</sup> j
                                          loc_0_2722:
0000:2722 CD 97 27
0000:2722
0000:2725 CD DA 27
0000:2728 06 06
0000:272A 11 10 00
0000:272D 21 58 69
                                                                        call
call
ld
                                                                                       sub_0_2797
sub_0_27DA
b, 6
de, 10h
                                                                                                                                                                   ; six elevators
                                                                        ld
                                                                                       hl, soft_sprite_ram+58h ix, unk_0_6600
                                                                        1d
0000:272D 21 58 69
0000:2734
0000:2734
0000:2734 DD 7E 03
0000:2734 DD 7E 03
0000:2737 77
0000:2738 2C
                                                                        ld
                                                                                                                                                                   ; CODE XREF: sub 0 26FA+48 - i
                                          loc_0_2734:
                                                                        ld
ld
                                                                                       a, (ix+3)
(h1), a
                                                                                                                                                                    ; store coordinates
                                                                        inc
                                                                        inc
 0000:273A 2C
0000:273B DD 7E 05
                                                                        inc
                                                                                             (ix+5)
                                                                                       a, (in), a
 0000:273E 77
0000:273F 2C
0000:2740 DD 19
0000:2742 10 F0
                                                                        ld
                                                                        add
                                                                                       ix, de
loc_0_2734
                                                                        djnz
 0000:2744 C9
 0000:2744
                                          ; End of function sub_0_26FA
```

```
0000:2745
0000:2745
0000:2745
0000:2745
0000:2745
                                          ; SUBROUTINE
0000:2745
0000:2745 3A 98 63
0000:2748 A7
0000:2749 C8
                                          sub_0_2745:
                                                                                                                                                                     ; CODE XREF: sub 0 26FA+24 p
                                                                         ld
                                                                                        a, (mario_on_elevator)
                                                                         and
ret
                                                                                                                                                                     ; on elevator?
; no, return
0000:2749 C8
0000:274A 3A 16 62
0000:274D A7
0000:274E C0
0000:274F 3A 03 62
                                                                         1d
                                                                                        a, (mario jumping)
                                                                         and
ret
ld
                                                                                                                                                                     ; jumping?
; yes, return
                                                                                        nz
                                                                                         a, (mario_y_coord)
0000:2752 FE 2C
0000:2754 DA 66 27
0000:2757 FE 43
0000:2759 DA 6F 27
                                                                         cp
jp
                                                                                        2Ch
                                                                                              loc_0_2766
                                                                                                                                                                     ; not not elevator
                                                                                        c, loc_0_2766

43h; 'C'

c, loc_0_276F

6Ch; 'l'
                                                                         cp
jp
cp
                                                                                                                                                                     ; on left elevator
0000:275C FE 6C
0000:275E DA 66 27
0000:2761 FE 83
0000:2763 DA 87 27
                                                                                              loc_0_2766
                                                                                                                                                                     ; not on elevator
                                                                         ср
                                                                                         83n ; 'ä'
c, loc_0_2787
                                                                         jр
                                                                                                                                                                     ; on right elevator
0000:2766
0000:2766
0000:2766 AF
                                                                                                                                                                     ; CODE XREF: sub_0_2745+F^{\dagger}j; sub_0_2745+19^{\dagger}j; mark off elevator
                                          loc_0_2766:
0000:2766
                                                                         xor
0000:2766
0000:2767 32 98 63
0000:276A 3C
0000:276B 32 21 62
                                                                         ld
inc
                                                                                         (mario_on_elevator), a
                                                                                         (unk 0 6221), a
                                                                         1d
0000:276E C9
0000:276F
0000:276F
                                          loc_0_276F:
                                                                                                                                                                     ; CODE XREF: sub_0_2745+14 j
                                                                                        a, (mario_x_coord)
71h ; 'q'
0000:276F
0000:276F
0000:276F 3A 05 62
0000:2772 FE 71
0000:2774 DA 7F 27
0000:2777 3D
0000:2778 32 05 62
0000:277B 32 4F 69
                                                                         1d
                                                                         ср
                                                                                         c, mario_dies_on_elevator
                                                                                                                                                                      ; make mario die
                                                                         jp
dec
                                                                                                                                                                      ; on upwards moving elevator
                                                                         1d
                                                                                          (mario x coord), a
                                                                                         (soft_sprite_ram+4Fh), a
                                                                         ret
0000:277F
0000:277F
0000:277F
0000:277F AF
0000:277F AF
0000:277F
0000:2780 32 00 62
0000:2783 32 98 63
                                          mario_dies_on_elevator:
                                                                                                                                                                     ; CODE XREF: sub_0_26FA+8<sup>†</sup>j; sub_0_2745+2F<sup>†</sup>j ...
                                                                         ld
ld
                                                                                        (mario_alive_flag), a
(mario_on_elevator), a
                                                                         ret
0000:2787
0000:2787
0000:2787
0000:2787
0000:2787 3A 05 62
                                           loc_0_2787:
                                                                                                                                                                     ; CODE XREF: sub_0_2745+1E<sup>†</sup>j
                                                                         ld
                                                                                         a, (mario_x_coord)
0000:2787 3A 05 62
0000:278A FE E8
0000:278C D2 7F 27
0000:278F 3C
0000:2790 32 05 62
0000:2793 32 4F 69
                                                                                         0E8h ;
                                                                         cp
jp
                                                                                        nc, mario_dies_on_elevator
                                                                                                                                                                     ; on downwards moving elevator
                                                                                         (mario_x_coord), a
(soft_sprite_ram+4Fh), a
                                                                         1d
0000:2790 32
0000:2793 32
0000:2796 C9
0000:2796
                                                                         ld
                                                                         ret
                                           ; End of function sub_0_2745
0000:2796
0000:2797
0000:2797
0000:2797
                                                                        SUBROUTINE
0000:2797
0000:2797
0000:2797 06 06
0000:2799 11 10 00
0000:279C DD 21 00 66
0000:27A0
0000:27A0 DD GR 00 46
                                                                                                                                                                         CODE XREF: sub_0_26FA+28↑p move elevators to the right side
                                          sub_0_2797:
                                                                                        b, 6
de, 10h
ix, unk_0_6600
                                                                         ld
                                                                         ld
                                          loc_0_27A0:
                                                                                                                                                                     ; CODE XREF: sub_0_2797+2D|j
0000:27A0 DD CB 00 46
0000:27A4 CA C2 27
0000:27A7 DD CB 0D 5E
0000:27AB CA C7 27
                                                                         bit
                                                                                        0, (ix+0)
                                                                                        z, loc_0_27C2
3, (ix+0Dh)
z, loc_0_27C7
                                                                         jp
ld
dec
0000:27AE DD 7E 05
0000:27B1 3D
0000:27B2 DD 77 05
0000:27B5 FE 60
                                                                                         a, (ix+5)
                                                                                         (ix+5), a
0000:27B5 FE 60
0000:27B7 C2 C2 27
0000:27BA DD 36 03 77
0000:27BE DD 36 0D 04
0000:27C2
0000:27C2
0000:27C2 DD 19
0000:27C2
0000:27C2 DD 0000:27C2
                                                                         cp
jp
ld
ld
                                                                                         60h ;
                                                                                        nz, loc_0_27C2
(ix+3), 77h;
(ix+0Dh), 4
                                                                                                                                                                     ; CODE XREF: sub_0_2797+D<sup>†</sup> j ; sub_0_2797+20<sup>†</sup> j ...
                                          loc_0_27C2:
                                                                         add
                                                                                        ix, de
loc_0_27A0
0000:27C4 10 DA
                                                                         dinz
0000:27C4 10
0000:27C6 C9
0000:27C7
0000:27C7
0000:27C7
                                          loc_0_27C7:
                                                                                                                                                                     ; CODE XREF: sub 0 2797+141 j
0000:27C7 DD 7E 05
0000:27CA 3C
0000:27CB DD 77 05
                                                                         ld
                                                                                        a, (ix+5)
                                                                         inc
ld
                                                                                        a
(ix+5), a
0000:27CE FE F8
0000:27D0 C2 C2 27
0000:27D3 DD 36 00 00
0000:27D7 C3 C2 27
                                                                         cp
jp
ld
                                                                                        0F8h ; ''
nz, loc_0_27C2
                                                                                         (ix+0), 0
loc_0_27C2
                                          jp loc_
; End of function sub_0_2797
0000:27D7
0000:27D7
0000:27DA
                                                                    SUBROUTINE
0000:27DA
0000:27DA
0000:27DA
0000:27DA
                                                                                                                                                                     ; CODE XREF: sub_0_26FA+2B<sup>†</sup>p ; move elevators to the left side
                                          sub 0 27DA:
0000:27DA

0000:27DA 21 A7 62

0000:27DD 7E

0000:27DE A7

0000:27DF C2 06 28

0000:27E2 06 06
                                                                                        a, (hl)
                                                                         ld
                                                                                        hl, unk_0_62A7
                                                                         ld
and
                                                                                        nz, loc_0_2806
                                                                         jp
ld
0000:27E2 00 06
0000:27E4 DD 21 00 66
0000:27E8
                                                                                         ix, unk_0_6600
                                          loc_0_27E8:
                                                                                                                                                                    ; CODE XREF: sub 0 27DA+17-j
 0000:27E8
0000:27E8 DD CB 00 46
0000:27EC CA F4 27
0000:27EF DD 19
0000:27F1 10 F5
0000:27F3 C9
                                                                                        0, (ix+0)
z, loc_0_27F4
ix, de
loc_0_27E8
                                                                         bit
                                                                         jp
add
                                                                         dinz
```

```
0000:27F4
0000:27F4
0000:27F4
                                         loc_0_27F4:
                                                                                                                                                                  ; CODE XREF: sub_0_27DA+12 j
0000:27F4 DD 36 00 01
0000:27F8 DD 36 03 37
0000:27FC DD 36 05 F8
0000:2800 DD 36 0D 08
0000:2804 36 34
0000:2806
                                                                                       (ix+0), 1
(ix+3), 37h; '7'
(ix+5), 0F8h; '°'
(ix+0Dh), 8
                                                                        ld
ld
                                                                        ld
                                                                        14
                                                                                       (ix+0Dh), 8
(h1), 34h; '4'
                                         loc_0_2806:
0000:2806
                                                                                                                                                                  ; CODE XREF: sub 0 27DA+511
0000:2806 35
0000:2807 C9
0000:2807
                                                                        dec
                                                                                       (hl)
                                                                        ret
                                          ; End of function sub_0_27DA
0000:2807
0000:2808
0000:2808
0000:2808
                                                                      SUBROUTINE ...
0000:2808

0000:2808

0000:2808 FD 21 00 62

0000:280C 3A 05 62

0000:280T 4F

0000:2810 21 07 04

0000:2813 CD 6F 28

0000:2816 A7

0000:2817 C8

0000:2819 32 00 62

0000:2810 C9

0000:281C C9

0000:281C 0000:281D
0000:2808
                                                                                                                                                                   ; CODE XREF: 0000:19B3↑p
                                          sub_0_2808:
                                                                                      iy, mario_alive_flag
a, (mario_x_coord)
c, a
hl, 407h
                                                                        ld
                                                                        ld
                                                                        ld
                                                                        ld
                                                                        call
                                                                                       sub 0 286F
                                                                        and
                                                                        ret
dec
                                                                                                                                                                   ; die
                                                                                       (mario_alive_flag), a
                                                                        ret
                                          ; End of function sub_0_2808
0000:281D
                                                                      SUBROUTINE
0000:281D
0000:281D
0000:281D
0000:281D
                                                                                                                                                                   ; CODE XREF: 0000:19B61p
                                         sub 0 281D:
0000:281D
0000:281D 06 02
0000:281F 11 10 00
0000:2822 FD 21 80 66
                                                                                       b, 2
de, 10h
iy, unk_0_6680
                                                                        1d
                                                                        ld
ld
                                                                                                                                                                   ; hammer character data
0000:2822 FD 21 80 66

0000:2826

0000:2826 FD CB 01 46

0000:282A C2 32 28

0000:282D FD 19

0000:282F 10 F5

0000:2831 C9

0000:2832 0000:2832
                                         loc_0_2826:
                                                                                                                                                                   ; CODE XREF: sub_0_281D+12|j
                                                                        bit
                                                                                      0, (iy+1)
nz, loc_0_2832
iy, de
                                                                        jp
add
                                                                        djnz
                                                                                       loc_0_2826
0000:2832
0000:2832
0000:2832 FD 4E 05
0000:2832 FD 6E 09
0000:2838 FD 6E 0A
0000:2838 CD 6F 28
                                         loc_0_2832:
                                                                                                                                                                   ; CODE XREF: sub_0_281D+D<sup>†</sup>j
                                                                                      c, (iy+5)
h, (iy+9)
1, (iy+0Ah)
sub_0_286F
                                                                        ld
                                                                        ld
                                                                        ld
call
                                                                        and
0000:283F C8
0000:2840 32 50 63
0000:2843 3A B9 63
0000:2846 90
                                                                        ret
ld
ld
                                                                                       (unk_0_6350), a
a, (unk_0_63B9)
b
                                                                        sub
0000:2847 32 54 63
0000:284A 7B
0000:284B 32 53 63
0000:284E DD 22 51 63
                                                                        ld
ld
ld
                                                                                       (unk_0_6354), a
                                                                                        a, e
(unk_0_6353),
                                                                                       (unk 0 6351), ix
                                                                        ld
0000:284E DD
0000:2852 C9
0000:2852
0000:2853
0000:2853
0000:2853
0000:2853
                                                                        ret
                                          ; End of function sub_0_281D
                                                                      SUBROUTINE
                                         sub_0_2853:
0000:2853
                                                                                                                                                                   ; CODE XREF: sub 0 1AC3+15D p
0000:2853 FD 21 00 62
0000:2857 3A 05 62
0000:285A
                                                                                      iy, mario_alive_flag
a, (mario_x_coord)
                                                                        ld
0000:285A
0000:285A C6 OC
0000:285C 4F
0000:285D 3A 10 60
                                          loc 0 285A:
                                                                                       a, 0Ch
                                                                        add
                                                                        ld
ld
                                                                                       c, a
a, (controller_in)
0000:2860 E6 03
0000:2862 21 08 05
0000:2865 CA 6B 28
0000:2868 21 08 13
                                                                        and
ld
                                                                                                                                                                  ; left/right only
                                                                                      hl, 508h
z, loc_0_286B
hl, 1308h
                                                                                                                                                                  ; not left/right
                                                                        jp
ld
0000:286B
0000:286B
0000:286B CD 88 3E
                                          loc_0_286B:
                                                                                                                                                                   ; CODE XREF: sub_0_2853+12<sup>†</sup> j
                                                                        call
                                                                                      sub 0 3E88
0000:286E C9
                                                                        ret
0000:286E
0000:286E
                                          ; End of function sub_0_2853
0000:286F
0000:286F
                                                                      SUBROUTINE
0000:286F
0000:286F
0000:286F
                                          sub_0_286F:
                                                                                                                                                                   ; CODE XREF: sub_0_2808+B1p
0000:286F
0000:286F
0000:286F
0000:2872 E5
0000:2873 EF
0000:2873 0000:2874
0000:2876 80 28
0000:2878 B0 28
                                                                                                                                                                   ; sub_0_281D+1E1p
                                                                        14
                                                                                            (level_type)
                                                                        push
                                                                                       28h
                                                                                                                                                                   ; go!
                                                                        rst
                                                                        .dw 0 .dw 11_check_hammer_hit
                                                                                                                                                                   ; Jump table
                                                                        .dw 12_check_hammer_hit
.dw 13_check_hammer_hit
.dw 14_check_hammer_hit
0000:287A E0 28
0000:287C 01 29
0000:287E 00 00
                                                                         .dw
0000:2880
0000:2880
0000:2880
0000:2880 E1
0000:2881 06 0A
0000:2883 78
0000:2884 32 B9 63
0000:2884 32 B9 63
0000:288A DD 21 00 67
0000:288E CD 13 29
0000:2893 78
                                                                                                                                                                   ; DATA XREF: sub_0_286F+7↑o
                                          11_check_hammer_hit:
                                                                       pop
ld
                                                                                       hl
                                                                                      b, 0Ah

a, b

(unk_0_63B9), a
                                                                        ld
ld
                                                                        ld
                                                                                       de, 20h; ''
ix. unk 0 6700
                                                                        ld
                                                                        call
ld
                                                                                       sub_0_2913
                                                                                       b,
0000:2893 78
                                                                        1d
                                                                                       a, b
(unk_0_63B9), a
0000:2894 32 B9 63
```

```
e, 20h;
ix, unk
0000:2897 1E 20
0000:2899 DD 21 00 64
0000:2890 CD 13 29
0000:28A0 06 01
0000:28A2 78
0000:28A3 32 B9 63
0000:28A6 1E 00
0000:28A6 DD 21 A0 66
0000:28AC CD 13 29
0000:28AF C9
                                                                                                         unk 0 6400
                                                                                 ld
                                                                                                 sub_0_2913
b, 1
a, b
                                                                                                                                                                                     ; fireball character data
                                                                                 call
ld
ld
                                                                                                  (unk_0_63B9), a
                                                                                 ld
                                                                                 ld
                                                                                                 e, 0
ix, unk_0_66A0
sub_0_2913
                                                                                call
                                                                                ret
0000:28AF
0000:28AF
0000:28B0
                                               ; End of function sub_0_286F
0000:28B0
0000:28B0
0000:28B0 E1
0000:28B0
                                                                                                                                                                                      ; DATA XREF: sub_0_286F+9<sup>†</sup>o; sub_0_3E88+9<sup>†</sup>o
                                              12_check_hammer_hit:
                                                                                                 hl
0000:28B0
0000:28B1 06 05
0000:28B3 78
0000:28B4 32 B9 63
0000:28B7 11 20 00
0000:28BA DD 21 00 64
0000:28BE CD 13 29
0000:28C1 06 06
0000:28C3 78
                                                                                                 b, 5
a, b
(unk_0_63B9), a
                                                                                 ld
ld
                                                                                                 de, 20h; ix, unk_0_6400
                                                                                 ld
                                                                                ld
call
                                                                                                                                                                                      ; fireball character data
                                                                                                  sub_0_2913
                                                                                 ld
                                                                                                 b, 6
a, b
                                                                                 ld
0000:28C3 78
0000:28C4 32 B9 63
0000:28C7 1E 10
0000:28C9 DD 21 A0 65
0000:28CD CD 13 29
0000:28D0 06 01
0000:28D2 78
0000:28D3 32 B9 63
                                                                                ld
ld
                                                                                                  (unk_0_63B9), a
                                                                                                 e, 10h
ix, unk_0_65A0
                                                                                 ld
                                                                                 call
ld
ld
ld
                                                                                                  sub_0_2913
                                                                                                 a, b
(unk_0_63B9), a
0000:28D6 1E 00
0000:28D8 DD 21 A0 66
0000:28DC CD 13 29
0000:28DF C9
                                                                                                 e, 0
ix, unk_0_66A0
sub_0_2913
                                                                                 ld
                                                                                 ld
                                                                                call
                                                                                 ret
0000:28E0
0000:28E0
0000:28E0
                                             13_check_hammer_hit:
                                                                                                                                                                                       ; DATA XREF: sub_0_286F+B<sup>†</sup>o; sub_0_3E88+B<sup>†</sup>o
0000:28E0 E1
0000:28E0
0000:28E0
0000:28E1 06 05
0000:28E3 78
                                                                                                 hl
                                                                                                 b, 5
0000:28E1 06 05
0000:28E3 78
0000:28E4 32 B9 63
0000:28E7 11 20 00
0000:28EE DD 21 00 64
0000:28EE CD 13 29
0000:28E1 06 0A
0000:28F3 78
0000:28F4 32 B9 63
0000:28F7 1E 10
0000:28F9 DD 21 00 65
0000:28PD CD 13 29
0000:2900 C9
                                                                                                 a, b
(unk_0_63B9), a
                                                                                 ld
                                                                                 ld
                                                                                                 de, 20h; ix, unk_0_6400
                                                                                 ld
ld
                                                                                                                                                                                      ; fireball character data
                                                                                call
ld
ld
ld
                                                                                                 sub_0_2913
b, 0Ah
a, b
(unk_0_63B9), a
                                                                                                 e, 10h
ix, unk_0_6500
                                                                                 ld
                                                                                 ld
                                                                                                                                                                                      ; check if hammer hits a spring
                                                                                 call
                                                                                                 sub_0_2913
                                                                                 ret
0000:2901
0000:2901
0000:2901
0000:2901 E1
                                                                                                                                                                                       ; DATA XREF: sub_0_286F+D<sup>†</sup>o; sub_0_3E88+D<sup>†</sup>o
                                               14_check_hammer_hit:
0000:2901 E1
0000:2902 06 07
0000:2902 08 07
0000:2905 32 B9 63
0000:2908 11 20 00
0000:290B DD 21 00 64
0000:290F CD 13 29
0000:2912 C9
0000:2913
0000:2913
0000:2913
                                                                                                 hl
b, 7
a, b
                                                                                                  (unk_0_63B9), a
                                                                                 ld
                                                                                                 de, 20h; ix, unk_0_6400 sub_0_2913
                                                                                 ld
                                                                                ld
call
                                                                                                                                                                                      ; fireball character data
                                                                                ret
                                                                                 SUBROUTINE
0000:2913
0000:2913
0000:2913 DD E5
0000:2913
                                                                                                                                                                                       ; CODE XREF: sub_0_286F+1F^p; sub_0_286F+2E^p ...
                                              sub_0_2913:
                                                                                push
                                                                                                 ix
0000:2915
0000:2915
0000:2915 DD CB 00 46
0000:2919 CA 4C 29
                                                                                                                                                                                      ; CODE XREF: sub_0_2913+3B|j; check if hammer hits something else
                                              loc_0_2915:
                                                                                                        (ix+0)
                                                                                                 z, loc_0_294C
                                                                                 jp
ld
0000:291C 79
0000:291D DD 96 05
0000:2920 D2 25 29
0000:2923 ED 44
                                                                                 sub
                                                                                                 nc, loc_0_2925
                                                                                 jр
                                                                                 neg
0000:2925
0000:2925
0000:2925 3C
                                               loc_0_2925:
                                                                                                                                                                                      ; CODE XREF: sub_0_2913+D<sup>†</sup>j
                                                                                                 a
1
0000:2926 95
0000:2927 DA 30 29
0000:292A DD 96 0A
0000:292D D2 4C 29
0000:2930
                                                                                 sub
                                                                                                 c, loc_0_2930
(ix+0Ah)
                                                                                                 nc, loc_0_294C
                                                                                 jр
0000:2930
0000:2930 FD 7E 03
0000:2930 FD 7E 03
0000:2933 DD 96 03
0000:2936 D2 3B 29
0000:293B ED 44
0000:293B
                                               loc_0_2930:
                                                                                                                                                                                      ; CODE XREF: sub_0_2913+14 j
                                                                                                a, (iy+3)
(ix+3)
                                                                                 ld
                                                                                 sub
                                                                                                 nc, loc_0_293B
                                                                                jp
neg
                                                                                                                                                                                      ; CODE XREF: sub_0_2913+23 j
                                               loc 0 293B:
0000:293B 94
0000:293C DA 45 29
0000:293F DD 96 09
0000:2942 D2 4C 29
                                                                                 sub
                                                                                                 n

c, loc_0_2945

(ix+9)

nc, loc_0_294C
                                                                                  jр
                                                                                 sub
                                                                                 jр
0000:2942 D2 4C
0000:2945
0000:2945 3E 01
0000:2947 DD E1
0000:2949 33
0000:2944 33
                                               loc_0_2945:
                                                                                                                                                                                      ; CODE XREF: sub_0_2913+29 j
                                                                                 ld
                                                                                                 a, 1
ix
                                                                                pop
inc
inc
                                                                                                 sp
sp
0000:294B C9
                                                                                 ret
0000:294C
0000:294C
0000:294C
                                                                                                                                                                                     ; CODE XREF: sub_0_2913+6<sup>†</sup> j ; sub_0_2913+1A<sup>†</sup> j ...
                                               loc_0_294C:
0000:294C DD 19
0000:294C
0000:294E 10 C5
0000:2950 AF
                                                                                 add
                                                                                                 ix, de loc_0_2915
                                                                                 djnz
                                                                                 xor
0000:2951 DD E1
                                                                                                 ix
                                                                                 pop
ret
0000:2953 C9
```

```
0000:2953
                                       ; End of function sub_0_2913
0000:2953
0000:2953
0000:2954
0000:2954
0000:2954
0000:2954
0000:2954 3E 0B
0000:2956 F7
0000:2957 CD 74
                                                                   SUBROUTINE
                                       sub_0_2954:
                                                                                                                                                            ; CODE XREF: sub_0_1AC3+171 p
                                                                                   a, 0Bh
30h
                                                                                                                                                           ; return if level bit not set
                                                                     rst
0000:2956 F7
0000:2957 CD 74 29
0000:295A 32 18 62
0000:295D 0F
0000:295E 0F
                                                                                   sub 0 2974
                                                                     call
ld
                                                                                    (unk_0_6218), a
                                                                     rrca
                                                                     rrca
0000:295F 32 85 60
0000:2962 78
0000:2963 A7
0000:2964 C8
                                                                     ld
ld
                                                                                    (digital_snd_tmr_barrel_jump_priz), a
                                                                                   a, b
a
z
                                                                     and
                                                                     ret
0000:2965 FE 01
0000:2967 CA 6F 29
0000:296A DD 36 01 01
0000:296E C9
                                                                     cp
jp
ld
                                                                                       loc_0_296F
                                                                                   (ix+1), 1
                                                                     ret
0000:296F
0000:296F
0000:296F
                                       loc 0 296F:
                                                                                                                                                            ; CODE XREF: sub 0 2954+131 j
0000:296F DD 36 11 01
                                                                     ld
                                                                                   (ix+11h), 1
0000:2973 C9
0000:2973
0000:2973
0000:2974
                                        ret; End of function sub_0_2954
0000:2974
0000:2974
0000:2974
0000:2974
                                                                    SUBROUTINE
0000:2974
                                        sub_0_2974:
                                                                                                                                                            ; CODE XREF: sub 0 2954+31p
0000:2974 FD 21 00 62
0000:2978 3A 05 62
0000:297B 4F
                                                                                  iy, mario_alive_flag
a, (mario_x_coord)
                                                                     14
                                                                     ld
                                                                     ld
0000:297B 4F
0000:297C 21 08 04
0000:297F 06 02
0000:2981 11 10 00
                                                                     ld
ld
ld
                                                                                   hl, 408h
b, 2
de, 10h
0000:2981 11 10 00
0000:2984 DD 21 80 66
0000:2988 CD 13 29
0000:298B C9
0000:298B
                                                                                   ix. unk 0 6680
                                                                     ld
                                                                                                                                                            ; hammer character data
                                                                     call
ret
                                                                                   sub_0_2913
                                        ; End of function sub_0_2974
0000:298C
0000:298C
                                                                  SUBROUTINE
0000:2980
0000:2980
0000:298C
0000:298C 2A C8 63
0000:298F 7D
0000:2990 C6 0E
0000:2992 6F
0000:2993 56
                                        sub_0_298C:
                                                                                                                                                            ; CODE XREF: sub_0_3202+3C|p
                                                                                  hl, (unk_0_63C8)
a, 1
a, 0Eh
1, a
d, (h1)
                                                                     ld
                                                                     ld
                                                                     add
                                                                     ld
ld
0000:2994 2C
0000:2995 7E
                                                                     inc
ld
                                                                                   1
0000:2994 2C
0000:2995 7E
0000:2996 C6 0C
0000:2998 5F
                                                                                   a, (hl)
                                                                     add
ld
                                                                                   a, OCh
                                                                                   e, a
0000:2999 EB
0000:299A CD F0 2F
0000:299D 7E
0000:299E FE B0
                                                                     ex
call
ld
                                                                                   de
                                                                                         . h1
                                                                                   sub_0_2FF0
a, (h1)
0B0h; '"
                                                                     cp
jp
and
cp
0000:299E FE BU
0000:29AO DA AC 29
0000:29A3 E6 OF
0000:29A5 FE 08
0000:29A7 D2 AC 29
0000:29AA AF
                                                                                   c, loc_0_29AC
                                                                                   nc, loc 0 29AC
                                                                     jp
0000:29AB C9
0000:29AC
0000:29AC
0000:29AC
0000:29AC 3E 01
0000:29AC
                                                                                                                                                            ; CODE XREF: sub_0_298C+14<sup>†</sup> j
; sub_0_298C+1B<sup>†</sup> j
                                       loc_0_29AC:
                                                                     ld
                                                                                  a, 1
0000:29AE C9
0000:29AE
0000:29AE
0000:29AF
                                       ret; End of function sub_0_298C
0000:29AF
0000:29AF
0000:29AF
                                                                  SUBROUTINE
0000:29AF
                                                                                                                                                           ; CODE XREF: sub 0 2B1C+7-p
                                       sub 0 29AF:
0000:29AF 3E 04
0000:29B1 F7
0000:29B2 FD 21 00 62
                                                                     ld
                                                                                   a, 4
30h
                                                                     rst
ld
                                                                                                                                                            ; return if level bit not set
                                                                                   iy, mario_alive_flag
a, (mario_x_coord)
0000:29B2 FD 21 00
0000:29B9 3A 05 62
0000:29B9 4F
0000:29BD CD 22 2A
0000:29C0 A7
0000:29C1 CA 20 2A
0000:29C4 3E 06
0000:29C6 90
                                                                     ld
                                                                     ld
ld
                                                                     call and
                                                                                   sub_0_2A22
                                                                     jp
ld
                                                                                   z, loc_0_2A20
                                                                                   a, 6
b
                                                                     sub
0000:2907
0000:29C7
0000:29C7 CA DO 29
0000:29CA DD 19
                                        loc_0_29C7:
                                                                                                                                                           ; CODE XREF: sub_0_29AF+1E|j
                                                                                   z, loc_0_29D0
ix, de
                                                                     jр
                                                                     add
0000:29CC 3D
0000:29CD C3 C7 29
0000:29D0
0000:29D0
                                                                     dec
                                                                     jp
                                                                                    loc_0_29C7
0000:29D0
                                        loc_0_29D0:
                                                                                                                                                           ; CODE XREF: sub_0_29AF+18 j
0000:29D0 DD 7E 05
0000:29D3 D6 04
0000:29D5 57
0000:29D6 3A 0C 62
0000:29D6 06 05
                                                                                   a, (ix+5)
                                                                     sub
                                                                     ld
                                                                                   d, a
                                                                     ld
add
                                                                                         (mario_y_before_jump)
                                                                                   a, 5
d
0000:29D9 C6 05

0000:29DB BA

0000:29DC D2 EE 29

0000:29E7 TA

0000:29E2 D6 08

0000:29E2 32 05 62

0000:29E5 3E 01

0000:29E8 32 98 63

0000:29E8 32 98 63
                                                                     cp
jp
ld
sub
                                                                                                                                                            ; check if on or below elevator
                                                                                   nc. loc 0 29EE
                                                                     ld
ld
ld
                                                                                    (mario_x_coord), a
                                                                                                                                                            ; flag on elevator
                                                                     ld
                                                                                    (mario_on_elevator), a
0000:29EB 33
0000:29EC 33
                                                                                   sp
sp
                                                                     inc
```

```
0000:29ED C9
                                                                              ret
0000:29EE
0000:29EE
0000:29EE
0000:29EE 3A 0C 62
0000:29F1 D6 0E
0000:29F3 BA
0000:29F4 D2 1B 2A
0000:29F7 3A 10 62
0000:29FA A7
                                                                                                                                                                                 ; CODE XREF: sub_0_29AF+2Df;
; collide with side of elevator
                                             loc_0_29EE:
                                                                                              a, (mario_y_before_jump)
0Eh
                                                                              sub
                                                                              cp
jp
ld
                                                                                              nc, loc_0_2A1B
a, (unk_0_6210)
                                                                              and
ld
0000:29FA A7
0000:29FB 3A 03 62
0000:29FE CA 08 2A
0000:2A01 F6 07
                                                                                              a, (mario_y_coord)
z, loc_0_2A08
                                                                              jр
                                                                              or
0000:2A03 D6 04
0000:2A05 C3 0E 2A
0000:2A08
0000:2A08
                                                                              sub
                                                                                              loc_0_2A0E
0000:2A08
                                             loc_0_2A08:
                                                                                                                                                                               ; CODE XREF: sub_0_29AF+4Ffj
0000:2A08
0000:2A08 D6 08
0000:2A0A F6 07
0000:2A0C C6 04
                                                                              sub
0000:2A0C C6 04

0000:2A0E 0000:2A0E 0000:2A0E 32 03 62

0000:2A11 32 4C 69

0000:2A14 3E 01

0000:2A14 3E 01

0000:2A18 33

0000:2A19 33

0000:2A18 09

0000:2A1B 09

0000:2A1B 0000:2A1B
                                                                              add
                                                                                              a. 4
                                              loc_0_2A0E:
                                                                                                                                                                                 ; CODE XREF: sub_0_29AF+56 j
                                                                                              (mario_y_coord), a (soft_sprite_ram+4Ch), a
                                                                              ld
                                                                              ld
                                                                              ld
ld
                                                                              inc
                                                                                              sp
0000:2A1B
0000:2A1B AF
0000:2A1C 32 00 62
0000:2A1F C9
                                                                                                                                                                                 ; CODE XREF: sub 0 29AF+451j
                                             loc_0_2A1B:
                                                                              ld
                                                                                              (mario_alive_flag), a
                                                                              ret
0000:2A11
0000:2A20
0000:2A20
0000:2A20
                                             loc_0_2A20:
                                                                                                                                                                                ; CODE XREF: sub_0_29AF+12 j
0000:2A20
0000:2A20 47
0000:2A21 C9
0000:2A21
0000:2A21
0000:2A22
0000:2A22
0000:2A22
                                                                              ld
                                                                                              b. a
                                             ret; End of function sub_0_29AF
                                                      SUBROUTINE
0000:2A22
0000:2A22

0000:2A22

0000:2A22 06 06

0000:2A24 11 10 00

0000:2A27 DD 21 00 66

0000:2A2B CD 13 29

0000:2A2E C9

0000:2A2E
                                             sub 0 2A22:
                                                                                                                                                                                 ; CODE XREF: sub 0 29AF+Eîp
                                                                                              b, 6
de, 10h
ix, unk_0_6600
                                                                              ld
ld
                                                                              ld
                                                                              call
                                                                                               sub_0_2913
                                             ret
; End of function sub_0_2A22
0000:2A2E
0000:2A2F
0000:2A2F
0000:2A2F
                                                                            SUBROUTINE
0000:2A2F
0000:2A2F
0000:2A2F DD 7E 03
0000:2A2F
                                                                                                                                                                                 ; CODE XREF: sub_0_1F72+E5^p; sub_0_1F72+188^p
                                              sub_0_2A2F:
0000:2A2F
0000:2A32 67
0000:2A33 DD 7E 05
0000:2A36 C6 04
0000:2A38 6F
0000:2A39 E5
0000:2A3D D1
0000:2A3D D1
                                                                                              a, (ix+3)
                                                                                             a, (ix+3)
h, a
a, (ix+5)
a, 4
l, a
hl
                                                                              ld
                                                                              ld
add
                                                                              ld
                                                                              push
call
                                                                                              sub_0_2FF0
de
a, (h1)
0B0h; '"
                                                                              pop
ld
0000:2A3E 7E
0000:2A3F FE B0
0000:2A41 DA 7B 2A
0000:2A44 E6 0F
                                                                              cp
jp
and
                                                                                              c, loc_0_2A7B
OFh
0000:2A46 FE 08
0000:2A48 D2 7B 2A
0000:2A4B 7E
0000:2A4C FE C0
                                                                              cp
jp
ld
                                                                                              nc, loc_0_2A7B
a, (h1)
0C0h; 'L'
                                                                              cp
jp
cp
jp
cp
0000:2A4C FE C0
0000:2A4E CA 7B 2A
0000:2A51 DA 69 2A
0000:2A54 FE D0
0000:2A56 DA 6E 2A
0000:2A59 FE E0
0000:2A5B DA 63 2A
0000:2A5E FE FO
                                                                                              z, loc_0_2A7B
c, loc_0_2A69
                                                                                              0D0h ;
                                                                                              c, loc_0_2A6E
0E0h ; 'Ó'
                                                                                              c, loc_0_2A63
0F0h; '-'
                                                                              cp
jp
0000:2A50 DA 6E 2A
                                                                                              c, loc_0_2A6E
0000:2A63
0000:2A63
0000:2A63 E6 OF
0000:2A65 3D
                                                                                                                                                                                 ; CODE XREF: sub_0_2A2F+2C<sup>†</sup>j
                                              loc_0_2A63:
                                                                                              0Fh
                                                                              and
dec
0000:2A66 C3 72 2A
0000:2A69
0000:2A69
                                                                              jp
                                                                                              loc_0_2A72
                                                                                                                                                                                 ; CODE XREF: sub_0_2A2F+22|j
0000:2A69
                                             loc_0_2A69:
 0000:2A69 3E FF
                                                                              ld
                                                                                                   0FFh
0000:2A6B C3 72 2A
0000:2A6E
                                                                                               loc_0_2A72
                                                                              jр
0000:2A6E
0000:2A6E
0000:2A6E
0000:2A6E E6 OF
0000:2A70 D6 O9
0000:2A72
0000:2A72
0000:2A72 4F
                                                                                                                                                                                 ; CODE XREF: sub_0_2A2F+27\uparrow j; sub_0_2A2F+31\uparrow j
                                             loc_0_2A6E:
                                                                              and
                                                                                              0Fh
                                                                              sub
                                                                                                                                                                                 ; CODE XREF: sub_0_2A2F+37<sup>†</sup>j
; sub_0_2A2F+3C<sup>†</sup>j
                                             loc_0_2A72:
0000:2A72 4F
0000:2A72
0000:2A73 7B
0000:2A74 E6 F8
                                                                                              c, a
a, e
0F8h ; '°'
                                                                              ld
ld
0000:2A74 E0 F0
0000:2A76 81
0000:2A77 BB
0000:2A78 DA 7D 2A
0000:2A7B
                                                                              add
                                                                              ср
                                                                                               c, loc_0_2A7D
                                                                              jр
                                                                                                                                                                                 ; CODE XREF: sub_0_2A2F+12\uparrow j; sub_0_2A2F+19\uparrow j ...
 0000:2A7B
                                             loc_0_2A7B:
0000:2A7B
0000:2A7B AF
0000:2A7B
                                                                              xor
                                                                                              а
0000:2A7C C9
                                                                              ret
0000:2A7D
```

```
0000:2A7D
0000:2A7D
0000:2A7D
0000:2A7D
0000:2A7F
0D
77
05
0000:2A82
0000:2A84
0000:2A84
0000:2A84
0000:2A84
                                                                         loc 0 2A7D:
                                                                                                                                                                                                                                                                                               ; CODE XREF: sub 0 2A2F+491i
                                                                                                                               sub
ld
ld
                                                                                                                                                           (ix+5), a
                                                                                                                               ret
                                                                           ; End of function sub_0_2A2F
                                                                          ; SUBROUTINE
 0000:2A85
 0000:2A85
0000:2A85
0000:2A85
                                                                          sub_0_2A85:
                                                                                                                                                                                                                                                                                               ; CODE XREF: 0000:19A1\p
0000:2A85
0000:2A85 3A 15 62
0000:2A88 A7
0000:2A89 C0
0000:2A8D A7
0000:2A8D A7
0000:2A8E C0
0000:2A8E G0
0000:2A92 FE 01
                                                                                                                                                         a, (mario_climbing)
                                                                                                                               1d
                                                                                                                                                                                                                                                                                               ; climbing?
; yes, return
                                                                                                                               ret
ld
                                                                                                                                                         nz
                                                                                                                                                         a. (mario jumping)
                                                                                                                               and
ret
ld
                                                                                                                                                                                                                                                                                               ; jumping?
; yes, return
                                                                                                                                                         a, (mario_on_elevator)
1
                                                                                                                               cp
ret
                                                                                                                                                                                                                                                                                                ; on elevator?
 0000:2A92 PE 01
0000:2A94 C8
0000:2A95 3A 03 62
0000:2A98 D6 03
                                                                                                                                                                                                                                                                                                ; yes, return
                                                                                                                                                          a, (mario_y_coord)
                                                                                                                               sub
ld
0000:2A98 D6 03

0000:2A98 3A 05 62

0000:2A9E C6 0C

0000:2A00 6F

0000:2AA1 E5

0000:2AA2 CD F0 2F

0000:2AA5 D1

0000:2AA5 D1
                                                                                                                                                        ", a
a, (mario_x_coord)
a, 0Ch
1, a
h1
                                                                                                                                                         h, a
                                                                                                                               ld
add
                                                                                                                               ld
                                                                                                                               push
call
                                                                                                                                                           sub_0_2FF0
                                                                                                                                                         de
a, (hl)
                                                                                                                               pop
ld
 0000:2AA7 FE B0
0000:2AA9 DA B4 2A
0000:2AAC E6 OF
0000:2AAE FE 08
                                                                                                                               cp
jp
and
                                                                                                                                                         0B0h
                                                                                                                                                                    loc_0_2AB4
                                                                                                                               ср
 0000:2ABE PE 00
0000:2ABO D2 B4 2A
0000:2AB3 C9
0000:2AB4
0000:2AB4
                                                                                                                                                         nc, loc_0_2AB4
0000:2AB4

0000:2AB4 7A

0000:2AB4 7A

0000:2AB5 E6 07

0000:2AB7 CA CD 2A

0000:2AB0 D1 20 00

0000:2ABD ED 42

0000:2ABD ED 42
                                                                                                                                                                                                                                                                                                ; CODE XREF: sub_0_2A85+24<sup>†</sup> j ; sub_0_2A85+2B<sup>†</sup> j
                                                                         loc_0_2AB4:
                                                                                                                                                        a, d
                                                                                                                               ld
                                                                                                                               and
                                                                                                                                                        z, loc_0_2ACD
bc, 20h; 'hl, bc
a, (hl)
                                                                                                                               jp
ld
                                                                                                                               sbo
ld
                                                                                                                                                         a, (h1)

0B0h; '"'

c, loc_0_2ACD

0Fh
 0000:2ABF 7E
0000:2ABF 7E
0000:2AC0 FE BO
0000:2AC2 DA CD 2A
0000:2AC5 E6 0F
0000:2AC7 FE 08
0000:2AC9 D2 CD 2A
0000:2AC9 CC
                                                                                                                               ср
                                                                                                                               jp
and
                                                                                                                               ср
                                                                                                                                                         nc, loc_0_2ACD
                                                                                                                               jр
 0000:2ACD
 0000:2ACD
0000:2ACD
0000:2ACD
0000:2ACD 3E 01
                                                                                                                                                                                                                                                                                               ; CODE XREF: sub_0_2A85+32<sup>†</sup> j ; sub_0_2A85+3D<sup>†</sup> j ...
                                                                          loc_0_2ACD:
0000:2ACD 3E 01
0000:2ACD
0000:2ACF 32 21 62
0000:2AD2 C9
0000:2AD2
0000:2AD2
                                                                                                                               1d
                                                                                                                               ld
ret
                                                                                                                                                           (unk_0_6221), a
                                                                          ; End of function sub_0_2A85
 0000:2AD3
                                                                                                                           SUBROUTINE
0000:2AD3

0000:2AD3

0000:2AD3

0000:2AD3

0000:2AD5

47

0000:2AD6

0000:2AD7

00000:2AD7

0000:2AD7

00000:2AD7

0000:2AD7

0000:
                                                                                                                                                                                                                                                                                                ; CODE XREF: sub_0_25F2+C\p
                                                                          sub_0_2AD3:
                                                                                                                               ld
                                                                                                                                                           a, (mario_y_coord)
                                                                                                                                                        b, a
a, (mario_x_coord)
                                                                                                                               ld
                                                                                                                               ld
cp
jp
cp
jp
                                                                                                                                                           z, loc_0_2AEA
 0000:2ADF FE 78
0000:2AE1 CA F6 2A
0000:2AE4 FE C8
0000:2AE6 CA F0 2A
                                                                                                                                                         78h; 'x'
z, loc_0_2AF6
0C8h; 'L'
                                                                                                                               ср
                                                                                                                                                          z, loc_0_2AF0
                                                                                                                               jр
 0000:2AE0 CA
0000:2AE9 C9
0000:2AEA
0000:2AEA
                                                                                                                                                                                                                                                                                                ; CODE XREF: sub 0 2AD3+91i
 0000:2AEA
                                                                          loc 0 2AEA:
 0000:2AEA 3A A3 63
0000:2AED C3 02 2B
0000:2AF0
                                                                                                                               1d
                                                                                                                                                                  (unk_0_63A3)
                                                                                                                               jр
                                                                                                                                                           loc_0_2B02
 0000:2AF0
0000:2AF0
0000:2AF0
0000:2AF0 3A A6 63
0000:2AF3 C3 02 2B
0000:2AF6
0000:2AF6
0000:2AF6 78
                                                                           loc_0_2AF0:
                                                                                                                                                                                                                                                                                                ; CODE XREF: sub_0_2AD3+13 j
                                                                                                                                                                  (unk_0_63A6)
                                                                                                                                                           loc 0 2B02
                                                                                                                               jр
                                                                          loc_0_2AF6:
                                                                                                                                                                                                                                                                                                ; CODE XREF: sub_0_2AD3+E^jj
                                                                                                                               ld
                                                                                                                                                          a, b
                                                                                                                                                        a, b

80h; 'C'

a, (unk_0_63A5)

nc, loc_0_2B02

a, (unk_0_63A4)
0000:2AF7 FE 80
0000:2AF9 3A A5 63
0000:2AFC D2 02 2B
0000:2AFF 3A A4 63
                                                                                                                               cp
ld
                                                                                                                               jp
ld
 0000:28FF 3A
0000:2B02
0000:2B02
0000:2B02 80
0000:2B02
                                                                                                                                                                                                                                                                                                ; CODE XREF: sub_0_2AD3+1A\uparrow j ; sub_0_2AD3+20\uparrow j ...
                                                                           loc_0_2B02:
0000:2B02 03 62 0000:2B03 32 03 62 0000:2B06 32 4C 69 0000:2B09 CD 1F 24 0000:2B0F 1D 0000:2B10 CA 18 2B 0000:2B13 15 0000:2B14 CA 1A 2B 0000:2B17 C9 0000:2B18
                                                                                                                               add
                                                                                                                                                         a. b
                                                                                                                                                         (mario_y_coord), a
(soft_sprite_ram+4Ch), a
sub_0_241F
                                                                                                                               ld
ld
                                                                                                                               call
ld
                                                                                                                                                         hl, mario_y_coord
                                                                                                                               dec
jp
                                                                                                                                                          e
z, loc_0_2B18
                                                                                                                               jp
ret
                                                                                                                                                           z. loc 0 2B1A
 0000:2B18
 0000:2B18
0000:2B18 35
0000:2B19 C9
                                                                          loc_0_2B18:
                                                                                                                                                                                                                                                                                               ; CODE XREF: sub_0_2AD3+3D<sup>†</sup> j
                                                                                                                               ret
 0000:2B1A
 0000:2B1A
```

```
; CODE XREF: sub_0_2AD3+41 j
                                       loc_0_2B1A:
0000:2B1A 34
0000:2B1B C9
0000:2B1B
0000:2B1B
                                                                    inc
                                                                                 (h1)
                                      ret; End of function sub_0_2AD3
 0000:2B1C
0000:2B1C
0000:2B1C
0000:2B1C
                                                                 SUBROUTINE
                                                                                                                                                        ; CODE XREF: sub 0 1AC3+142 p
 0000:2B1C
                                      sub 0 2B1C:
0000:2B1C DD 21 00 62
0000:2B20 CD 29 2B
0000:2B23 CD AF 29
0000:2B23 AF
0000:2B27 47
0000:2B28 C9
0000:2B28 C9
                                                                                 ix, mario_alive_flag
sub_0_2B29
sub_0_29AF
                                                                    1d
                                                                    call
                                                                    call
                                                                    xor
                                                                    ld
                                                                    ret
                                       ; End of function sub_0_2B1C
0000:2B28
0000:2B29
0000:2B29
                                                                 SUBROUTINE
 0000:2B29
 0000:2B29
0000:2B29
0000:2B29 3A 27 62
                                       sub_0_2B29:
                                                                                                                                                        ; CODE XREF: sub_0_2B1C+4\(^1\)p
                                                                    ld
                                                                                 a, (level type)
 0000:2B2C 3D
                                                                    dec
0000:2B2C 3D 0000:2B2D C2 53 2B 0000:2B30 3A 03 62 0000:2B33 67 0000:2B34 3A 05 62 0000:2B37 C6 07 0000:2B39 6F 0000:2B3A CD 9B 2B 0000:2B3A CD 9B 2B
                                                                                 nz, loc_0_2B53
a, (mario_y_coord)
                                                                    jp
ld
                                                                    ld
ld
                                                                                 h, a
                                                                                       (mario_x_coord)
                                                                   add
ld
call
                                                                                 sub_0_2B9B
0000:2B3D A7
0000:2B3E CA 51 2B
0000:2B41 7B
0000:2B42 91
                                                                    and
jp
ld
                                                                                  z, loc_0_2B51
                                                                                 a, e
                                                                    sub
0000:2B43 FE 04
0000:2B45 D2 74 2B
0000:2B48 79
0000:2B49 D6 07
                                                                    cp
jp
ld
                                                                                  nc, loc_0_2B74
                                                                    sub
 0000:2849 B0 07
0000:284B 32 05 62
0000:284E 3E 01
0000:2850 47
                                                                   ld
ld
                                                                                  (mario_x_coord), a
ld
                                                                                 b, a
                                       loc_0_2B51:
                                                                                                                                                        ; CODE XREF: sub_0_2B29+15<sup>†</sup>j
                                                                    pop
                                        loc_0_2B53:
                                                                                                                                                        ; CODE XREF: sub_0_2B29+4<sup>†</sup>j
                                                                    ld
                                                                                 a, (mario_y_coord)
                                                                   sub
ld
ld
                                                                                 a, (mario_x_coord)
                                                                   add
ld
call
                                                                                 sub_0_2B9B
                                                                   cp
jp
ld
add
ld
0000:2B64 CA 7A 2B
0000:2B67 7A
0000:2B68 C6 07
0000:2B6A 67
                                                                                  z, loc_0_2B7A
                                                                                 h, a
0000:2B6A 67

0000:2B6B 6B

0000:2B6C CD 9B 2B

0000:2B6F A7

0000:2B70 C8

0000:2B71 C3 7A 2B

0000:2B74

0000:2B74
                                                                   call
and
                                                                                 sub_0_2B9B
                                                                    ret
                                                                                  loc 0 2B7A
                                       loc 0 2B74:
                                                                                                                                                        ; CODE XREF: sub 0 2B29+1C1 j
0000:2B74 3E 00
0000:2B76 06 00
0000:2B78 E1
0000:2B79 C9
0000:2B7A
0000:2B7A
                                                                                 a, 0
b, 0
hl
                                                                    ld
                                                                    ld
                                                                    pop
                                                                                                                                                         ; CODE XREF: sub_0_2B29+3B1j
                                       loc 0 2B7A:
0000:287A

0000:287A 3A 10 62

0000:287D A7

0000:287D A7

0000:287E 3A 03 62

0000:2881 CA 8B 2B

0000:2884 F6 07

0000:2886 D6 04
                                                                                                                                                         ; sub_0_2B29+481 j
                                                                                 a, (unk_0_6210)
                                                                    and
ld
                                                                                  a. (mario v coord)
                                                                    jp
or
                                                                                  z, loc_0_2B8B
                                                                    sub
                                                                                 loc 0 2B91
 0000:2B88 C3 91 2B
                                                                    jp
 0000:2B8B
0000:2B8B
; CODE XREF: sub 0 2B29+581 j
                                       loc 0 2B8B:
                                                                    sub
                                                                                 a, 4
0000:2B91
0000:2B91 32 03 62
0000:2B94 32 4C 69
0000:2B97 3E 01
                                       loc 0 2B91:
                                                                                                                                                        ; CODE XREF: sub 0 2B29+5F11
                                                                                  (mario_y_coord), a
(soft_sprite_ram+4Ch), a
                                                                    14
                                                                    ld
                                                                    ld
 0000:2B97 5E
0000:2B99 E1
0000:2B9A C9
0000:2B9A
0000:2B9A
                                                                   pop
ret
                                                                                 h1
                                       ; End of function sub_0_2B29
 0000:2B9B
 0000:2B9B
0000:2B9B
                                                                 SUBROUTINE
 0000:2B9B
 0000:2B9B
0000:2B9B E5
                                                                                                                                                         ; CODE XREF: sub_0_2B29+11<sup>p</sup>; sub_0_2B29+36<sup>p</sup>...
                                       sub_0_2B9B:
0000:2B9B E5
0000:2B9C CD F0 2F
0000:2B9F D1
0000:2BAO 7E
0000:2BA1 FE B0
                                                                    push
call
                                                                                 hl
                                                                                  sub 0 2FF0
                                                                   pop
ld
                                                                                 de
a, (hl)
                                                                   cp
jp
and
                                                                                  0B0h ;
 0000:2BA3 DA D9 2B
0000:2BA6 E6 OF
0000:2BA8 FE 08
                                                                                       loc_0_2BD9
                                                                    ср
                                                                                 nc, loc_0_2BD9
a, (h1)
 0000:2BAA D2 D9 2B
 0000:2BAD 7E
```

```
0C0h ; (L)
0000:2BAE FE C0
                                                                                  z, loc_0_2BD9
c, loc_0_2BDC
                                                                    jp
jp
cp
0000:2BB0 CA D9 2B
0000:2BB0 CA D9 2B
0000:2BB3 DA DC 2B
0000:2BB6 FE D0
0000:2BB8 DA CB 2B
                                                                                  0D01
                                                                                   c, loc_0_2BCB
                                                                    cp
jp
                                                                                  0E0h ;
0000:2BBB FE E0
0000:2BBD DA C5 2B
                                                                                       loc_0_2BC5
0000:2BBD DA C5 2B
0000:2BC0 FE F0
0000:2BC2 DA CB 2B
                                                                                  0F0h; '-'
c, loc_0_2BCB
                                                                    jр
0000:2BC5
0000:2BC5
0000:2BC5
0000:2BC5 E6 OF
0000:2BC7 3D
                                       loc_0_2BC5:
                                                                                                                                                          ; CODE XREF: sub_0_2B9B+221j
                                                                                  0Fh
                                                                    dec
0000:2BC8 C3 CF 2B
0000:2BCB
0000:2BCB
0000:2BCB
                                                                                  loc_0_2BCF
                                                                    jр
                                                                                                                                                          ; CODE XREF: sub_0_2B9B+1D j
                                       loc 0 2BCB:
0000:2BCB E6 OF
                                                                                                                                                          ; sub_0_2B9B+271 j
0000:2BCB E6 01
0000:2BCB D6 09
                                                                                  0Fh
                                                                    sub
0000:2BCF
0000:2BCF
0000:2BCF 4F
0000:2BD0 7B
                                       loc_0_2BCF:
                                                                                                                                                          ; CODE XREF: sub_0_2B9B+2D<sup>†</sup>j
                                                                    ld
                                                                                  a, e
0F8h ; '°'
0000:2BD1 E6 F8
                                                                    and
0000:2BD1 E6 F8
0000:2BD3 81
0000:2BD4 4F
0000:2BD5 BB
0000:2BD6 DA E1 2B
0000:2BD9
0000:2BD9
0000:2BD9 AF
                                                                    add
ld
                                                                                  a, c
c, a
                                                                    ср
                                                                    jp
                                                                                   c. loc 0 2BE1
                                                                                                                                                          ; CODE XREF: sub_0_2B9B+8<sup>†</sup> j ; sub_0_2B9B+F<sup>†</sup> j ...
                                       loc_0_2BD9:
0000:2BD9
0000:2BDA 47
0000:2BDB C9
0000:2BDC
                                                                    xor
ld
                                                                                  b, a
                                                                    ret
0000:2BDC
0000:2BDC
0000:2BDC 7B
                                       loc_0_2BDC:
                                                                                                                                                          ; CODE XREF: sub_0_2B9B+18 j
                                                                    ld
                                                                                  a, e
0F8h ; '°'
0000:2BDD E6 F8
0000:2BDF 3D
0000:2BE0 4F
0000:2BE1
                                                                    and
                                                                                                                                                          ; CODE XREF: sub 0 2B9B+3B1i
0000:2BE1
                                       loc_0_2BE1:
                                                                                  a, (mario_y_before_jump)
(ix+5)
0000:2BE1 3A 0C 62
0000:2BE4 DD 96 05
0000:2BE7 83
0000:2BE8 B9
                                                                    ld
sub
                                                                    add
                                                                                  a, e
                                                                    cp
jp
0000:2BE8 B9
0000:2BE9 CA EF 2B
0000:2BEC D2 F8 2B
0000:2BEF
                                                                                  z, loc_0_2BEF
nc, loc_0_2BF8
                                                                    jр
0000:2BEF
0000:2BEF 79
0000:2BFD D6 07
0000:2BF2 32 05 62
0000:2BF5 C3 FD 2B
0000:2BF8
0000:2BF8
                                        loc_0_2BEF:
                                                                                                                                                          ; CODE XREF: sub_0_2B9B+4E1j
                                                                    sub
                                                                                   (mario_x_coord), a
                                                                    1d
                                                                    jp
                                                                                  loc_0_2BFD
0000:2BF8
0000:2BF8 3E 02
0000:2BFA 06 00
0000:2BFC C9
                                       loc_0_2BF8:
                                                                                                                                                          ; CODE XREF: sub_0_2B9B+51 j
                                                                    ret
0000:2BFD
0000:2BFD
                                                                                                                                                          ; CODE XREF: sub_0_2B9B+5A^jj
                                        loc_0_2BFD:
0000:2BFD 3E 01
0000:2BFD 47
0000:2C00 E1
0000:2C01 E1
0000:2C02 C9
                                                                    ld
                                                                                  a, 1
b, a
                                                                    14
                                                                    pop
                                                                                  hl
                                                                    pop
                                                                    ret
0000:2C02
0000:2C02
0000:2C03
                                       ; End of function sub_0_2B9B
0000:2C03
0000:2C03
0000:2C03
0000:2C03
                                                                   SUBROUTINE
                                       sub 0 2C03:
                                                                                                                                                          ; CODE XREF: 0000:1989 p
0000:2C03 3E 01
0000:2C05 F7
0000:2C06 D7
0000:2C07 3A 93
                                                                                  a, 1
30h
10h
                                                                    1d
                                                                                       1
                                                                    rst
                                                                                                                                                          ; return if level bit not set
; return if mario not alive
                                                                    rst
0000:2C07 3A 93 63
0000:2C0A 0F
                                                                    ld
                                                                                  a, (barrel_deployment)
                                                                    rrca
ret
ld
0000:2C0A 0F
0000:2C0B D8
0000:2C0C 3A B1 62
0000:2C0F A7
                                                                                  a, (unk 0 62B1)
                                                                    and
0000:2C0F A7
0000:2C10 C8
0000:2C11 4F
0000:2C12 3A B0 62
0000:2C15 D6 02
0000:2C17 B9
0000:2C18 DA 7B 2C
0000:2C18 3A 82 63
                                                                    ret
ld
                                                                                  a, (unk_0_62B0)
2
                                                                    ld
                                                                    sub
                                                                    cp
                                                                                  c, loc_0_2C7B
a, (unk_0_6382)
                                                                    jp
ld
0000:2C1E CB 4F
0000:2C20 C2 86 2C
0000:2C23 3A 80 63
0000:2C26 47
                                                                    bit
jp
ld
                                                                                  nz, loc_0_2C86
a, (unk_0_6380)
                                                                    ld
                                                                                  b. a
0000:2C27 3A 1A 60
0000:2C2A E6 1F
0000:2C2C
0000:2C2C
                                                                    ld
and
                                                                                        (gen_purpose_timer)
                                       loc 0 2C2C:
                                                                                                                                                          ; CODE XREF: sub 0 2C03+2D-i
0000:2C2C B8
0000:2C2D CA 33 2C
0000:2C30 10 FA
0000:2C32 C9
0000:2C33
0000:2C33
                                                                                  b
                                                                    ср
                                                                                  z, loc_0_2C33
loc_0_2C2C
                                                                    jp
djnz
                                                                    ret
                                                                                                                                                         ; CODE XREF: sub 0 2C03+2A1 j
                                       loc 0 2C33:
0000:2C33 3A B0 62
0000:2C36 CB 3F
0000:2C38 B9
                                                                    ld
                                                                                  a. (unk 0 62B0)
                                                                    srl
                                                                    ср
0000:2C39 DA 41 20
                                                                    jp
ld
                                                                                   c, loc 0 2C41
0000:2C3C 3A 19 60
0000:2C3F 0F
0000:2C40 D0
                                                                                        (random_no+1)
                                                                                  nc
                                                                    ret
0000:2041
0000:2C41
                                       loc_0_2C41:
                                                                                                                                                          ; CODE XREF: sub_0_2C03+36 j
```

```
0000:2C41 CD 57 00
                                                                     call
                                                                                   rand
0000:2C44 E6 OF
                                                                     and
                                                                                    0Fh
0000:2C46 C2 86 2C
                                                                     jр
                                                                                   nz, loc_0_2C86
                                        loc_0_2C49:
                                                                                                                                                             ; CODE XREF: sub_0_2C03+7B|j
0000:2C49 3E 01
0000:2C4B
0000:2C4B
0000:2C4B 32 82 63
                                                                     ld
                                                                                   a, 1
                                                                                                                                                            ; CODE XREF: sub_0_2C03+80|j
                                        loc_0_2C4B:
                                                                                   (unk_0_6382), a
                                                                     ld
0000:2C4E 3C
                                                                     inc
0000:2C4F
0000:2C4F
0000:2C4F
0000:2C4F 32 8F 63
                                                                                                                                                            ; CODE XREF: sub_0_2C03+89|j
                                        loc_0_2C4F:
                                                                                   (unk_0_638F), a
                                                                     ld
0000:2C52 3E 01
0000:2C54 32 92 63
0000:2C57 3A B2 62
0000:2C5A B9
                                                                     ld
ld
ld
                                                                                    (unk_0_6392),
                                                                                   a, (unk_0_62B2)
                                                                     cp
ret
sub
ld
0000:2C5A B9

0000:2C5B C0

0000:2C5C D6 08

0000:2C5E 32 B2 62

0000:2C61 11 20 00

0000:2C64 21 00 64

0000:2C67 06 05

0000:2C69
                                                                                   nz
                                                                                    (unk_0_62B2), a
                                                                                   de, 20h; 'hl, unk_0_6400 b, 5
                                                                     ld
                                                                     1d
                                                                                                                                                           ; fireball character data
0000:2069
                                        loc_0_2C69:
                                                                                                                                                            ; CODE XREF: sub 0 2C03+6C-i
0000:2c69

0000:2c69 7E

0000:2c6A A7

0000:2c6B CA 72 2C

0000:2c6E 19

0000:2c71 C9

0000:2c71 C9
                                                                     ld
and
                                                                                   a, (hl)
                                                                                   a
z, loc_0_2C72
hl, de
                                                                     jp
add
                                                                                   loc_0_2C69
                                                                     ret
0000:2072
0000:2C72

0000:2C72

0000:2C72 3A 82 63

0000:2C75 F6 80

0000:2C77 32 82 63

0000:2C7A C9

0000:2C7B
                                        loc_0_2C72:
                                                                                                                                                           ; CODE XREF: sub_0_2C03+68 j
                                                                                   a, (unk_0_6382)
80h; 'Ç'
                                                                     ld
                                                                     or
                                                                                   (unk_0_6382), a
                                                                     1d
0000:2C7B
0000:2C7B
                                        loc_0_2C7B:
                                                                                                                                                            ; CODE XREF: sub_0_2C03+15 j
0000:2C7B C6 02

0000:2C7D B9

0000:2C7D CA 49 2C

0000:2C81 3E 02

0000:2C83 C3 4B 2C
                                                                     add
                                                                                   a, 2
                                                                     ср
                                                                                    z, loc_0_2C49
                                                                                    loc_0_2C4B
                                                                     jр
 0000:2C86
 0000:2086
0000:2C86
0000:2C86 AF
                                        loc_0_2C86:
                                                                                                                                                             ; CODE XREF: sub_0_2C03+1D\uparrow j; sub_0_2C03+43\uparrow j
0000:2C86
0000:2C87 32 82 63
0000:2C8A 3E 03
0000:2C8C C3 4F 2C
                                                                     xor
                                                                     ld
ld
                                                                                    (unk_0_6382), a
                                                                                    a, 3
loc_0_2C4F
                                                                     jр
                                        ; End of function sub_0_2C03
0000:2C8C
0000:2C8C
0000:2C8F
0000:2C8F
                                                                   SUBROUTINE
0000:2C8F
0000:2C8F
0000:2C8F
0000:2C8F 3E 01
                                        sub_0_2C8F:
                                                                                                                                                             ; CODE XREF: 0000:1986 p
                                                                                   a, 1
30h
                                                                     ld
0000:2C8F 3E 01
0000:2C91 F7
0000:2C92 D7
0000:2C93 3A 93 63
0000:2C96 0F
0000:2C97 DA 15 2D
0000:2C9A 3A 92 63
0000:2C9D 0F
                                                                                                                                                            ; return if level bit not set
; return if mario not alive
                                                                     rst
                                                                     rst
ld
                                                                                    10h
                                                                                   a, (barrel_deployment)
                                                                     rrca
                                                                                   c, loc_0_2D15
a, (unk_0_6392)
                                                                     rrca
                                                                     ret
ld
ld
0000:2C9E D0
0000:2C9F DD 21 00 67
0000:2CA3 11 20 00
0000:2CA6 06 0A
                                                                                   ix, unk_0_6700
de, 20h; ' '
b, 0Ah
                                                                     ld
0000:2CA8
0000:2CA8
0000:2CA8 DD 7E 00
0000:2CAB 0F
                                        loc_0_2CA8:
                                                                                                                                                            ; CODE XREF: sub_0_2C8F+26|j
                                                                     ld
                                                                                   a, (ix+0)
                                                                     rrca
0000:2CAB UF
0000:2CAC DA B3 2C
0000:2CAF OF
0000:2CB0 D2 B8 2C
0000:2CB3
                                                                     jp
rrca
                                                                                   c, loc_0_2CB3
                                                                                   nc, loc_0_2CB8
                                                                     jр
0000:2CB3
0000:2CB3 DD 19
0000:2CB5 10 F1
0000:2CB7 C9
                                        loc_0_2CB3:
                                                                                                                                                            ; CODE XREF: sub_0_2C8F+1D| j
                                                                     add
                                                                                   loc_0_2CA8
                                                                     djnz
                                                                     ret
0000:2CB7 C9
0000:2CB8
0000:2CB8
0000:2CB8 DD 22 AA 62
0000:2CBC DD 36 00 02
0000:2CC0 16 00
0000:2CC2 3E 0A
                                                                                                                                                             ; CODE XREF: sub 0 2C8F+21 j
                                        loc 0 2CB8:
                                                                     ld
                                                                                    (unk_0_62AA), ix
                                                                     ld
ld
ld
                                                                                   (ix+0), 2
d, 0
a, 0Ah
0000:2CC4 90
0000:2CC5 87
0000:2CC6 87
0000:2CC7 5F
                                                                     sub
add
add
ld
ld
add
ld
                                                                                   h
                                                                                    a, a
                                                                                   a, a
0000:2CC7 5F
0000:2CC8 21 80 69
0000:2CCB 19
0000:2CCF 3E 01
0000:2CCP 3Z 01
0000:2CD1 3Z 93 63
0000:2CD1 10 05
0000:2CD7 CD 9F 30
0000:2CD7 21 B1 62
                                                                                   hl, soft_sprite_ram+80h
hl, de
(unk_0_62AC), hl
                                                                     ld
ld
                                                                                    (barrel_deployment), a
                                                                                   de, 501h
sub_0_309F
                                                                     call
ld
                                                                                   hl, unk_0_62B1
0000:2CDA 21 B1 62
                                                                                   (h1)
nz, loc_0_2CE6
0000:2CDD 35
0000:2CDE C2 E6 2C
0000:2CE1 3E 01
0000:2CE3 32 86 63
                                                                     dec
jp
ld
                                                                                   a, 1 (unk_0_6386), a
                                                                     ld
0000:2CE6
0000:2CE6
                                        loc_0_2CE6:
                                                                                                                                                           ; CODE XREF: sub_0_2C8F+4Ffj
0000:2CE6 7E
                                                                     ld
                                                                                   a, (hl)
0000:2CE7 FE 04
0000:2CE9 D2 F6 2C
0000:2CEC 21 A8 69
0000:2CEF 87
                                                                     cp
jp
ld
                                                                                   nc, loc_0_2CF6
hl, soft_sprite_ram+0A8h
                                                                     add
0000:2CF0 87
```

```
0000:2CF1 5F
                                                                                                   e, a
d, 0
 0000:2CF2 16 00
0000:2CF4 19
0000:2CF5 72
0000:2CF6
                                                                                                          de
de
                                                                                   ld
                                                                                  add
ld
                                                                                                   hl, de (hl),
 0000:2CF6
0000:2CF6 DD 36 07 15
0000:2CFA DD 36 08 0B
0000:2CFE DD 36 15 00
                                                                                                                                                                                          ; CODE XREF: sub_0_2C8F+5A j
                                               loc_0_2CF6:
                                                                                                   (ix+7), 15h
(ix+8), 0Bh
(ix+15h), 0
                                                                                   ld
                                                                                                                                                                                          ; sideways barrel sprite tile
                                                                                   ld
ld
                                                                                                   a, (unk_0_6382)
 0000:2D02 3A 82 63 0000:2D05 07
                                                                                   ld
                                                                                  rlca
jp
ld
0000:2D05 07
0000:2D06 D2 15 2D
0000:2D09 DD 36 07 19
0000:2D0D DD 36 08 0C
0000:2D11 DD 36 15 01
0000:2D15
                                                                                                   nc, loc_0_2D15
(ix+7), 19h
(ix+8), 0Ch
                                                                                                                                                                                          ; sideways blue barrel sprite tile
                                                                                   1d
                                                                                                                                                                                          ; set blue palette for barrel
                                                                                                                                                                                         ; CODE XREF: sub_0_2C8F+8<sup>†</sup>j
; sub_0_2C8F+77<sup>†</sup>j
                                               loc 0 2D15:
 0000:2D15 21 AF 62
0000:2D15
0000:2D18 35
                                                                                                   hl, unk_0_62AF (hl)
                                                                                  ld
dec
 0000:2D19 C0
                                                                                   ret
                                                                                                   nz
 0000:2D1A 36 18
0000:2D1C 3A 8F 63
0000:2D1F A7
                                                                                   ld
ld
                                                                                                    (hl), 18h
                                                                                                   a, (unk_0_638F)
0000:2D1F A7
0000:2D20 CA 51 2D
0000:2D23 4F
0000:2D24 21 32 39
0000:2D27 3A 82 63
0000:2D2B DA 2F 2D
0000:2D2B DO 2D000:2D2B DO 0000:2D2F
                                                                                   and
                                                                                   jp
ld
ld
                                                                                                   z, loc_0_2D51
                                                                                                   c, a
hl, dk_throw_barrel_spr
                                                                                   ld
                                                                                                   a, (unk_0_6382)
                                                                                   rrca
                                                                                  jp
dec
                                                                                                   c, loc_0_2D2F
0000:2D2F
0000:2D2F 79
0000:2D30 87
0000:2D31 87
0000:2D32 87
0000:2D33 4F
0000:2D34 87
                                               loc_0_2D2F:
                                                                                                                                                                                         ; CODE XREF: sub_0_2C8F+9Cfj
                                                                                  1d
                                                                                                   a, a
a, a
a, a
c, a
                                                                                  add
                                                                                   add
                                                                                   add
                                                                                  ld
add
                                                                                                   a, a
 0000:2D35 87
                                                                                                   a, a
a, c
e, a
d, 0
                                                                                   add
0000:2D35 87

0000:2D36 81

0000:2D37 5F

0000:2D38 16 00

0000:2D3A 19

0000:2D3B CD 4E 00

0000:2D3E 21 8F 63

0000:2D41 35
                                                                                   add
ld
ld
                                                                                                   hl. de
                                                                                   add
                                                                                                   copy_sprites_2_11_data
h1, unk_0_638F
(h1)
                                                                                   call
ld
0000:2D41 35
0000:2D42 C2 51 2D
0000:2D45 3E 01
0000:2D47 32 AF 62
0000:2D4A 3A 82 63
0000:2D4D 0F
0000:2D4E DA 83 2D
0000:2D51
                                                                                   dec
                                                                                                   nz, loc_0_2D51
                                                                                   jp
ld
ld
                                                                                                    (unk_0_62AF)
                                                                                                   a, (unk_0_6382)
                                                                                   ld
                                                                                   rrca
                                                                                  jp
                                                                                                   c, loc_0_2D83
 0000:2D51
0000:2D51 2A A8 62
0000:2D51
0000:2D51
                                                                                                                                                                                          ; CODE XREF: sub_0_2C8F+91<sup>†</sup> j
; sub_0_2C8F+B3<sup>†</sup> j
                                               loc 0 2D51:
                                                                                  ld
                                                                                                  hl, (unk_0_62A8)
0000:2D54
0000:2D54 7E
0000:2D55 DD 2A AA 62
0000:2D59 ED 5B AC 62
0000:2D5D FE 7F
                                               loc_0_2D54:
                                                                                                                                                                                         ; CODE XREF: sub_0_2C8F+FA j
                                                                                                   a, (h1)
ix, (unk_0_62AA)
de, (unk_0_62AC)
7Fh; ''
                                                                                   ld
0000:2D5D FE 7F
0000:2D5D FE 7F
0000:2D5D FE 7F
0000:2D65 4F
0000:2D63 E6 7F
0000:2D65 12
0000:2D66 DD 7E 07
0000:2D69 CB 79
0000:2D68 CA 70 2D
0000:2D68 EE 03
0000:2D70
0000:2D70 13
0000:2D71 12
0000:2D71 DD 77 07
0000:2D72 DD 77 07
0000:2D75 DD 76 08
                                                                                  cp
jp
ld
                                                                                                   z, loc_0_2D8C
                                                                                                  c, a
7Fh; '(de), a
a, (ix+7)
7, c
                                                                                   and
ld
                                                                                                                                                                                          ; sprite data X coord
                                                                                   ld
                                                                                                                                                                                          ; sprite tile #
                                                                                                   z, loc_0_2D70
                                                                                   jр
                                                                                                                                                                                         ; CODE XREF: sub_0_2C8F+DC|j
                                                loc_0_2D70:
                                                                                                   de
                                                                                   ld
ld
ld
                                                                                                   (de), a
(ix+7), a
a, (ix+8)
de
                                                                                                                                                                                         ; sprite tile # (barrel)
; sprite tile #
0000:2D78 13
0000:2D79 12
0000:2D7A 23
                                                                                                   (de), a
hl
a, (hl)
de
                                                                                   ld
                                                                                   inc
                                                                                   ld
 0000:2D7B 7E
 0000:2D7C 13
0000:2D7D 12
0000:2D7E 23
                                                                                   ld
                                                                                                     (de), a
                                                                                   inc
                                                                                                   hl
                                                                                                   (unk_0_62A8), hl
 0000:2D7F 22 A8 62
                                                                                   1d
0000:2D7F 22 A8 62

0000:2D82 C9

0000:2D83

0000:2D83

0000:2D83 21 CC 39

0000:2D86 22 A8 62

0000:2D89 C3 54 2D
                                                loc 0 2D83:
                                                                                                                                                                                         ; CODE XREF: sub_0_2C8F+BF|j
                                                                                                   hl, barrel_falling_data
(unk_0_62A8), hl
loc_0_2D54
                                                                                   ld
                                                                                   ld
                                                                                   jр
 0000:2D8C
0000:2D8C
0000:2D8C
0000:2D8C
0000:2D8C 21 C3 39
                                                loc_0_2D8C:
                                                                                                                                                                                          ; CODE XREF: sub_0_2C8F+D0 i
                                                                                                   hl, barell_rolling_data
                                                                                   ld
0000:2D8F 22 A8 62
0000:2D92 DD 36 01 01
0000:2D96 3A 82 63
0000:2D99 0F
                                                                                  ld
ld
ld
                                                                                                   (unk_0_62A8), hl
(ix+1), 1
a, (unk_0_6382)
rrca
                                                                                                   c, loc_0_2DA5
(ix+1), 0
(ix+2), 2
                                                                                   ld
                                                loc_0_2DA5:
                                                                                                                                                                                         ; CODE XREF: sub_0_2C8F+10Bfj
                                                                                   ld
                                                                                                   (ix+0Fh), 1
0000:2DAD AF
0000:2DAE DD 77 10
0000:2DBE DD 77 11
0000:2DBE DD 77 12
0000:2DBA DD 77 13
0000:2DBA DD 77 14
0000:2DBD 32 93 63
0000:2DC 32 92 63
0000:2DC 32 92 63
                                                                                   xor
                                                                                                   a
(ix+10h), a
(ix+11h), a
(ix+12h), a
(ix+13h), a
(ix+14h), a
(barrel_deployment), a
                                                                                   ld
ld
                                                                                  ld
ld
ld
                                                                                   ld
                                                                                                    (unk_0_6392),
                                                                                   1d
```

```
0000:2DC4 DD 77 03
                                                                                         (ix+3), a
                                                                         ld
0000:2DC7
                                                                         inc
                                                                                        de
0000:2DC8 13
0000:2DC9 13
0000:2DCA 1A
                                                                        inc
inc
ld
                                                                                       de
de
                                                                                       a, (de)
(ix+5), a
hl, kong_normal_spr
copy_sprites_2_11_data
hl, soft_sprite_ram+0Bh
c, 0FCh; '3'
0000: 2DCA 1A

0000: 2DCB DD 77 05

0000: 2DCE 21 5C 38

0000: 2DD1 CD 4E 00

0000: 2DD4 21 0B 69

0000: 2DD7 0E FC
                                                                         1d
                                                                         ld
                                                                         call
ld
                                                                                                                                                                    ; sprite #2, x coord
                                                                         ld
                                                                                        c,
38h
0000:2DD9 FF
0000:2DDA C9
0000:2DDA
                                                                         rst
                                                                                                                                                                    ; subtract 4 from x coord for 10 sprites
                                                                         ret
                                          ; End of function sub_0_2C8F
0000:2DDA
0000:2DDB
0000:2DDB
0000:2DDB
                                                                     SUBROUTINE ...
0000:2DDB
0000:2DDB
0000:2DDB
0000:2DDB 3E 0A
0000:2DDD F7
                                                                                                                                                                    ; CODE XREF: 0000:1995 p
                                          sub_0_2DDB:
                                                                                       a, 0Ah
30h
                                                                         ld
                                                                                                                                                                    ; return if level bit not set
; return if mario not allive
                                                                         rst
0000:2DDE D7
0000:2DDF 3A 80 63
0000:2DE2 3C
                                                                         rst
ld
                                                                                        10h
                                                                                        a, (unk_0_6380)
                                                                         inc
0000:2DE3 A7
                                                                         and
0000:2DE3 A7

0000:2DE4 1F

0000:2DE5 47

0000:2DE6 3A 27 62

0000:2DE9 FE 02

0000:2DEB 20 01

0000:2DED 04

0000:2DEB
                                                                         rra
ld
                                                                                       b, a
a, (level_type)
2
                                                                         1d
                                                                         cp
jr
inc
                                                                                        nz, loc_0_2DEE
0000:2DEE
0000:2DEE 3E FE
0000:2DF0 37
0000:2DF1
                                          loc_0_2DEE:
                                                                                                                                                                    ; CODE XREF: sub 0 2DDB+10 i
                                                                         14
                                                                                       a, 0FEh ; '■'
                                                                        scf
0000:2DF1
0000:2DF1 1F
0000:2DF2 A7
                                          loc_0_2DF1:
                                                                                                                                                                    ; CODE XREF: sub_0_2DDB+18|j
                                                                         and
0000:2DF2 A7
0000:2DF3 10 FC
0000:2DF5 47
0000:2DF6 3A 1A 60
0000:2DF9 A0
                                                                                        loc 0 2DF1
                                                                         dinz
                                                                        ld
ld
                                                                                       b, a
a, (gen_purpose_timer)
0000:2DF9 A0
0000:2DFA C0
0000:2DFB 3E 01
0000:2DFD 32 A0 63
0000:2E00 32 9A 63
0000:2E03 C9
0000:2E03
                                                                         and
                                                                         ret
                                                                                       nz
                                                                         ld
ld
                                                                         ld
                                                                                        (unk_0_639A), a
                                                                         ret
                                          ; End of function sub_0_2DDB
0000:2E04
0000:2E04
0000:2E04
                                                  SUBROUTINE
0000:2E04
0000:2E04 3E 04
0000:2E06 F7
0000:2E07 D7
                                          sub 0 2E04:
                                                                                                                                                                    ; CODE XREF: 0000:198F1p
                                                                                       a, 4
30h
10h
                                                                         14
                                                                                                                                                                    ; return if level bit not set
; return if mario not alive
                                                                         rst
                                                                         rst
0000:2E08 DD 21 00 65
0000:2E0C FD 21 80 69
0000:2E10 06 0A
0000:2E12
                                                                        ld
ld
ld
                                                                                       ix, unk_0_6500
iy, soft_sprite_ram+80h
b, 0Ah
0000:2E12
                                          loc 0 2E12:
                                                                                                                                                                    ; CODE XREF: sub 0 2E04+7D-i
0000:2E12 DD 7E 00
0000:2E15 DF 7E 00
0000:2E15 DF
0000:2E16 D2 A7 2E
0000:2E10 E6 DF
0000:2E1C E6 DF
0000:2E1C E7 DF
0000:2E1C FD 7E 07
0000:2E24 EE 07
0000:2E26 FD 77 01
0000:2E29
                                                                        ld
rrca
                                                                                       a, (ix+0)
                                                                                                                                                                    ; any active springs?
                                                                                      nc, loc_0_2EA7
a, (gen_purpose_timer)
0Fh
nz, loc_0_2E29
a, (iy+1)
7
                                                                                                                                                                    ; no, skip
                                                                         jp
ld
                                                                         jp
ld
                                                                                                                                                                    ; animate spring sprites
                                                                                       (iy+1), a
0000:2E29
0000:2E29 DD 7E 0D
0000:2E2C FE 04
0000:2E2E CA 84 2E
                                          loc_0_2E29:
                                                                                                                                                                    ; CODE XREF: sub 0 2E04+1A j
                                                                                       a, (ix+0Dh)
                                                                         ld
                                                                         ср
                                                                                        z, loc_0_2E84
                                                                         jp
inc
inc
ld
0000:2E31 DD 34 03
0000:2E34 DD 34 03
0000:2E37 DD 6E 0E
                                                                                       (ix+3)
(ix+3)
1, (ix+0Eh)
h, (ix+0Fh)
0000:2E3A DD 66 OF
0000:2E3B 7E
0000:2E3E 4F
0000:2E3F FE 7F
0000:2E41 CA 9C 2E
0000:2E44 23
0000:2E45 DD 86 05
0000:2E48 DD 77 05
0000:2E3A DD 66 OF
                                                                         ld
                                                                         ld
ld
                                                                                        a, (hl)
                                                                                        c, a
7Fh
                                                                        cp
jp
                                                                                       z, loc_0_2E9C
                                                                                             (ix+5)
                                                                                       a, (ix+5)
(ix+5), a
                                                                         1d
0000:2E4B
0000:2E4B DD 75 0E
0000:2E4E DD 74 0F
0000:2E51 DD 76 03
0000:2E54 FE B7
0000:2E56 DA 6C 2E
0000:2E59 79
                                          loc_0_2E4B:
                                                                                                                                                                   ; CODE XREF: sub_0_2E04+A0|j
                                                                                       (ix+0Eh), 1
(ix+0Fh), h
a, (ix+3)
0B7h; 'À'
                                                                         ld
                                                                         1d
                                                                         ср
                                                                                        c, loc_0_2E6C
                                                                         jp
ld
0000:2E5A FE 7F
0000:2E5C C2 6C 2E
0000:2E5F DD 36 0D 04
0000:2E63 AF
                                                                         cp
jp
ld
                                                                                        7Fh ; ' '
nz, loc_0_2E6C
                                                                                       nz, loc_0_2
(ix+0Dh), 4
                                                                         xor
ld
                                                                                                                                                                    ; stop timer
0000:2E63 AF
0000:2E64 32 83 60
0000:2E67 3E 03
0000:2E69 32 84 60
                                                                                        (digital_snd_tmr_coin_spring), a
                                                                                        (digital_snd_tmr_kong_fall), a
                                                                         ld
0000:2E6C
0000:2E6C
0000:2E6C DD 7E 03
                                                                                                                                                                    ; CODE XREF: sub_0_2E04+52<sup>†</sup>j; sub_0_2E04+58<sup>†</sup>j ...
                                          loc_0_2E6C:
                                                                                       a, (ix+3)
(iy+0), a
a, (ix+5)
(iy+3), a
0000:2E6C
                                                                         ld
0000:2E6F FD 77 00
                                                                         ld
                                                                                                                                                                    ; x corrd to sprite data
                                                                         ld
ld
                                                                                                                                                                    ; y coord to sprite data
0000:2E78
 0000:2E78
                                          loc_0_2E78:
                                                                                                                                                                    ; CODE XREF: sub_0_2E04+A7|j
0000:2E78
0000:2E78 11 10 00
0000:2E78
                                                                                                                                                                    ; sub_0_2E04+CD|j
; 16 bytes/sprite
                                                                         ld
                                                                                       de, 10h
0000:2E78 DD 19
                                                                                       ix, de e, 4
                                                                         add
1d
                                                                                                                                                                    ; next spring data
0000:2E7D 1E 04
```

```
0000:2E7F FD 19
                                                                                           add
                                                                                                                                                                                                              ; next sprite data
                                                                                                             iy, de loc_0_2E12
0000:2E81 10 8F
0000:2E83 C9
0000:2E84
0000:2E84
                                                                                           dinz
0000:2E84
0000:2E84 3E 03
0000:2E86 DD 86 05
0000:2E89 DD 77 05
0000:2E8C FE F8
                                                                                                                                                                                                              ; CODE XREF: sub 0 2E04+2A1 j
                                                    loc_0_2E84:
                                                                                                             a, 3
a, (ix+5)
(ix+5), a
                                                                                           14
                                                                                           add
ld
                                                                                           cp
jp
ld
                                                                                                             0F8h ;
0000:2E8C FE F8
0000:2E8E DA 6C 2E
0000:2E91 DD 36 03 00
0000:2E95 DD 36 00 00
0000:2E9C 0000:2E9C
0000:2E9C
                                                                                                              c, loc_0_2E6C
(ix+3), 0
(ix+0), 0
                                                                                           ld
                                                                                           jp
                                                                                                              loc 0 2E6C
                                                    loc 0 2E9C:
                                                                                                                                                                                                              ; CODE XREF: sub 0 2E04+3D1i
0000:2E9C 21 AA 39
0000:2E9F 3E 03
0000:2EA1 32 83 60
0000:2EAA 34 2E
0000:2EA7
0000:2EA7
0000:2EA7
                                                                                           1d
                                                                                                             hl, bouncing_spring_data
                                                                                           ld
ld
                                                                                                              a, 3
(digital_snd_tmr_coin_spring), a
                                                                                           jр
                                                                                                              loc 0 2E4B
                                                                                                                                                                                                              ; CODE XREF: sub_0_2E04+12 j
                                                    loc 0 2EA7:
0000:2EA7 3A 96 63
                                                                                           ld
                                                                                                             a, (unk_0_6396)
0000:2EA7 3A 96 63

0000:2EAA 0F

0000:2EAB D2 78 2E

0000:2EAF AF

0000:2EAF 32 96 63

0000:2EAF 32 96 65 50

0000:2EAF DD 36 05 50

0000:2EAF DD 36 0D 01

0000:2EAB CD 57 00
                                                                                           rrca
jp
                                                                                                             nc, loc_0_2E78
                                                                                                            a (unk_0_6396), a (ix+5), 50h; 'P' (ix+0Dh), 1 rand
                                                                                           xor
                                                                                           ld
ld
ld
                                                                                           call
0000:2EBA CD 57 00
0000:2EBB E6 0F
0000:2EBF C6 F8
0000:2ECI DD 77 03
0000:2EC4 DD 36 00 01
0000:2EC8 21 AA 39
0000:2ECB DD 75 0E
0000:2ECE DD 74 0F
0000:2ECE DD 74 0F
                                                                                           and
add
ld
ld
                                                                                                             OFh
a, OF8h; '°'
(ix+3), a
(ix+0), 1
                                                                                                             hl, bouncing_spring_data
(ix+0Eh), l
(ix+0Fh), h
                                                                                           ld
                                                                                           ld
ld
                                                    jp loc_
; End of function sub_0_2E04
                                                                                                              loc 0 2E78
                                                                                                                                                                                                             ; end of spring routine
0000:2ED1
0000:2ED1
0000:2ED4
0000:2ED4
0000:2ED4
0000:2ED4
                                                                                         SUBROUTINE
0000:2ED4

0000:2ED4

0000:2ED6 F7

0000:2ED6 F7

0000:2ED8 11 18 6A

0000:2EDF DD 7E 01

0000:2EDF DD 7E 01

0000:2EDF DD 7E 01
                                                    sub 0 2ED4:
                                                                                                                                                                                                              ; CODE XREF: 0000:1998 p
                                                                                                             a, 0
30h
10h
                                                                                           14
                                                                                                                    0Bh
                                                                                                                                                                                                              ; return if level bit not set
; return if mario not alive
                                                                                           rst
                                                                                           rst
                                                                                                             de, soft_sprite_ram+118h ix, unk_0_6680 a, (ix+1)
                                                                                                                                                                                                              ; hammers in sprite ram
                                                                                           1d
                                                                                           ld
ld
                                                                                                                                                                                                              ; hammer character data
UUUU:2EE2 OF

0000:2EE3 DA ED 2E

0000:2EE6 11 1C 6A

0000:2EE9 DD 21 90 66

0000:2EED
                                                                                           rrca
                                                                                                             c, loc_0_2EED
de, soft_sprite_ram+11Ch
ix, unk_0_6690
                                                                                           jp
ld
                                                                                           ld
0000:2EED
0000:2EED DD 36 0E 00
0000:2EF1 DD 36 0F F0
0000:2EF5 3A 17 62
0000:2EF8 0F
0000:2EF8 0F
0000:2EFC AF
0000:2EFC AF
0000:2EFC 32 18 62
0000:2FC 21 89 60
0000:2FO 21 89 60
0000:2FO 36 04
0000:2FO 36 04
0000:2FO DD 36 09 06
                                                    loc_0_2EED:
                                                                                                                                                                                                             ; CODE XREF: sub_0_2ED4+Ffj
                                                                                                            (ix+0Eh), 0
(ix+0Fh), 0F0h;
a, (unk_0_6217)
                                                                                           ld
ld
ld
                                                                                           rrca
                                                                                           jp
xor
                                                                                                             nc, loc_0_2F97
                                                                                                              a
(unk_0_6218),
                                                                                           ld
ld
ld
ld
                                                                                                             hl, unk_0_6089
(hl), 4
(ix+9), 6
0000:2F09 DD 36 0A 03
                                                                                           ld
                                                                                                              (ix+0Ah), 3
0000:2F09 DD 36 0A
0000:2F0D 06 1E
0000:2F0F 3A 07 62
0000:2F12 CB 27
0000:2F14 D2 1B 2F
0000:2F17 F6 80
0000:2F18 CB F8
                                                                                           ld
ld
                                                                                                             b, 1Eh
a, (mario_flipy_sprite_tile)
                                                                                           sla
                                                                                                             nc, loc_0_2F1B
80h; 'Ç'
7, b
                                                                                           jp
or
                                                                                           set
0000:2F1B
0000:2F1B F6 08
0000:2F1D 4F
0000:2F1D 4F
0000:2F1C 3A 94 63
0000:2F21 CB 5F
0000:2F23 CA 43 2F
0000:2F26 CB CO
0000:2F28 CB C1
                                                    loc_0_2F1B:
                                                                                                                                                                                                             ; CODE XREF: sub_0_2ED4+40 j
                                                                                           or
ld
                                                                                                             c, a
a, (unk_0_6394)
3, a
                                                                                           ld
                                                                                           bit
                                                                                                                     a
loc_0_2F43
                                                                                           jp
                                                                                                              z, lo
0, b
                                                                                           set
                                                                                           set
0000:2F28 CB C1

0000:2F2A DD 36 09 05

0000:2F2E DD 36 0A 06

0000:2F32 DD 36 0F 00

0000:2F36 DD 36 0F F0

0000:2F3A CB 79

0000:2F3A CA 43 2F

0000:2F3F DD 36 0E 10
                                                                                           ld
ld
                                                                                                              (ix+9), 5
(ix+0Ah), 6
                                                                                                              (ix+0Fh), 0
(ix+0Eh), 0F0h; '-'
                                                                                           ld
ld
                                                                                           bit
                                                                                                                    loc_0_2F43
                                                                                                              z, loc_u__...
(ix+0Eh), 10h
0000:2F43
0000:2F43
0000:2F43 79
0000:2F43
                                                                                                                                                                                                              ; CODE XREF: sub_0_2ED4+4F\uparrow j; sub_0_2ED4+68\uparrow j
                                                    loc_0_2F43:
                                                                                           ld
0000:2F44 32 4D 69
0000:2F47 0E 07
0000:2F49 21 94 63
0000:2F4C 34
                                                                                           ld
ld
ld
                                                                                                              (soft_sprite_ram+4Dh), a
                                                                                                             c, 7
hl, unk_0_6394
(hl)
                                                                                           inc
0000:2F4C 34
0000:2F4D C2 B7 2F
0000:2F5D 21 95 63
0000:2F53 34
0000:2F54 7E
0000:2F55 FE 02
0000:2F57 C2 BE 2F
0000:2F5A AF
                                                                                                             nz, loc_0_2FB7
hl, unk_0_6395
(hl)
                                                                                            jp
ld
                                                                                           inc
                                                                                           ld
                                                                                                              a, (hl)
                                                                                           cp
jp
                                                                                                             nz, loc_0_2FBE
0000:2F5A AF
0000:2F5B 32 95 63
0000:2F5E 32 17 62
0000:2F61 DD 77 01
0000:2F64 3A 03 62
0000:2F67 ED 44
0000:2F69 DD 77 0E
0000:2F65 3A 07 62
0000:2F6F 32 4D 69
                                                                                           xor
ld
                                                                                                              a (unk 0 6395), a
                                                                                                             (unk_0_6217), a
(ix+1), a
                                                                                           ld
ld
                                                                                                             a, (mario_y_coord)
                                                                                           ld
                                                                                           neg
ld
ld
                                                                                                             (ix+0Eh), a
a, (mario_flipy_sprite_tile)
(soft_sprite_ram+4Dh), a
(ix+0), 0
                                                                                           1d
0000:2F72 DD 36 00 00
```

```
; CODE XREF: sub_0_2ED4+E0|;
; sub_0_2ED4+E7|; ...
                                                                                                                                                                                                                                                                                                                   ; CODE XREF: sub_0_2ED4+25 j
0000:2FAA 1F
0000:2FAB 47
0000:2FAC 0E 07
0000:2FAE 3A 89 60
0000:2FB1 32 89 63
0000:2FB4 C3 7C 2F
0000:2FB7
                                                                                                                                                                     a, (unk_0_6089)
(unk_0_6389), a
                                                                                                                                                                    loc_0_2F7C
0000:2FB7 | 0000:2FB7 | 3A 95 63 | 0000:2FBA A7 | 0000:2FBE | 0000:2FBE | 0000:2FBE | 0000:2FC1 | 0000:2FC1 | 0000:2FC2 | 0000:2FC3 | 0000
                                                                                                                                                                                                                                                                                                                   ; CODE XREF: sub 0 2ED4+791i
                                                                               loc 0 2FB7:
                                                                                                                                        ld
and
                                                                                                                                                                    a, (unk_0_6395)
                                                                                                                                                                    z, loc_0_2F7C
                                                                                                                                         qŗ
                                                                                loc_0_2FBE:
                                                                                                                                                                                                                                                                                                                   ; CODE XREF: sub_0_2ED4+83 j
                                                                                                                                                                     a, (gen_purpose_timer)
                                                                                                                                         bit
                                                                                                                                                                     3, a
z, loc_0_2F7C
                                                                                                                                         jp
ld
                                                                                                                                                                     loc_0_2F7C
                                                                                                                                         jр
                                                                               ; End of function sub_0_2ED4
                                                                                                               SUBROUTINE
  0000:2FCB
  0000:2FCB
0000:2FCB
0000:2FCB
0000:2FCB 3E 0E
                                                                               sub_0_2FCB:
                                                                                                                                                                                                                                                                                                                   ; CODE XREF: 0000:19BF1p
                                                                                                                                                                    a, 0Eh
30h
0000:2FCB 3E 0E
0000:2FCD F7
0000:2FCE 21 B4 62
0000:2FD1 35
0000:2FD2 C0
0000:2FD3 3E 03
0000:2FD5 32 B9 62
0000:2FD8 32 96 63
0000:2FD8 11 01 05
0000:2FDB 11 01 05
                                                                                                                                         ld
                                                                                                                                         rst
ld
dec
                                                                                                                                                                                                                                                                                                                   ; return if level bit not set
                                                                                                                                                                    hl, unk_0_62B4 (hl)
                                                                                                                                         ret
ld
                                                                                                                                                                    nz
                                                                                                                                                                    a, 3
(unk_0_62B9), a
(unk_0_6396), a
                                                                                                                                         ld
ld
                                                                                                                                         ld
                                                                                                                                                                     de, 501h
  0000:2FDE CD 9F 30
0000:2FE1 3A B3 62
0000:2FE4 77
0000:2FE5 21 B1 62
                                                                                                                                         call
ld
ld
                                                                                                                                                                     sub_0_309F
                                                                                                                                                                     _uw_u_suyF
a, (unk_0_62B3)
(h1), a
                                                                                                                                                                   ___o_o2B3
(hl), a
hl, unk_0_62B1
(hl)
                                                                                                                                         ld
 0000:2FE5 21 B1 62

0000:2FE8 35

0000:2FE9 C0

0000:2FEA 3E 01

0000:2FEC 32 86 63

0000:2FEF C9

0000:2FEF 0000:2FEF
                                                                                                                                         ded
                                                                                                                                                                    nz
a, 1
                                                                                                                                         ld
                                                                                                                                                                     (unk_0_6386), a
                                                                                                                                         1d
                                                                               ; End of function sub_0_2FCB
  0000:2FF0
  0000:2FF0
0000:2FF0
0000:2FF0
                                                                                                                                   SUBROUTINE
  0000:2FF0
0000:2FF0 7D
0000:2FF0
                                                                                                                                                                                                                                                                                                                   ; CODE XREF: sub_0_DA7+10^{\uparrow}p ; sub_0_DA7+3D^{\uparrow}p ...; byte2
                                                                               sub_0_2FF0:
                                                                                                                                         ld
                                                                                                                                                                    a, 1
  0000:2FF1 0F
                                                                                                                                         rrca
 0000:2FF1 0F
0000:2FF2 0F
0000:2FF3 0F
0000:2FF4 E6 1F
0000:2FF6 6F
0000:2FF7 7C
0000:2FF8 2F
0000:2FF8 E6 F8
                                                                                                                                         rrca
rrca
                                                                                                                                                                                                                                                                                                                    ; byte2/8
                                                                                                                                                                    31
1, a
                                                                                                                                         and
ld
                                                                                                                                                                                                                                                                                                                    ; L=byte2/8
                                                                                                                                         ld
                                                                                                                                                                    a, h
                                                                                                                                         cpl
                                                                                                                                                                    0F8h ;
                                                                                                                                         and
  0000:2FFB 5F
0000:2FFC AF
0000:2FFD 67
0000:2FFE CB 13
                                                                                                                                         1d
                                                                                                                                                                    e, a
                                                                                                                                         xor
ld
                                                                                                                                                                    h, a
                                                                                                                                         rl
0000:2FFE CB 13
0000:3001 T7
0000:3001 CB 13
0000:3001 17
0000:3004 C6 74
0000:3006 57
0000:3006 C9
0000:3008
0000:3008
0000:3008
0000:3009
                                                                                                                                        rla
rl
rla
                                                                                                                                                                    a. 74h ; 't'
                                                                                                                                         add
                                                                                                                                                                                                                                                                                                                  ; start of video RAM
                                                                                                                                                                    d, a
hl, de
                                                                                                                                         1d
                                                                                                                                         add
                                                                                                                                                                                                                                                                                                                   ; HL = screen address
                                                                                                                                         ret
                                                                               ; End of function sub_0_2FF0
                                                                                                                   SUBROUTINE
  0000:3009
  0000:3009
  0000:3009
0000:3009
                                                                                                                                                                                                                                                                                                                  ; CODE XREF: 0000:18DF<sup>†</sup>p; sub_0_1AC3+1DB<sup>†</sup>p ...
                                                                               sub_0_3009:
  0000:3009 57
  0000:3009
0000:300A OF
0000:300B DA 22 30
                                                                                                                                         ld
                                                                                                                                                                    d, a
                                                                                                                                         rrca
                                                                                                                                                                    c, loc_0_3022
                                                                                                                                         jp
ld
  0000:300E 0E 93
0000:3010 0F
                                                                                                                                                                    c, 93h;
```

```
File: E:\Projects\pace\pacedev.net\sw\re\platform\dkong\dkong.lst 21/11/2013, 11:26:09 PM
  0000:3011 OF
                                                                                                                             rrca
  0000:3012 D2 17 30
0000:3015 OE 6C
0000:3017
0000:3017
                                                                                                                                                       nc, loc_0_3017
c, 6Ch; '1'
                                                                                                                             jp
ld
                                                                          loc_0_3017:
                                                                                                                                                                                                                                                                                          ; CODE XREF: sub_0_3009+91j
 0000:3017 07
0000:3018 DA 31 30
0000:3018 79
0000:301C E6 F0
                                                                                                                             rlca
                                                                                                                             jp
ld
                                                                                                                                                       c, loc_0_3031
                                                                                                                                                       a, c
0F0h; '-'
                                                                                                                             and
  0000:301E 4F
0000:301F C3 31 30
0000:3022
0000:3022
                                                                                                                             ld
                                                                                                                                                       loc_0_3031
  0000:3022
0000:3022 0E B4
0000:3024 0F
0000:3025 0F
                                                                        loc_0_3022:
                                                                                                                                                                                                                                                                                          ; CODE XREF: sub 0 3009+211
                                                                                                                             ld
                                                                                                                                                       c, 0B4h ; '- '
                                                                                                                             rrca
                                                                                                                             rrca
                                                                                                                                                       nc, loc_0_302B
c, lEh
 0000:3026 D2 2B 30
0000:3029 0E 1E
0000:302B
  0000:302B
0000:302B CB 50
0000:302D CA 31 30
0000:3030 05
                                                                        loc 0 302B:
                                                                                                                                                                                                                                                                                         ; CODE XREF: sub 0 3009+1D1 i
                                                                                                                                                      2, b
z, loc_0_3031
b
                                                                                                                             bit
                                                                                                                             jp
dec
  0000:3031
 0000:3031
0000:3031
0000:3031
79
0000:3031
0000:3032
0F
0000:3033
0F
0000:3034
0F
0000:3035
0F
0000:3035
0F
0000:3037
                                                                                                                                                                                                                                                                                          ; CODE XREF: sub_0_3009+F<sup>†</sup>j
; sub_0_3009+16<sup>†</sup>j ...
                                                                        loc_0_3031:
                                                                                                                             ld
                                                                                                                                                       a, c
                                                                                                                             rrca
                                                                                                                             rrca
ld
                                                                                                                             and
  0000:3037 B8
0000:3038 C2 31 30
0000:303B 79
0000:303C 0F
                                                                                                                             cp
jp
ld
                                                                                                                                                       nz, loc_0_3031
                                                                                                                                                       a, c
                                                                                                                             rrca
  0000:303C 0F
0000:303D 0F
0000:303E E6 03
0000:3040 FE 03
                                                                                                                             rrca
and
                                                                                                                             ср
0000:3040 FE 03
0000:3042 C0
0000:3043 CB 92
0000:3045 15
0000:3046 C0
0000:3047 3E 04
0000:3049
0000:3049
0000:3049
                                                                                                                             ret
                                                                                                                                                       nz
                                                                                                                                                       2, d
d
                                                                                                                             ret
                                                                                                                                                       nz
                                                                                                                             ld
                                                                                                                                                       a, 4
                                                                        ret; End of function sub_0_3009
  0000:304A
0000:304A
                                                                                                                        SUBROUTINE
  0000:304A
  0000:304A
0000:304A 11 E0 FF
0000:304A
                                                                                                                                                                                                                                                                                           ; CODE XREF: 0000:0AF0<sup>p</sup>; 0000:0B38<sup>p</sup>
                                                                         sub_0_304A:
0000:304A
0000:304A
0000:304D 3A 8E 63
0000:3050 4F
0000:3051 06 00
0000:3053 21 00 76
0000:3055 CD 64 30
0000:305F 21 8E 63
0000:305F 21 8E 63
0000:305G 25
0000:305G 25
0000:305G 35
0000:305G 35
0000:305G 40
0000:3064
                                                                                                                                                       de, OFFEOh
                                                                                                                             ld
                                                                                                                             ld
ld
ld
                                                                                                                                                       a, (unk_0_638E)
                                                                                                                                                       c, a
b, 0
hl, VRAM_start+200h
                                                                                                                             ld
                                                                                                                                                      ni, VRAM_Start+2001
sub_0_3064
hl, VRAM_start+1C0h
sub_0_3064
hl, unk_0_638E
(hl)
                                                                                                                             call
ld
call
                                                                                                                             ld
                                                                                                                             dec
                                                                         ret; End of function sub_0_304A
                                                                                                                         SUBROUTINE
  0000:3064
  0000:3064
0000:3064 09
0000:3064
                                                                                                                                                                                                                                                                                           ; CODE XREF: sub_0_304A+C^p; sub_0_304A+12^p
                                                                         sub_0_3064:
                                                                                                                                                      hl, bc
a, (hl)
hl, de
                                                                                                                             add
  0000:3065 7E
0000:3066 19
0000:3067 77
0000:3068 C9
                                                                                                                             1d
                                                                                                                             add
                                                                                                                             ld
                                                                                                                                                       (hl), a
                                                                                                                             ret
 0000:3068
0000:3068
0000:3069
                                                                          ; End of function sub_0_3064
  0000:3069
  0000:3069
0000:3069 DF
0000:3069
                                                                                                                                                                                                                                                                                          ; DATA XREF: 0000:0A80↑o
                                                                         loc_0_3069:
                                                                                                                                                                                                                                                                                           ; 0000:0A84\rangle ...
; wait for 8-bit countdown
                                                                                                                                                        18h
                                                                                                                             rst
 0000:3069
0000:306A 2A CO 63
0000:306D 34
0000:306E C9
0000:306F
                                                                                                                                                      hl, (unk_0_63C0)
(hl)
                                                                                                                             ld
                                                                                                                             inc
                                                                                                                            SUBROUTINE
  0000:306F
0000:306F
0000:306F 21 AF 62 0000:306F 0000:306F 0000:3077 AE 0000:3074 E6 07 0000:3077 E 0000:3077 E 0000:3077 E 0000:3077 E 0000:3077 E 0000:3070 E F 0000:3070 E 10 96 90 000:3085 C1 1D 69 0000:3085 C1 1D 69 0000:3088 CD 96 30 0000:3088 CD 97 00 00000:3088 CD 97 00 0000:3088 CD 97 00 000000:3088 CD 97 00 0000:3088 CD 97 00 000000:3088 CD 97 00 0000:3088 CD 97 00 00000:3088 CD 97 00 0000:3088 CD 97 00 0000:3080 CD 97 00 0000:3088 CD 97 00 0000:3088 CD 97 00 0000:3088 CD 97 
                                                                         sub_0_306F:
                                                                                                                                                                                                                                                                                           ; CODE XREF: 0000:0AE8†p
  0000:306F
                                                                                                                                                                                                                                                                                           ; 0000:1732↑p ...
                                                                                                                                                      hl, unk_0_62AF(hl)
                                                                                                                             ld
                                                                                                                             inc
ld
                                                                                                                                                      a, (hl)
                                                                                                                             and
ret
ld
                                                                                                                                                       nz
hl, soft_sprite_ram+<mark>0Bh</mark>
                                                                                                                                                                                                                                                                                        ; sprite #2, x coord
                                                                                                                                                      n1, sort_sprite_ram+UBn
c, 0PCh; '3'
38h
c, 81h; 'ŭ'
h1, soft_sprite_ram+9
sub_0_3096
h1, soft_sprite_ram+1Dh
sub_0_3096
                                                                                                                             1d
                                                                                                                             rst
ld
ld
                                                                                                                                                                                                                                                                                        ; sprite #2, flipy & code
```

call ld call

call and

ld xor 1d

ret ; End of function sub_0_306F

; SUBROUTINE SUBROUTINE

0000:3090 21 0000:3093 AE 0000:3094 77

0000:3095 C9 0000:3095 0000:3095

0000:3096

0000:3096

Rand 80h; 'C' hl, soft_sprite_ram+2Dh (hl)

(hl), a

```
0000:3096
 0000:3096
 0000:3096
0000:3096
0000:3096 06 02
0000:3096
                                                                                                                                                                 ; CODE XREF: sub_0_306F+13^p; sub_0_306F+19^p
                                         sub_0_3096:
                                                                        ld
                                                                                      b. 2
0000:3096
0000:3098
0000:3098
0000:3099 AP
0000:3099 AP
0000:3099 19
0000:309E CP
0000:309E CP
0000:309E
0000:309F
0000:309F
0000:309F
                                          loc_0_3098:
                                                                                                                                                                 ; CODE XREF: sub_0_3096+6|j
                                                                        ld
                                                                                      a, c
                                                                        xor
                                                                        1d
                                                                                       (hl), a
                                                                        add
                                                                                      hl, de
loc_0_3098
                                                                        djnz
                                                                        ret
                                          ; End of function sub_0_3096
                                                     SUBROUTINE
 0000:309F
0000:309F
0000:309F
                                                                                                                                                                 ; CODE XREF: sub_0_17B+3B<sup>†</sup>p; 0000:01F7<sup>†</sup>p ...
                                          sub_0_309F:
 0000:309F E5
 0000:309F
0000:309F
0000:30A0 21 C0 60
0000:30A3 3A B0 60
0000:30A6 6F
                                                                       push
1d
1d
1d
                                                                                      hl, fg_vector_fn_params
                                                                                      a, (unk_0_60B0)
1, a
7, (h1)
z, loc_0_30BB
 0000:30A6 6F
0000:30A7 CB 7E
0000:30A9 CA BB 30
0000:30AC 72
0000:30AD 2C
0000:30AE 73
0000:30AF 2C
0000:30BO 7D
                                                                       bit
jp
ld
inc
                                                                                      (hl), d
                                                                        ld
                                                                                       (hl), e
                                                                        inc
ld
                                                                                      1
a, 1
 0000:30B1 FE C0
0000:30B3 D2 B8 30
0000:30B6 3E C0
0000:30B8
                                                                                      0C0h ; L
                                                                        cp
jp
ld
                                                                                      nc, loc_0_30B8
a, 0C0h; 'L'
0000:30B8
0000:30B8
0000:30B8
0000:30BB
0000:30BB
0000:30BB E1
0000:30BC
0000:30BC
0000:30BC
0000:30BC
0000:30BD
0000:30BD
                                          loc_0_30B8:
                                                                                                                                                                 ; CODE XREF: sub_0_309F+14 j
                                                                        ld
                                                                                      (unk_0_60B0), a
                                                                                                                                                                 ; CODE XREF: sub 0 309F+A1i
                                          loc 0 30BB:
                                                                       pop
ret
                                                                                      h1
                                          ; End of function sub_0_309F
                                                                      SUBROUTINE
 0000:30BD
 0000:30BD
                                                                                                                                                                 ; CODE XREF: 0000:12A3<sup>p</sup>; 0000:1615<sup>p</sup>
 0000:30BD
0000:30BD 21 50 69
                                          sub_0_30BD:
0000:30BD 21
0000:30BD
0000:30C0 06 02
0000:30C2 CD E4 30
0000:30C5 2E 80
0000:30C7 06 0A
                                                                                      hl, soft_sprite_ram+50h b. 2
                                                                        ld
                                                                       ld
call
ld
                                                                                      sub_0_30E4
                                                                                      1, 80h; 'Ç
b, 0Ah
 0000:30C7 06 0A
0000:30C9 CD E4 30
0000:30CC 2E B8
0000:30CE 06 0B
                                                                        1d
                                                                       call
ld
ld
                                                                                       sub_0_30E4
                                                                                      1, 0B8h ;
b, 0Bh
 0000:30D0 CD E4 30
0000:30D3 21 0C 6A
0000:30D6 06 05
0000:30D8 C3 E4 30
0000:30D8
                                                                       call
ld
ld
                                                                                      sub_0_30E4
hl, soft_sprite_ram+10Ch
b, 5
                                                                                      sub_0_30E4
                                                                        jр
                                          ; End of function sub 0 30BD
 0000:30D8
0000:30DB
0000:30DB
0000:30DB
0000:30DB
0000:30DB
0000:30DB
0000:30DB 21 4C 69
0000:30DB 25 58
0000:30E0 2E 58
0000:30E2 06 06
                                                                      SUBROUTINE
                                          sub_0_30DB:
                                                                                                                                                                ; CODE XREF: 0000:12DF1p
                                                                                      hl, soft_sprite_ram+4Ch (hl), 0
1, 58h; 'X'
                                                                        ld
                                                                       ld
ld
                                                                        ld
                                                                                      b,
 0000:30E2
0000:30E2
0000:30E2
0000:30E4
                                          ; End of function sub_0_30DB
                                                     SUBROUTINE
 0000:30E4
0000:30E4
0000:30E4
0000:30E4
7D
                                                                                                                                                                 ; CODE XREF: sub_0_30BD+5<sup>†</sup>p; sub_0_30BD+C<sup>†</sup>p ...
                                          sub_0_30E4:
 0000:30E4
0000:30E5
0000:30E5
                                                                       ld
                                                                                      a, 1
                                                                                                                                                                 ; CODE XREF: sub_0_30E4+6|j
                                          loc 0 30E5:
0000:30E5
0000:30E5 36 00
0000:30E7 C6 04
0000:30E9 6F
0000:30EA 10 F9
0000:30EC C9
0000:30EC
0000:30EC
                                                                        ld
                                                                                      (hl), 0
                                                                       add
ld
                                                                                      a, 4
1, a
                                                                                      loc 0 30E5
                                                                       djnz
                                          ; End of function sub_0_30E4
 0000:30ED
0000:30ED
0000:30ED
0000:30ED
                                                                      SUBROUTINE
                                          sub 0 30ED:
                                                                                                                                                                 ; CODE XREF: 0000:198C1p
0000:30ED CD FA 30 0000:30FD CD FA 31 0000:30F3 CD B1 31 0000:30F5 CD F3 34 0000:30F9 C9 0000:30F9 0000:30F9 0000:30FA
                                                                                      sub_0_30FA
sub_0_313C
sub_0_31B1
                                                                        call
                                                                       call
                                                                                                                                                                 ; spawn fireballs?
; process fireball AI?
; add fireballs to sprite display
                                                                        call
                                                                                      sub 0 34F3
                                          ret
; End of function sub_0_30ED
 0000:30FA
0000:30FA
                                                                     SUBROUTINE
 0000:30FA
 0000:30FA
                                          sub 0 30FA:
                                                                                                                                                                 ; CODE XREF: sub 0 30EDîp
                                                                                      a, (unk_0_6380)
 0000:30FA 3A 80 63
0000:30FD FE 06
0000:30FF 38 02
0000:3101 3E 05
                                                                        ld
                                                                        ср
                                                                                      c, loc_0_3103
a, 5
 0000:3101
0000:3103
0000:3103
                                                                        ĺd
                                                                                                                                                                 ; CODE XREF: sub_0_30FA+5<sup>†</sup>j
                                          loc_0_3103:
 0000:3103 EF
                                                                       rst
                                                                                      28h
                                                                                                                                                                 ; go!
 0000:3103
```

```
0000:3104 10 31
                                                                            .dw loc_0_3110
                                                                                                                                                                           ; Jump table
                                                                            .dw loc_0_3110
.dw loc_0_311B
.dw loc_0_3126
.dw loc_0_3126
 0000:3106 10 31
0000:3108 1B 31
0000:310A 26 31
0000:310C 26 31
0000:3110
0000:3110
0000:3110
0000:3110
 0000:3106 10 31
                                                                             .dw loc 0 3131
                                            loc_0_3110:
                                                                                                                                                                           ; DATA XREF: sub_0_30FA+A↑o
0000:3110
0000:3110
0000:3110
0000:3113 E6 01
0000:3115 FE 01
0000:3117 C8
0000:3118 33
0000:3119 33
0000:311A C9
                                                                                                                                                                           ; sub_0_30FA+C1o
                                                                                           a, (gen_purpose_timer)
1
1
                                                                           ld
and
                                                                            ср
                                                                                           sp
                                                                            ret
 0000:311B
0000:311B
0000:311B
                                            loc_0_311B:
                                                                                                                                                                          ; DATA XREF: sub_0_30FA+E<sup>†</sup>o
                                                                                           a, (gen_purpose_timer)
7
 0000:311B 3A 1A 60
0000:311E E6 07
0000:3120 FE 05
0000:3122 F8
                                                                            1d
                                                                            and
                                                                            ср
                                                                            ret
                                                                                           m
                                                                                           sp
 0000:3123 33
                                                                            inc
 0000:3123 33
0000:3124 33
0000:3125 C9
0000:3126
0000:3126
0000:3126
0000:3126 3A 1A 60
                                                                            inc
                                                                                                                                                                           ; DATA XREF: sub_0_30FA+10\uparrowo ; sub_0_30FA+12\uparrowo
                                            loc_0_3126:
0000:3126 3A IA 60
0000:3129 E6 03
0000:3129 FE 03
0000:312B FE 03
0000:312B 33
0000:312C 33
0000:3131 C9
0000:3131
0000:3131
0000:3131
0000:3131 3A IA 60
0000:3134 E6 07
0000:3136 FE 07
0000:3138 F8
0000:3139 33
0000:3139 33
                                                                            ld
                                                                                           a, (gen_purpose_timer)
                                                                           and
cp
ret
                                                                                           m
                                                                            inc
                                                                                           sp
                                                                            inc
                                            loc_0_3131:
                                                                                           a, (gen_purpose_timer)
7
                                                                                                                                                                          ; DATA XREF: sub_0_30FA+14\daggered o
                                                                            ld
                                                                            and
                                                                            cp
ret
inc
                                                                                           m
sp
                                                                            inc
                                                                                           sp
 0000:313B C9
                                                                            ret
 0000:313B
0000:313B
0000:313C
0000:313C
0000:313C
0000:313C
                                            ; End of function sub_0_30FA
                                                            SUBROUTINE
                                                                                                                                                                           ; CODE XREF: sub_0_30ED+3\u00f1p
; fireball character data
 0000:3130
                                            sub_0_313C:
 0000:313C DD 21 00 64
0000:3140 AF
0000:3141 32 A1 63
0000:3144 06 05
0000:3146 11 20 00
0000:3149
                                                                            1d
                                                                                           ix, unk_0_6400
                                                                            xor
ld
                                                                                            a (unk_0_63A1), a
                                                                            1d
                                                                                           b, 5
de, 20h; ''
                                            loc 0 3149:
                                                                                                                                                                          ; CODE XREF: sub 0 313C+30-j
  0000:3149
 0000:3149 DD 7E 00
                                                                            ld
                                                                                           a, (ix+0)
0000:3149 DD 7E 00
0000:314C FE 00
0000:314E CA 7C 31
0000:3151 3A A1 63
0000:3155 32 A1 63
0000:3158 3E 01
0000:315B 3A 17 62
0000:315D 3A 17 62
0000:315C FE 01
0000:315C C2 6A 31
                                                                            ср
                                                                                           z, loc_0_317C
                                                                            jp
ld
inc
                                                                                           a, (unk_0_63A1)
                                                                            ld
ld
                                                                                            (unk_0_63A1), a
                                                                                           a, 1
(ix+8),
                                                                            ld
                                                                                           a, (unk_0_6217)
                                                                            ld
cp
                                                                                           nz, loc_0_316A
                                                                            jp
ld
 0000:3165 3E 00
0000:3167 DD 77 08
0000:316A
                                                                                            (ix+8), a
                                                                            ld
                                                                                                                                                                          ; CODE XREF: sub_0_313C+26<sup>†</sup>j; sub_0_313C+45<sup>†</sup>j ...
                                            loc 0 316A:
  0000:316A
 0000:316A DD 19
                                                                           add
djnz
                                                                                           ix, de
loc_0_3149
 0000:316E 21 A0 63
0000:3171 36 00
0000:3173 3A A1 63
0000:3176 FE 00
                                                                                           hl, unk_0_63A0 (hl), 0
                                                                            1d
                                                                                           a, (unk_0_63A1)
                                                                            ld
                                                                            ld
                                                                            ср
 0000:3178 C0
0000:3179 33
0000:317A 33
                                                                            ret
                                                                                           nz
                                                                                           sp
sp
 0000:317B C9
0000:317C
                                                                            ret
 0000:317C
0000:317C
0000:317C
                                            loc_0_317C:
                                                                                                                                                                           ; CODE XREF: sub_0_313C+12<sup>†</sup>j
                                                                                           a, (unk_0_63A1)
                    3A A1 63
                                                                            ld
 0000:317F FE 05
0000:3181 CA 6A 31
0000:3184 3A 27 62
0000:3187 FE 02
                                                                            cp
jp
ld
                                                                                           z, loc_0_316A
                                                                                           a, (level_type)
                                                                                                                                                                           ; cement level?
                                                                           cp
jp
ld
ld
 0000:3189 C2 95 31
0000:318C 3A A1 63
0000:318E 4F
                                                                                           nz, loc_0_3195
a, (unk_0_63A1)
                                                                                                                                                                          ; no, continue
; cement level timers
 0000:3190 3A 80 63
                                                                            ld
                                                                                           a. (unk 0 6380)
 0000:3190 3A
0000:3193 B9
0000:3194 C8
0000:3195
0000:3195
0000:3195
0000:3195
0000:3195
0000:3198 FE 01
0000:319A C2 6A 31
0000:319D DD 77 00
0000:31AO DD 77 18
                                                                                                                                                                           ; CODE XREF: sub 0 313C+4D1 i
                                            loc 0 3195:
                                                                                           a, (unk_0_63A0)
                                                                           ld
cp
                                                                                                                                                                           ; spawn a fireball
                                                                                           nz, loc_0_316A
(ix+0), a
(ix+18h), a
                                                                            jp
ld
                                                                            ld
                                                                            XOI
 0000:31A4 32 A0 63
0000:31A7 3A A1 63
0000:31AA 3C
0000:31AB 32 A1 63
                                                                                            (unk 0 63A0)
                                                                            ld
                                                                                            a, (unk_0_63A1)
                                                                            ld
                                                                           inc
ld
                                                                                             unk_0_63A1), a
                                            jp loc_0_316A
; End of function sub_0_313C
 0000:31AE C3 6A 31
 0000:31AE
```

```
0000:31AE
 0000:31B1
0000:31B1
0000:31B1
0000:31B1
                                                                  ; SUBROUTINE
0000:31B1
0000:31B1 CD DD 31
0000:31B4 AF
0000:31B5 32 A2 63
0000:31B8 21 E0 63
0000:31BB 22 C8 63
0000:31BE
                                                                                                                                                                                                                                                             ; CODE XREF: sub 0 30ED+6 p
                                                                 sub_0_31B1:
                                                                                                                call
                                                                                                                                       sub_0_31DD
                                                                                                                xor
ld
                                                                                                                                      \unk_0_63A2), a
hl, unk_0_63E0
(unk_0_63C8), hl
                                                                                                                ld
                                                                                                                ld
                                                                  loc_0_31BE:
                                                                                                                                                                                                                                                            ; CODE XREF: sub_0_31B1+28|j
 0000:31BE 2A C8 63
0000:31C1 01 20 00
0000:31C4 09
0000:31C5 22 C8 63
                                                                                                                ld
ld
add
ld
                                                                                                                                       hl, (unk_0_63C8)
bc, 20h; 'hl, bc
(unk_0_63C8), hl
 0000:31C8 7E
0000:31C9 A7
0000:31CA CA DO 31
0000:31CD CD 02 32
                                                                                                                ld
and
                                                                                                                                       a, (hl)
a
                                                                                                                                        z, loc_0_31D0
                                                                                                                jр
0000:31CD CD 02 32
0000:31D0
0000:31D0 3A A2 63
0000:31D3 3C
0000:31D3 3C
0000:31D4 32 A2 63
0000:31D7 F0 05
0000:31D7 CD BE 31
0000:31DC CD
0000:31DC CD
0000:31DC
0000:31DD 0000:31DD
                                                                                                                call
                                                                                                                                       sub_0_3202
                                                                 loc_0_31D0:
                                                                                                                                                                                                                                                            ; CODE XREF: sub_0_31B1+19<sup>†</sup>j
                                                                                                                ld
                                                                                                                                       a, (unk 0 63A2)
                                                                                                                inc
                                                                                                                ld
                                                                                                                                         (unk_0_63A2), a
                                                                                                                ср
                                                                                                                                       nz, loc_0_31BE
                                                                                                                jp
                                                                  ; End of function sub_0_31B1
 0000:31DD
0000:31DD
0000:31DD
0000:31DD
                                                                                                           SUBROUTINE
0000:31DD 3A 80 63 0000:31ED FE 03 0000:31EZ F8 0000:31E3 CD F6 31 0000:31E8 C0 0000:31E8 C0 0000:31EC 3E 02 0000:31EC 77 0000:31EC 77 0000:31EC 77 04 0000:31E7 21 79 64 0000:31E7 27 07 0000:31E7 27 0000:31E7 27 07 0000:31E7 27 0000:31E7 0000:31E7 27 0000:31E7 0000:31E7 27 0000:31E7 0000:31E7 27 0000:31E7 27
                                                                                                                                                                                                                                                             ; CODE XREF: sub 0 31B1 p
                                                                  sub 0 31DD:
                                                                                                                                       a, (unk_0_6380)
                                                                                                                1d
                                                                                                                ср
                                                                                                                ret
                                                                                                                call
                                                                                                                                       sub 0 31F6
                                                                                                                cp
ret
ld
ld
                                                                                                                                       hl, unk 0 6439
                                                                                                                                       a, 2
(h1), a
h1, unk_0_6479
a, 2
                                                                                                                ld
ld
                                                                                                                ld
                                                                                                                                       a, 2
(hl), a
                                                                                                                14
 0000:31F4 77
0000:31F5 C9
0000:31F5
0000:31F5
                                                                                                                ret
                                                                  ; End of function sub_0_31DD
 0000:31F6
0000:31F6
0000:31F6
                                                                                                              SUBROUTINE
 0000:31F6
 0000:31F6
0000:31F6
0000:31F6 3A 18 60
0000:31F9 E6 03
                                                                 sub_0_31F6:
                                                                                                                                                                                                                                                             ; CODE XREF: sub_0_31DD+6 p
                                                                                                                ld
                                                                                                                                       a, (random_no)
                                                                                                                and
 0000:31FB FE 01
0000:31FD C0
0000:31FE 3A 1A
0000:3201 C9
                                                                                                                cp
ret
ld
                                     1A 60
                                                                                                                                       a, (gen_purpose_timer)
                                                                                                                ret
 0000:3201
                                                                  ; End of function sub 0 31F6
 0000:3202
0000:3202
0000:3202
0000:3202
                                                                                                           SUBROUTINE
                                                                sub_0_3202:
                                                                                                                                                                                                                                                             ; CODE XREF: sub_0_31B1+1C\p
0000:3202 DD 2A C8 63
0000:3206 DD 7E 18
0000:3206 ED 07
0000:3208 CA 7A 32
0000:320B CA 7A 32
0000:3211 FE 04
0000:3213 F2 30 32
0000:3216 DD 7E 19
                                                                                                                                       ix, (unk_0_63C8)
a, (ix+18h)
1
                                                                                                                ld
                                                                                                                ld
cp
                                                                                                                                       z, loc_0_327A
                                                                                                                jp
ld
                                                                                                                                       a, (ix+0Dh)
                                                                                                                cp
jp
ld
                                                                                                                                       p, loc_0_3230
a, (ix+19h)
0000:3216 DD 7E 19
0000:3219 FE 02
0000:321B CA 7E 32
0000:321E CD 0F 33
0000:3221 3A 18 60
0000:3224 E6 03
0000:3226 C2 33 32
0000:3229
                                                                                                                cp
jp
call
                                                                                                                                       z, loc_0_327E
sub_0_330F
                                                                                                                                       a, (random_no)
                                                                                                                 and
                                                                                                                jр
                                                                                                                                       nz, loc_0_3233
                                                                                                                                                                                                                                                            ; CODE XREF: sub 0 3202+7F-i
 0000:3229
                                                                 loc 0 3229:
                                                                                                                                       a, (ix+ODh)
 0000:3229 DD 7E 0D
0000:322C A7
                                                                                                                ld
and
 0000:322D CA 57 32
0000:3230
                                                                                                                                       z, loc 0 3257
                                                                                                                jр
 0000:3230
0000:3230 CD 3D 33
0000:3233
                                                                 loc_0_3230:
                                                                                                                                                                                                                                                             ; CODE XREF: sub_0_3202+11 j
                                                                                                               call
                                                                                                                                       sub_0_333D
 0000:3233
                                                                loc_0_3233:
                                                                                                                                                                                                                                                            ; CODE XREF: sub 0 3202+241 j
 0000:3233 DD 7E 0D
0000:3236 FE 04
                                                                                                                                       a, (ix+ODh)
                                                                                                                ld
 0000:3233 EB 7E 0D
0000:3236 FE 04
0000:3238 F2 91 32
                                                                                                                ср
                                                                                                                                       p, loc_0_3291
                                                                                                                jp
call
call
 0000:323B CD AD 33
0000:323E CD 8C 29
0000:3241 FE 01
                                                                                                                                       sub_0_33AD
sub_0_298C
                                                                                                                cp
jp
ld
ld
0000:3241 FE 01
0000:3243 CA 97 32
0000:3246 DD 2A C8 63
0000:324A DD 7E 0E
0000:324F DA 8C 32
                                                                                                                                       z, loc_0_3297
ix, (unk_0_63C8)
a, (ix+0Eh)
10h
                                                                                                                cp
jp
                                                                                                                                             , loc_0_328C
 0000:3252 FE F0
0000:3254 D2 84 32
                                                                                                                                       OFOh ; '-'
nc, loc_0_3284
                                                                                                                ср
jp
 0000:3257
              :3257 DD 7E 13
                                                                                                                                                                                                                                                             ; CODE XREF: sub_0_3202+2B^{\dagger}j; sub_0_3202+87^{\dagger}j ...
 0000:3257
                                                                loc 0 3257:
                                                                                                                                      a, (ix+13h)
                                                                                                                ld
 0000:325A FE 00
                                                                                                                cp
jp
ld
 0000:325C
0000:325F
0000:3261
                             C2 B9 32
3E 11
                                                                                                                                       nz, loc_0_32B9
a, 11h
                                                                 loc 0 3261:
                                                                                                                                                                                                                                                            ; CODE XREF: sub 0 3202+B8-1
 0000:3261 DD 77 13
                                                                                                               1d
                                                                                                                                       (ix+13h), a
```

```
0000:32D6 DD 7E 10
0000:32D9 FE 00
0000:32DB C2 FD 32
0000:32DE DD 7E 1D
0000:32E1 FE 01
0000:32E3 C2 0B 33
0000:32E6 DD 36 1D 00
0000:32EA 3A 05 62
                                                                   cp
jp
ld
                                                                                 a, (ix+1Dh)
                                                                   cp
jp
ld
ld
ld
                                                                                  nz, loc_0_330B
                                                                                 (ix+1Dh), 0
a, (mario_x_coord)
b, (ix+0Fh)
0000:32ED DD 46 0F
0000:32F0 90
0000:32F1 DA 03 33
0000:32F4 DD 36 1C FF
                                                                   sub
jp
ld
                                                                                     loc_0_3303
                                                                                 (ix+1Ch), 0FFh
0000:32F8
0000:32F8
0000:32F8 DD 36 0D 00
                                      loc_0_32F8:
                                                                                                                                                         ; CODE XREF: sub_0_32D6+2A|j
                                                                   ld
                                                                                 (ix+0Dh), 0
0000:32FC C9
                                                                   ret
0000:32FD
0000:32FD
0000:32FD
                                      loc_0_32FD:
                                                                                                                                                         ; CODE XREF: sub_0_32D6+5<sup>†</sup>j
0000:32FD DD 35 1C
                                                                                  (ix+1Ch)
0000:3300 C2 F8 32
                                                                                  nz, loc_0_32F8
```

```
; CODE XREF: sub 0 32D6+1B1i
0000:3303
                                            loc 0 3303:
0000:3303 DD 36 19 00
0000:3307 DD 36 1C 00
0000:3308
                                                                                          (ix+19h), 0
(ix+1Ch), 0
                                                                                                                                                                           ; CODE XREF: sub 0 32D6+D17
                                            loc_0_330B:
0000:330B
0000:330B CD 0F 33
0000:330E C9
0000:330E
                                                                            call
                                                                                        sub_0_330F
                                            ret; End of function sub_0_32D6
0000:330E
0000:330F
0000:330F
0000:330F
                                                                          SUBROUTINE
0000:330F
0000:330F
0000:330F
0000:330F DD 7E 16
0000:330F
                                                                                                                                                                              ; CODE XREF: sub_0_3202+1C^p; sub_0_3206+35^p
                                            sub_0_330F:
                                                                                            a, (ix+16h)
0000:330F FE 00 0000:3312 FE 00 0000:3312 FE 00 0000:3317 DD 36 16 2B 0000:3318 JA 18 60 0000:3322 0F 0000:3326 DD 7E 0D 0000:3326 DD 36 0D 01 0000:3322 DD 36 DD 01 0000:3322 DD 36 DD 01 0000:3332 0000:3332 0000:3332 0000:3332 0D 35 16 0000:3332 0D 35 16 0000:3335 C9
                                                                             ld
                                                                            cp
jp
ld
ld
ld
rrca
                                                                                            nz, loc_0_3332
                                                                                            (ix+16h), 2Bh; '+'
(ix+0Dh), 0
                                                                                            a, (random_no)
                                                                                            nc, loc_0_3332
a, (ix+0Dh)
                                                                             jp
ld
                                                                             ср
                                                                                             z, loc_0_3336
                                                                             jp
ld
                                                                                            (ix+0Dh), 1
                                                                                                                                                                              ; CODE XREF: sub_0_330F+5<sup>†</sup>j; sub_0_330F+14<sup>†</sup>j ...
                                            loc_0_3332:
                                                                                            (ix+16h)
0000:3332
0000:3335 C9
0000:3336
0000:3336
                                                                            ret
                                                                                                                                                                             ; CODE XREF: sub_0_330F+1C j
                                            loc_0_3336:
0000:3336 DD 36 0D 02
0000:333A C3 32 33
0000:333A
                                            ld (ix+0Dh),;
jp loc_0_3332; End of function sub_0_330F
0000:333A
0000:333D
0000:333D
0000:333D
                                                                         SUBROUTINE
0000:333D
0000:333D
0000:333D DD 7E 0D
0000:333D DD 7E 0D
0000:3340 FE 08
0000:3342 CA 71 33
0000:3347 CA 8A 33
0000:3347 CA 8A 33
0000:3340 DD 7E 0F
0000:3350 C6 08
0000:3355 DD 7E 0E
                                            sub_0_333D:
                                                                                                                                                                              ; CODE XREF: sub_0_3202+2E1p
                                                                             ld
                                                                                            a, (ix+ODh)
                                                                            cp
jp
cp
jp
call
ld
add
ld
ld
ld
call
                                                                                             z, loc_0_3371
                                                                                            4
z, loc_0_338A
sub_0_33A1
a, (ix+0Fh)
a, 8
d, a
a, (ix+0Eh)
bc, 15h
cx b0 236F
UUUU: 3352 57
0000: 3353 DD 7E 0E
0000: 3356 01 15 00
0000: 3359 CD 6E 23
0000: 335C A7
                                                                                            sub_0_236E
                                                                                            a
z, loc_0_3399
(ix+1Fh), b
a, (mario_x_coord)
b, a
0000:335D CA 99 33
0000:3360 DD 70 1F
0000:3363 3A 05 62
0000:3366 47
                                                                             jp
ld
ld
                                                                             ld
                                                                                             a, (ix+0Fh)
0000:3367 DD 7E 0F
                                                                             ld
0000:336A 90
0000:336B D0
                                                                            sub
ret
0000:336B DU
0000:336C DD 36 0D 04
0000:3370 C9
0000:3371
0000:3371
                                                                                            (ix+0Dh), 4
                                                                             1d
0000:3371
                                           loc_0_3371:
                                                                                                                                                                             ; CODE XREF: sub_0_333D+51j
0000:3371 DD 7E 0F
0000:3374 C6 08
0000:3376 DD 46 1F
                                                                             ld
                                                                                            a, (ix+0Fh)
                                                                            add
ld
                                                                                            a, 8
b, (ix+1Fh)
                                                                            cp
ret
ld
ld
0000:3379 B8
                                                                                            h
0000:3379 B8
0000:337A C0
0000:337B DD 36 0D 00
0000:337F DD 7E 19
0000:3382 FE 02
0000:3384 C0
0000:3385 DD 36 1D 01
0000:3389 C9
                                                                                             (ix+0Dh)
                                                                                            a, (ix+19h)
                                                                            cp
ret
ld
                                                                                            (ix+1Dh), 1
                                                                             ret
0000:338A
0000:338A
0000:338A
                                           loc_0_338A:
                                                                                                                                                                             ; CODE XREF: sub 0 333D+A1j
0000:338A DD 7E 0F
                                                                             ld
                                                                                            a. (ix+0Fh)
0000:338A DD 7E 0F
0000:338D C6 08
0000:338F DD 46 1F
0000:3392 B8
0000:3393 C0
0000:3394 DD 36 0D 00
0000:3398 C9
0000:3399
                                                                            add
ld
                                                                                            a, 8
b, (ix+1Fh)
                                                                             cp
ret
                                                                             ld
                                                                                             (ix+0Dh), 0
0000:3399
0000:3399
0000:3399 DD 70 1F
0000:3390 DD 36 0D 08
0000:33A0
0000:33A0
0000:33A0
                                            loc_0_3399:
                                                                                                                                                                           ; CODE XREF: sub_0_333D+20 j
                                                                                            (ix+0Dh), 8
                                                                            ld
                                            ret; End of function sub_0_333D
0000:33A1
0000:33A1
0000:33A1
0000:33A1
0000:33A1 3E 07
0000:33AA DD 7E 0F
0000:33AA DD 7E 0F
0000:33AA DD 7E 0F
0000:33AA 33
0000:33AB 33
0000:33AB 33
0000:33A1
                                            ; SUBROUTINE
                                            sub_0_33A1:
                                                                                                                                                                             ; CODE XREF: sub_0_333D+D1p
                                                                                            a, 7
30h
a, (ix+0Fh)
59h; 'Y'
                                                                            ld
rst
                                                                                                                                                                              ; return if level bit not set
                                                                             ld
                                                                             cp
ret
                                                                             inc
                                                                                             sp
                                                                             inc
                                                                                            sp
0000:33AC C9
0000:33AC
0000:33AC
                                            ; End of function sub_0_33A1
0000:33AD
                                            ; SUBROUTINE
0000:33AD
```

```
0000:33AD
0000:33AD
0000:33AD
0000:33AD DD 7E 0D
0000:33B0 FE 01
                                             sub_0_33AD:
                                                                                                                                                                             ; CODE XREF: sub_0_3202+391p
                                                                                            a, (ix+0Dh)
                                                                             ср
0000:33B0 FE 01
0000:33B2 CA D9 33
0000:33B5 DD 7E 07
0000:33B8 E6 7F
0000:33BA DD 77 07
0000:33BD DD 35 0E
                                                                             jp
ld
and
ld
                                                                                             z, loc_0_33D9
                                                                                             a, (ix+7)
7Fh;
(ix+7), a
                                                                                                                                                                              ; reset hflip
; sprite tile #
                                                                             dec
                                                                                             (ix+0Eh)
0000:33C0
0000:33C0
0000:33C0 CD 09 34
                                                                                                                                                                              ; CODE XREF: 0000:33E4|j
                                             loc_0_33C0:
                                                                             call
                                                                                             sub_0_3409
0000:33C0
0000:33C0
0000:33C3
0000:33C3
                                             ; End of function sub_0_33AD
                                                         SUBROUTINE ...
0000:33C3
0000:33C3
0000:33C3
0000:33C3 3A 27 62 0000:33C6 FE 01 0000:33C8 C0 0000:33CP DD 66 0E 0000:33CP DD 46 0D 0000:33CP DD 46 0D 0000:33D5 DD 75 0F 0000:33D8 C9 0000:33D8 0000:33D8 0000:33D8 0000:33D9
                                             sub_0_33C3:
                                                                                                                                                                              ; CODE XREF: sub_0_3202+A91p
                                                                             ld
                                                                                             a, (level_type)
                                                                             cp
ret
ld
ld
                                                                                             nz
                                                                                            nz
h, (ix+0Eh)
l, (ix+0Fh)
b, (ix+0Dh)
sub_0_2333
                                                                             ld
call
                                                                             ld
                                                                                             (ix+0Fh), 1
                                                                             ret
                                             ; End of function sub_0_33C3
                                             7 -
0000:33D9
0000:33D9
0000:33D9 DD 7E 07
0000:33D5 F6 80
0000:33DE DD 77 07
0000:33E1 DD 34 0E
0000:33E4 C3 C0 33
                                                                                                                                                                              ; CODE XREF: sub_0_33AD+5\frac{1}{j}
; sprite tile #
; set hflip
                                                                                            a, (ix+7)
80h; 'Ç'
(ix+7), a
(ix+0Eh)
                                             loc_0_33D9:
                                                                             ld
                                                                             or
                                                                             ld
inc
                                                                                             loc_0_33C0
                                                                             jр
0000:33E7
0000:33E7
0000:33E7
0000:33E7
                                                                            SUBROUTINE
0000:33E7
0000:33E7 CD 09 34
0000:33EA DD 7E 0D
0000:33EB DD 7E 08
0000:33EF CZ 05 34
0000:33F5 A7
0000:33F5 A7
0000:33F6 CZ 01 34
0000:33F9 DD 36 14 02
0000:33F0 DD 35 0F
0000:3400 C9
0000:3400 C9
                                                                                                                                                                              ; CODE XREF: sub_0_3202+8F1p
                                             sub_0_33E7:
                                                                             call
ld
                                                                                             sub_0_3409
a, (ix+0Dh)
                                                                             cp
jp
ld
                                                                                             nz. loc 0 3405
                                                                             and
                                                                             jp
ld
dec
ret
                                                                                             nz, loc_0_3401
                                                                                             (ix+14h),
(ix+0Fh)
0000:3401
0000:3401
0000:3401
0000:3401 DD 35 14
                                             loc_0_3401:
                                                                                                                                                                              ; CODE XREF: sub_0_33E7+F<sup>†</sup> j
                                                                                             (ix+14h)
0000:3404 C9
0000:3405
0000:3405
0000:3405
                                                                             ret
                                             loc 0 3405:
                                                                                                                                                                              ; CODE XREF: sub 0 33E7+81j
0000:3405 DD 34 0F
0000:3408 C9
0000:3408
0000:3408
0000:3409
0000:3409
0000:3409
0000:3409
0000:3409
                                                                             inc
                                                                                             (ix+0Fh)
                                             ret; End of function sub_0_33E7
                                                                            SUBROUTINE
0000:3409
0000:3409
0000:3409 DD 7E 15
0000:3409
                                                                                                                                                                              ; CODE XREF: sub_0_33AD+13<sup>†</sup>p
; sub_0_33E7<sup>†</sup>p
                                             sub_0_3409:
                                                                                             a, (ix+15h)
0000:3409
0000:340C A7
0000:340D C2 28 34
0000:3410 DD 36 15 02
0000:3411 DD 7E 07
0000:3411 E6 0F
0000:3411 F0 0F
0000:341E C0
0000:341E C0
0000:341E DD 7E 07
0000:342 EE 02
0000:3424 DD 77 07
0000:3428
                                                                             ld
                                                                             and
                                                                             jp
ld
                                                                                             nz, loc_0_3428
                                                                                             (ix+15h), 2
(ix+7)
                                                                                                                                                                              ; inc fireball animation
                                                                             inc
                                                                                            a, (ix+7)

OFh

OFh
                                                                             ld
and
                                                                                                                                                                              ; last animation frame?
                                                                             ср
                                                                             ret
                                                                                             nz
                                                                                                                                                                              ; no, return
                                                                                             a, (ix+7)
                                                                             ld
xor
                                                                                                                                                                              ; reset animation frame
                                                                                             (ix+7), a
                                                                             ld
                                                                             ret
0000:3428
0000:3428 DD 35 15
0000:342B C9
0000:342B
0000:342B
                                                                                                                                                                              ; CODE XREF: sub 0 3409+41 j
                                             loc_0_3428:
                                                                                             (ix+15h)
                                                                             dec
                                                                             ret
                                             ; End of function sub_0_3409
0000:342C
0000:342C
0000:342C
0000:342C
                                                                          SUBROUTINE
0000:342C

0000:342C DD 6E 1A

0000:342F DD 66 1B

0000:3432 AF

0000:3433 01 00 00

0000:3436 ED 4A

0000:3438 C2 42 34

0000:3438 C2 42 34

0000:3438 DD 36 03 26

0000:3442
                                             sub_0_342C:
                                                                                                                                                                              ; CODE XREF: sub_0_32BD+111p
                                                                                            l, (ix+1Ah)
h, (ix+1Bh)
                                                                             ld
ld
                                                                             xor
                                                                                            bc, 0
hl, bc
nz, loc_0_3442
hl, fireball_bounce_data
                                                                             ld
ado
                                                                             jp
ld
                                                                             ld
                                                                                             (ix+3), 26h;
0000:3442
0000:3442 DD 34 03
0000:3445
0000:3445
                                                                                                                                                                             ; CODE XREF: sub 0 342C+C1 j
                                            loc 0 3442:
                                                                             inc
                                                                                             (ix+3)
                                                                                                                                                                             ; CODE XREF: sub_0_3478+2D|j; sub_0_3478+3E|j
                                             loc_0_3445:
0000:3445 7E
0000:3445
0000:3446 FE AA
0000:3448 CA 56 34
0000:344B DD 77 05
                                                                                             a, (h1)

0AAh; '¬'

z, loc_0_3456

(ix+5), a
                                                                             ld
                                                                             ср
                                                                             jp
ld
0000:344E 23
```

hl, unk_0_6400 de, soft_sprite_ram+0D0h b, 5

z, loc_0_351E

(hl) a, (hl)
(de), a
a, 4
a, 1

a, (hl)

; CODE XREF: sub_0_34F3+28 | j

; fireball X coordinate

ld ld

ld and

jp inc inc

ld

1d add

loc_0_34FB:

0000:34FD CA 1E 35 0000:3500 2C 0000:3501 2C

0000:3502 2C 0000:3503 7E 0000:3504 12

0000:3505 3E 04 0000:3507 85

0000:3673 0000:3675 0000:3677

0000:3679 66 0000:367B 88 0000:367D 9E

0000:367F B6

0000:3681 D2 37

44 61

.dw

.dw 6166h .dw 6188h .dw aRANK_SCORE_NAME

.dw 6144h

.dw aINSERT_COIN

.dw aYOUR NAME WAS REGISTERED

```
.dw byte_0_3EFF+1 .dw byte_0_3F09 .db 96h, 76h, 17h, 11h, 1Dh, 15h, 10h, 10h, 1Fh, 26h, 15h ; DATA XREF: 0000:364B†o
                                                                             .db 22h, 3Fh
.db 94h, 76h, 20h, 1Ch, 11h, 29h, 15h, 22h, 10h, 30h, 32h
; DATA XREF: 0000:364F†o
                                                                            .db 31h, 3Fh
.db 94h, 76h, 20h, 1Ch, 11h, 29h, 15h, 22h, 10h, 30h, 33h
; DATA XRI
    0000:36A5 94 76
                                   20 1C+aPLAYER :
    0000:36A5 11 29
0000:36A5 10 30
                                   15 22+
33 31+
                                                                                                                                                                               DATA XREF: 0000:3651 o
                                                                             .db 31h, 3Fh
                                   18 19+aHIGH_SCORE:
10 23+
    0000:36B2 80 76 18 19+aHIGH_SCOF
0000:36B2 17 18 10 23+
0000:36B2 13 1F 22 15+
0000:36BF 9F 75 13 22+aCREDIT:
                                                                              .db 80h, 76h, 18h, 19h, 17h, 18h, 10h, 23h, 13h, 1Fh,
                                                                                                                                                                               DATA XREF: 0000:365310
                                                                              .db 15h, 3Fh
                                                                              .db 9Fh, 75h, 13h, 22h, 15h, 14h, 19h, 24h, 10h, 10h, 10h
    0000:36BF 15 14 19 24+
                                                                                                                                                                             ; DATA XREF: 0000:3655 o
                                                                                db 10h
                                        0000:36CC 27 10
                                   18 19+
                                        13+ ...db 13h, 11h, 1Eh, 10h, 29h, 1Fh, 25h, 10h, 17h, 15h, 24h
29+ ...db 10h, 0FBh, 10h, 3Fh
1E+aONLY_1_PLAYER_BUTTON:.db 29h, 77h, 1Fh, 1Eh, 1Ch, 29h, 10h, 1, 10h, 20h,
                                   10 13+
    0000:36CC 17 16
0000:36CC 11 1E
0000:36E6 29 77
                                                                                                                                                                                DATA XREF: 0000:365D1o
    0000:36E6 1C 29 10 01+
                                                                               .db 11h, 29h, 15h, 22h, 10h, 12h, 25h, 24h, 24h, 1Fh, 1Eh
                                        01
    0000:36FD 1F 22 10 02+
0000:36FD 10 20 1C 11+
0000:36FD 29 15 22 23+
0000:3715 27 76 20 25+aPUSH:
                                                                             db 11h, 29h, 15h, 22h, 23h, 10h, 12h, 25h, 24h, 24h, 1Fh
db 1Eh, 3Fh
db 27h, 76h, 20h, 25h, 23h, 18h, 3Fh
                                                                                                                                                                         ; DATA XREF: 0000:3663†o
                                  10 22+ 70 DATA XREF: 0000:36650
    0000:371C 06 77
                                                                             0000:371C 06 77
0000:371C 1D 15
0000:371C 15 17
0000:3730 88 76
                                  19 23+
1E 11+aNAME:
  ; DATA XREF: 0000:3669|0 ; DATA XREF: 0000:3668|0 ; DATA XREF: 0000:3668|0 ; DATA XREF: 0000:3668|0 ; DATA XREF: 0000:3668|0 ; DATA XREF: 0000:3669|0 ; DATA XREF: 00000:3669|0 ; DATA XREF: 000
    0000:3738 E9 75 2D 2D+a???:
0000:3738 2D 10 10 10+
0000:3738 10 10 10 10+
    0000:37B6 72 77
0000:37B8 29 1F 25 22+
0000:37B8 10 1E 11 1D+
0000:37B8 15 10 27 11+
                                                                            db 29h, 1Fh, 25h, 22h, 10h, 1Eh, 11h, 1Dh, 15h, 10h, 27h, db 11h, 23h, 10h, 22h, 15h, 17h, 19h, 23h, 24h, 15h, 22h, db 15h, 14h, 42h, 3Fh
    0000:37D2 A7 76 aINSERT_COIN:
0000:37D4 19 1E 23 15+
0000:37D4 22 24 10 13+
0000:37E1 0A 77 aPLAYER_COIN:
                                                                               .dw VRAM_start+2A7h ; DATA XREF: 0000:3681\u00e90 .db 19h, 1Eh, 23h, 15h, 22h, 24h, 10h, 13h, 1Fh, 19h, 1Eh .db 10h, 3Fh
    0000:37E1 0A 77 aPLAYER_COIN: 0000:37E3 10 10 20 1C+
                                                                               .dw VRAM_start+30Ah
                                                                                                                                                                               DATA XREF: 0000:368310
                                                                               .db 10h, 10h, 20h, 1Ch, 11h, 29h, 15h, 22h, 10h, 10h, 10h
.db 10h, 13h, 1Fh, 19h, 1Eh, 3Fh
.dw VRAM_start+2FCh
    0000:37E3 11 29 15 22+
0000:37F4 FC 76
0000:37F4 FC 70
0000:37F6 49 4A 10 1E+a_NINTENDO:
0000:37F6 19 1E 24 15+
                                                                              db 49h, 4Ah, 10h, 1Eh, 19h, 1Eh, 24h, 15h, 1Eh, 14h, 1Fh db 10h, 10h, 10h, 10h, 3Fh
                                  08 01+ .db 1, 9, 8, 1, 3Fh
38 68+draw_data_climb:.db 2, 97h, 38h, 68h, 38h, 2, 0DFh, 54h, 10h, 54h, 2, 0EFh
; DATA XREF: 0000:0A9210
                                                                                                                                                                            ; DATA XREF: 0000:064D1o
                                                                                                                                                                            ; DATA XREF: animate_kong_and_pauline+74↑o; 0000:0B1E↑o ...
    ; DATA XREF: 0000:0AC0†o
    0000:388C
0000:3890
0000:3890
0000:3894
53
32
08
40
                                                                                                                                                                            ; 0000:168B1o
                                                                             .db 0, 35h, 8, 3Ch
.db 53h, 32h, 8, 40h
.db 63h, 33h, 8, 40h
.db 0, 70h, 8, 48h
.db 53h, 36h, 8, 50h
.db 63h, 37h, 8, 50h
.db 6Bh, 31h, 8, 41h
.db 0, 70h, 8, 48h
.db 6Ah, 14h, 0Ah, 4
    0000:3898 63 33 08 40 0000:389C 00 70 08 48
    0000:38A4 63
    0000:38A8 6B 31 08 41
    0000:38B4 FD FD FD FD+dk_intro_jump_up_data:.db 0FDh, 0FDh, 0FDh, 0FDh, 0FDh, 0FDh, 0FDh, 0FEh,
    0000:38B4 FD FD FD FE+
                                                                                                                                                                               DATA XREF: 0000:0AA910
     0000:38B4 FE FE FE FE+
0000:38B4 FE FF FF FF+
                                                                              .db 0FEh, 0FEh, 0FEh, 0FFh, 0FFh, 0FFh, 0FFh, 0 .db 0, 1, 1, 1, 7Fh
    0000:38CB FF 00 FF 00+
0000:38CB 00 01 00 01+
0000:38CB 01 01 01 01+
0000:38CB 04 7-
                                                                                                                                                                            ; DATA XREF: ; 0000:0B8610
                                        01+ .db 1, 1, 1, 1, 1, 7Fh
10+draw_data_bend_girders_2:.db 4, 7Fh, 0F0h, 10h, 0F0h, 2, 0DFh, 0F2h, 70h, 0F8h
                                                                                                                                                                              ; DATA XREF: 0000:0B911o
    0000:38DC F0 02 DF F2+
```

```
File: E:\Projects\pace\pacedev.net\sw\re\platform\dkong\dkong.lst 21/11/2013, 11:26:09 PM
 0000:3932 3B AE 08 4C+
0000:3932 3B AF 08 3C+
0000:3932 4B BO 07 3C+
 0000:39AA FE FE FE FF+
0000:39AA FF 00 FF 00+
0000:39AA 00 01 00 01+
                                                                                                                                                                                                                                                                                          ; DATA XREF: sub_0_2E04+98\u00f30
; sub_0_2E04+C4\u00f30
  0000:39AA 00 01 00 01+ .db 0, 0FFh, 0, 0, 1, 0, 1, 1, 2, 2, 2, 2, 3, 3, 0000:39C3 1E 4E BB 4C+barell_rolling_data:.db 1Eh, 4Eh, 0BBh, 4Ch, 0D8h, 4Eh, 59h, 4Eh,
                                                                                                                                                                                                                                                                                            3, 7Fh
, 7Fh
  0000:39C3 D8 4E 59 4E+
0000:39CC BB 4D 7F barrel_falling_data:.db 0BBh, 4Dh, 7Fh
0000:39CF 47 27 08 50 dk_thrash_right_spr:.db 47h, 27h, 8, 50h
                                                                                                                                                                                                                                                                                              DATA XREF: sub_0_2C8F+FD10
DATA XREF: sub_0_2C8F+F410
DATA XREF: animate_kong_and_pauline+4310
0000:39CF
                                                                                                                                                                                                                                                                                          : 0000:081610
                                                                                                                                                                                                                                                                                       ; DATA XREF: animate_kong_and_pauline+4A<sup>†</sup>o
                                                                                                                                                                                                                                                                                    ; DATA XREF: 0000:1870↑o
 ; DATA XREF: 0000:17D9\u00f30
; DATA XREF: 0000:17E5\u00f30
; DATA XREF: 0000:17F1\u00f30
; DATA XREF: 0000:17FD\u00f30
                                                                                                                                                                                                                                                                                          ; DATA XREF: 0000:18A510
                                                                                                                                                                                                                                                                                              DATA XREF: 0000:095F10
DATA XREF: 0000:179910
                                                                                                                                                                                                                                                                                            ; 0000:1947†o
  0000:SA7A FF 00 FF FF+fireball_bouncing_data:.db 0FFh, 0, 0FFh, 0FFh, 0FEh, 0FEh, 0FEh, 0FEh, 0FEh 0000:3A7A FE FE FE FE+ ; DATA XREF: sub_0_3202+65
  0000:3A7A FF U0 FF FFTITEBRAIL DOUBLE DOUBLE
  0000:3A8C E1 E0 DF DE+
0000:3A8C DD DD DC DC+
0000:3A8C DC DC DC DC+
                                                                                                                           .db ODDh, ODCh, ODCh, ODCh, ODCh, ODCh, ODCh, ODCh, ODDh, ODDh
.db ODEh, ODFh, OEOh, OEIh, OE2h, OE3h, OE4h, OE5h, OE7h
.db OE9h, OEBh, OEDh, OFOh, OAAh
_data:.db 80h, 78h, 78h, 76h, 74h, 73h, 72h, 71h, 70h, 70h, 6Fh
  0000:3A8C DD DD DE DF+
  0000:3AAC 80 78 78 76+cement_fireball_data:.db 80h, 0000:3AAC 74 73 72 71+ 0000:3AAC 70 70 6F 6F+ .db 6Fh, 6Fh,
                                                                                                                                                                                                                                                                                                DATA XREF: sub_0_3478+F<sup>↑</sup>o
                                                                                                                   .db 6Fh, 6Fh, 70h, 70h, 71h, 72h, 73h, 74h, 75h, 76h, 77h
  0000:3AAC 6F 70 70 71+ .db 78h, 0AAh
0000:3AAC 6F 70 70 71+ .db 78h, 0AAh
0000:3AC4 EE F0 DB A0+rivet_fireball_data:.db 0EEh, 0F0h, 0DBh, 0A0h, 0E6h, 0C8h, 0D6h, 78h, 0EBh
0000:3AC4 EB F0 DB A0+ .db 0F0h, 0DBh, 0A0h, 0E6h, 0C8h, 0E6h. 0C8h
  UUUU:3AC4 EB F0 DB A0+ .db 0F0h, 0DBh, 0A0h, 0E6h, 0C8h, 0E6h, 0C8h
0000:3AD4 1B C8 23 A0+rivet_fireball_start_points:.db 1Bh, 0C8h, 23h, 0A0h, 2Bh, 78h, 12h, 0F0h, 1Bh, 0C8h
0000:3AD4 2B 78 12 F0+ .db 23h, 0A0h 12h 0B0
                                                    ; DATA XREF: sub_0_34B9+3410
  0000:3AE4 02 97 38 68+
0000:3AE4 38 02 9F 54+
0000:3AE4 10 54 02 DF+
                                                                                                                            ; sub_0_2
; sub_
   0000:3AE4 58 A0
0000:3AE4 EF 6D
                                                      55 02+
20 79+
  0000:3AE4 EF 0D 20 79+
0000:3AE4 02 DF 9A 10+
0000:3AE4 8E 02 EF AF+
0000:3AE4 20 BB 02 DF+
  0000:3AE4 DC 10 D0 02+
0000:3AE4 FF F0 80 F7+
0000:3AE4 02 7F F8 00+
0000:3AE4 F8 00 CB 57+
  0000:3AE4 CB 6F 00 CB+
0000:3AE4 99 CB B1 00+
0000:3B5D 06 8F 90 70+
0000:3B5D 90 06 8F 98+
                                                             O0+ .db 75h, 0AAh
70+cement_pie_level_tilemap_data:.db 6, 8Fh, 90h, 70h, 90h, 6, 8Fh, 98h, 70h, 98h, 6, 8Fh
98+ ; DATA XREF: 0000:0CDF|o
8F+ ; sub_0_2441+20|o
 0000:3B5D 70
                                           98 06
```

0000:3BE5 58 00 63 88+ 0000:3BE5 63 D0 00 53+ ; DATA XREF: 0000:0CFA\(\)o ; sub_0_2441+27\(\)o

```
0000:3BE5 18 53 58
0000:3BE5 53 88 53 D0+
0000:3BE5 00 E3 68 E3+
0000:3BE5 90 00 E3 B8+
0000:3BE5 E3 D0 00 CB+
0000:3BE5 90 CB B0 00+
0000:3BE5 B3 58 B3 78+
0000:3BE5 B5 56 B5
0000:3BE5 00 9B 80
0000:3BE5 A0 00 93
                               38+
0000:3BE5 93
                     58 00
0000:3BE5
                88
                     23 C0
0000:3BE5 00 23
0000:3BE5 1B C0
0000:3BE5 02 97
                          1B
38
                               68+
0000:3BE5 38 02 B7 58+
0000:3BE5 10 58 02 EF+
0000:3C8B 00 7B 80 7B+:
0000:3C8B A8 00 7B D0+
0000:3C8B 7B F8 00 33+
0000:3C8B 58 33 80 00+
0000:3C8B 53 58 53 80+
                                                                ; sub_0_;
db 33h, 58h, 33h, 80h, 0, 53h, 58h, 53h, 80h, 0, 0ABh
db 58h, 0ABh, 80h, 0, 0CBh, 58h, 0CBh, 80h, 0, 2Bh, 80h
db 28h, 0A8h, 0, DD3h, 80h, 0D3h, 0A8h, 0, 23h, 0A8h
db 23h, 0D0h, 0, 5Bh, 0A8h, 5Bh, 0D0h, 0, 0A3h, 0A8h
db 0A3h, 0D0h, 0, 0DBh, 0A8h, 5Bh, 0D0h, 0, 0A3h, 0A8h
db 18h, 0F8h, 0, 0E3h, 0D0h, 0E3h, 0F8h, 5, 0B7h, 30h
db 18h, 30h, 5, 0CFh, 58h, 30h, 58h, 5, 0D7h, 80h, 28h
db 80h, 5, 0DFh, 0A8h, 20h, 0A8h, 5, 0E7h, 0D0h, 18h
db 10D0h, 5, 0EFh, 0F8h, 10h, 0F8h, 0AAh
qh:db 10h, 82h, 85h, 88h, 10h, 85h, 80h, 8Bh, 10h, 87h,
0000:3C8B 00 AB
                               AB+
0000:3C8B 80 00 CB
0000:3C8B CB 80 00
0000:3C8B 80
0000:3C8B D3 80 D3 A8+
0000:3C8B 00 23 A8
0000:3C8B D0 00 5B
0000:3CF0 10 82 85 8B+
0000:3CF0 10 85 80 8B+
0000:3CF0 10 87 85 8B+
0000:3CF0 81 80 80 8B+
0000:3D08 05
                               8B+draw_data_how_high:.db 10h, 82h, 85h, 88h, 10h, 85h, 80h, 88h, 10h, 87h,
                                                                ; DATA XREF: 0000:0C5010
.db 8Bh, 81h, 80h, 80h, 8Bh, 81h, 82h, 85h, 8Bh, 81h, 85h
.db 80h, 8Bh
                                                               .db 80h, 8Bh
.db 5
                                    title_screen:
                                                                                                                                                ; DATA XREF: 0000:07F7 o
0000:3D08
0000:3D09 88 77
0000:3D0B 01
0000:3D0C 68 77
                                                                                                                                                ; RLE-encoded "DONKEY KONG" title
                                                                 .dw VRAM_start+388h
                                                                .db
                                                                .dw VRAM start+368h
0000:3D0E 01
0000:3D0F 6C
0000:3D11 03
                                                                .db
                     77
                                                                      VRAM_start+36Ch
                                                                .db
0000:3D12 49 77
                                                                .dw VRAM start+349h
0000:3D12 49
0000:3D14 05
0000:3D15 08
0000:3D17 01
                                                                .db
                                                                .dw VRAM_start+308h
                                                                .db
0000:3D18 E8 76
                                                                .dw VRAM_start+2E8h
                                                                .db
                                                                      VRAM_start+2ECh
0000:3D1D 05
                                                                .db 5
0000:3D1E C8 76
                                                                .dw VRAM_start+2C8h
0000:3D1E C0 70
0000:3D20 05
0000:3D21 88 76
                                                                .db
                                                                      VRAM_start+288h
                                                                .dw
0000:3D23 02
                                                                .db
0000:3D24 69 76
                                                                 dw
                                                                      VRAM_start+269h
0000:3D24 03 70
0000:3D26 02
0000:3D27 4A 76
                                                                .db
                                                                .dw VRAM_start+24Ah
0000:3D29 05
                                                                .db 5
0000:3D29 05
0000:3D2A 28 76
0000:3D2C 05
0000:3D2D E8 75
                                                                .dw VRAM_start+228h
.db 5
                                                                .dw VRAM_start+1E8h
0000:3D2F 01
0000:3D30 CA 75
0000:3D32 03
0000:3D33 A9 75
                                                                .db
                                                                .dw VRAM_start+1CAh
.db 3
                                                                .dw VRAM_start+1A9h
0000:3D35 01
                                                                .db
                                                                .dw VRAM_start+188h
.db 1
0000:3D36 88 75
0000:3D38 01
0000:3D39 8C 75
                                                                .dw VRAM_start+18Ch
0000:3D3B 05
                                                                dh •
0000:3D3C 48 75
0000:3D3E 01
                                                                .dw VRAM_start+148h
                                                                .db
0000:3D3F 28 75
                                                                .dw VRAM_start+128h
0000:3D41 01
                                                                dh '
0000:3D41 01
0000:3D42 2A
0000:3D44 01
                                                                      VRAM_start+12Ah
                                                                .db
0000:3D44 01
0000:3D45 2C 75
0000:3D47 01
0000:3D48 08 75
0000:3D4A 01
                                                                 .dw VRAM_start+12Ch
                                                                .db
                                                                      VRAM_start+108h
                                                                .dw
                                                                .db
0000:3D4B 0A 75
                                                                .dw VRAM_start+10Ah
0000:3D4E 0C 75
                                                                .db
                                                                      VRAM_start+10Ch
                                                                .dw
0000:3D50 03
                                                                .db
0000:3D50 03
0000:3D51 C8 74
0000:3D53 03
0000:3D54 AA 74
                                                                 .dw VRAM_start+0C8h
                                                                .dw VRAM_start+0AAh
0000:3D56 03
0000:3D57 88 74
0000:3D59 05
                                                                .db 3
                                                                .dw VRAM_start+88h
.db 5
0000:3D5A 2F 77
0000:3D5C 05
                                                                .dw VRAM_start+32Fh .db 5
0000:3D5D 0F 77
                                                                 .dw VRAM_start+30Fh
                                                                .db
0000:3D60 F0 76
                                                                .dw VRAM_start+2F0h
0000:3D62 02
                                                                .db 2
0000:3D62 02
0000:3D63 CF 76
0000:3D65 02
                                                                .dw VRAM_start+2CFh .db 2
0000:3D65 02
0000:3D66 D2 76
                                                                .dw VRAM start+2D2h
0000:3D68 05
0000:3D69 8F
0000:3D6B 05
                                                                .db
                                                                .dw
                     76
                                                                      VRAM_start+28Fh
0000:3D6C 6F 76
                                                                .dw VRAM start+26Fh
0000:3D6E 01
                                                                .db
                                                                .dw VRAM_start+24Fh
0000:3D71 01
                                                                .db
0000:3D72 53 76
                                                                .dw VRAM start+253h
0000:3D72 33 70
0000:3D74 05
0000:3D75 2F 76
0000:3D77 05
                                                                .db
                                                                      VRAM_start+22Fh
                                                                .db
0000:3D78 EF 75
                                                                .dw VRAM start+1EFh
                                                                .db
                                                                      VRAM_start+1D0h
                                                                .dw
0000:3D7D 02
                                                                .db
0000:3D7E B1 75
                                                                 dw
                                                                      VRAM_start+1B1h
0000:3D7E BI 75
0000:3D80 05
0000:3D81 8F 75
                                                                .db
                                                                      VRAM_start+18Fh
                                                                .dw
0000:3D83 03
                                                                 .db
0000:3D84 50 75
                                                                .dw VRAM_start+150h
```

; SUBROUTINE

0000:3EC3

0000:3EC3 0000:3EC3 0000:3EC3

0000:3EC3 DD CB 00 46 sub_0_3EC3:

; CODE XREF: $sub_0_3E88+1F^p$; $sub_0_3E88+28^p$...

```
File: E:\Projects\pace\pacedev.net\sw\re\platform\dkong\dkong.lst 21/11/2013, 11:26:09 PM
 0000:3EC3
                                                                          bit
                                                                                         0, (ix+0)
 0000:3EC7 CA FA 3E
                                                                                        z. loc 0 3EFA
                                                                          jp
ld
 0000:3ECA 79
0000:3ECB DD 96 05
0000:3ECE D2 D3 3E
                                                                                        a, c
(ix+5)
nc, loc_0_3ED3
                                                                          sub
                                                                          дį
0000:3ECE D2 D3 3E

0000:3ED1 ED 44

0000:3ED3

0000:3ED3

0000:3ED3 3C

0000:3ED3 95

0000:3ED5 DA DE 3E

0000:3ED8 DD 96 0A

0000:3ED8 DD 96 A
                                                                          neg
                                           loc_0_3ED3:
                                                                                                                                                                     ; CODE XREF: sub_0_3EC3+B<sup>†</sup>j
                                                                                        1
                                                                          sub
                                                                          jp
sub
                                                                                         c, loc_0_3EDE (ix+0Ah)
                                                                                        nc, loc_0_3EFA
                                                                          jр
 0000:3EDE
0000:3EDE
0000:3EDE FD 7E 03
0000:3EE1 DD 96 03
                                           loc_0_3EDE:
                                                                                                                                                                      ; CODE XREF: sub_0_3EC3+12 j
                                                                          ld
                                                                                              (iy+3)
                                                                                        a, (iy
(ix+3)
                                                                          sub
 0000:3EE4 D2 E9 3E
0000:3EE7 ED 44
0000:3EE9
                                                                                        nc, loc_0_3EE9
                                                                          jp
neg
 0000:3EE9
                                           loc 0 3EE9:
                                                                                                                                                                     ; CODE XREF: sub 0 3EC3+211i
 0000:3EE9 94
0000:3EEA DA F3 3E
0000:3EED DD 96 09
0000:3EF0 D2 FA 3E
                                                                          sub
                                                                                         n
c, loc_0_3EF3
(ix+9)
                                                                          jp
sub
                                                                                        nc, loc_0_3EFA
                                                                          jp
0000:3EF0 D2 FA 3E
0000:3EF3
0000:3EF3 3A 60 60
0000:3EF6 3C
0000:3EF7 3C 60 60
0000:3EFA
0000:3EFA
                                                                                                                                                                      ; CODE XREF: sub_0_3EC3+271j
                                           loc_0_3EF3:
                                                                          ld
                                                                                        a, (unk_0_6060)
                                                                          ld
                                                                                         (unk_0_6060), a
                                          loc_0_3EFA:
                                                                                                                                                                      ; CODE XREF: sub_0_3EC3+4 ij
0000:3EFA DD 19
0000:3EFA
0000:3EFC 10 C5
0000:3EFE C9
                                                                                                                                                                      ; sub_0_3EC3+18†j ...
                                                                                        ix, de sub_0_3EC3
                                                                          add
                                                                         djnz
                                                                          ret
 0000:3EFE
0000:3EFE
0000:3EFE
                                          ; End of function sub_0_3EC3
0000:3EFF 00 5C 76 49+byte_0_3EFF:
0000:3F09 7D 77 1E 19+byte_0_3FF9:
0000:3F09 1E 24 15 1E+
0000:3F09 16 10 11 1D+
0000:3F09 15 22 19 13+
0000:3F24 ;
0000:3F24 ;
0000:3F24 sub_03F24
0000:3F24 sub_03F24:
0000:3F24 sub_0_3F24:
0000:3F27 11 E0 FF
0000:3F2A 36 9F
0000:3F2A 36 9F
0000:3F2B 36 9F
                                                                          .db 0, 5Ch, 76h, 49h, 4Ah, 1, 9, 8, 1, 3Fh
.db 7Dh, 77h, 1Eh, 19h, 1Eh, 24h, 15h, 1Eh, 14h,
                                                                                                                                                                      ; DATA XREF: 0000:36871o
                                                                                                                                                                       1Fh, 10h; DATA XREF: 0000:368910
                                                                                                                                                                         sub_0_24411o
                                                                         .db 1Fh, 16h, 10h, 11h, 1Dh, 15h, 22h, 19h, 13h, 11h, 10h .db 19h, 1Eh, 13h, 2Bh, 3Fh
                                                                       SUBROUTINE
                                                                                                                                                                      ; CODE XREF: 0000:081C↑p
                                                                                        hl, VRAM_start+0AFh
de, 0FFE0h
(hl), 9Fh; 'f'
hl, de
(hl), 9Eh; 'x'
                                                                          ld
                                                                         ld
ld
                                                                          add
0000:3F2C 19
0000:3F2D 36 9E
0000:3F2F C9
0000:3F2F
                                                                         1d
                                           ; End of function sub_0_3F24
0000:3F2F ; 0000:3F2F ; 0000:3F30 50 52 4F 47+aProgramWeWouldTeachYou_Tel_toky:.text "PROGRAM, WE WOULD TEACH YOU.*****TEL.TOKYO-JAPAN 044(244)2" 0000:3F30 52 41 4D 2C+ .text "151 EXTENTION 304 SYSTEM DESIGN IKEGAMI CO. LIM." 0000:3FA0 ; 0000:3FA0
0000:3FA0
0000:3FA0 CD A6 3F
0000:3FA3 C3 5F 0D
0000:3FA6
0000:3FA6
0000:3FA6
                                           loc_0_3FA0:
                                                                                                                                                                      ; CODE XREF: 0000:0CD1†j
                                                                                        sub_0_3FA6
                                                                         jp
                                                                                        loc_0_D5F
                                                                          SUBROUTINE
 0000:3FA6
0000:3FA6
0000:3FA6 3E 02
0000:3FA6 3E 02
0000:3FA8 F7
0000:3FAB 21 6C 77
0000:3FAB 21 6C 77
                                           sub_0_3FA6:
                                                                                                                                                                      ; CODE XREF: 0000:3FA01p
                                                                                        a, 2
30h
                                                                                                                                                                     ; return if level bit not set
                                                                          rst
                                                                          1d
                                                                                        hl, VRAM_start+36Ch
                                          loc 0 3FAE:
                                                                                                                                                                     ; CODE XREF: sub 0 3FA6+11-i
0000:3FAE 36 10 0000:3FB0 23 0000:3FB1 23 0000:3FB2 36 C0 0000:3FB4 21 8C 74 0000:3FB4 10 F5 0000:3FB9 C9 0000:3FB9 C9
                                                                          1d
                                                                                         (hl), 10h
                                                                          inc
                                                                                        hl
hl
                                                                                         (hl), 0C0h; 'L'
                                                                          ld
                                                                          1d
                                                                                        hl, VRAM_start+8Ch
                                                                          djnz
                                                                                         loc_0_3FAE
                                                                          ret
 0000:3FB9
                                           ; End of function sub_0_3FA6
 0000:3FBA 00 00 00 00+
0000:3FC0
                                                                          .db 0, 0, 0, 0, 0, 0
 0000:3FC0
0000:3FC0
0000:3FC0
                                                                       SUBROUTINE II
0000:3FC0
0000:3FC0 21 4D 69
0000:3FC3 36 03
0000:3FC5 2C
0000:3FC6 2C
0000:3FC7 C9
0000:3FC7
                                           sub 0 3FC0:
                                                                                                                                                                    ; CODE XREF: 0000:22851p
                                                                                        hl, soft_sprite_ram+4Dh
(hl), 3
1
                                                                          14
                                                                          ld
                                                                          inc
                                                                          inc
                                                                                        1
                                          ; End of function sub_0_3FC0
0000:3FC7

0000:3FC8 00 00 41 7F+

0000:3FC8 7F 41 00 00:

0000:3FC8 00 7F 7F 18+

0000:3FC8 00 7F 7F 18+

0000:3FC8 00 00 7F 7F+

0000:3FC8 49 49 41+

0000:3FC8 49 49 41+
                                                                         .db 0, 0, 41h, 7Fh, 7Fh, 41h, 0, 0, 0, 7Fh, 7Fh, 18h, 3Ch .db 76h, 63h, 41h, 0, 0, 7Fh, 7Fh, 49h, 49h, 49h, 41h .db 0, 1Ch, 3Eh, 63h, 41h, 49h, 79h, 79h, 0, 7Ch, 7Eh .db 13h, 11h, 13h, 7Eh, 7Ch, 0, 7Fh, 7Fh, 0Eh, 1Ch, 0Eh .db 7Fh, 7Fh, 0, 0, 0, 41h, 7Fh, 7Fh, 41h, 0, 0
                                    41+; end of 'ROM'
```

; Segment type: Regular
; segment 'RAM'

RAM_start:

no of credits:

.org 6000h

.block 1

.block 1

; DATA XREF: 0000:02681o

; DATA XREF: display_credits+5\u00f10 o ; 0000:073\u00er1\u00er1 ...

0000:6000 ?? 0000:6000

0000:6001

0000:6001 ??

```
.block 1
                                    unk 0 6003:
                                                                                                                                                  ; DATA XREF: sub 0 17B+51o
0000:6003 ??
                                                                 .block
0000:6004 ??
0000:6005 ??
0000:6005
                                                                 .block
                                                                                                                                                  ; DATA XREF: 0000:00C6 r; sub_0_17B+12 r ...
                                     nmi_sequencer: .block
0000:6006 ??
0000:6007 ??
0000:6008 ??
0000:6009*??
                                                                .block 1
                                    attract_mode_flag:.block 1
sixteen_bit_countdown_msb:.block 1
eight_bit_countdown:.block 1
                                                                                                                                                  ; DATA XREF: return_NOT_16bit_timeout | o
; DATA XREF: return_NOT_8bit_timeout | o
; 0000:078E | o ...
0000:6009*
                                                                                                                                                    DATA XREF: 0000:01EE†w 0000:06FE†r ...
0000:600A ??
                                    main_sequencer: .block 1
0000:600A ::
0000:600A
0000:600B ??
                                                                .block 1
0000:600C ??
0000:600D ??
0000:600E ??
0000:600F ??
                                                                 .block 1
                                    current_player_D:.block 1
current_player_E:.block 1
                                    two_players: .block 1 controller_in: .block 1
0000:6010 ??
0000:6010
0000:6011 ??
0000:6012 ??
                                                                                                                                                  ; DATA XREF: 0000:00AC<sup>†</sup>w
; 0000:1502<sup>†</sup>r ...
                                    last_raw_in:
                                                                .block
                                                                 .block
0000:6013 ??
0000:6014 ??
0000:6015 ??
0000:6016 ??
                                                                 .block
                                                                 .block
                                                                 .block
                                                                 .block
0000:6017 ??
0000:6018 ?? ??
                                                                .block 1
                                    random_no:
                                                                                                                                                  ; DATA XREF: rand↑r
0000:6018
0000:601A ??
                                                                                                                                                  ; rand+B<sup>↑</sup>w ...
; DATA XREF: rand+3<sup>↑</sup>o
                                     gen_purpose_timer:.block 1
0000:601A ??
0000:601B ??
0000:601C ??
                                                                                                                                                  ; 0000:00B5†o ...
                                                                 .block
                                                                 .block
0000:601D ??
0000:601E ??
0000:601F ??
0000:6020 ??
                                                                 .block
                                                                 .block
                                                                 .block
                                                                                                                                                  ; DATA XREF: read dips and high score tbl+410
                                    lives_per_game: .block
0000:6020
0000:6021
0000:6021
                                                                                                                                                    DATA XREF: check_and_award_bonus+1E†o
                                                                .block 1
                                    bonus_setting:
                                                                                                                                                    DATA XREF: sub_0_17B+27↑o
DATA XREF: 0000:0087↑r
0000:099F↑r ...
0000:6022 ?? ?? ?? ?? coinage:
                                                                 .block 4
0000:6026 ??
0000:6026
0000:6027 ??
                                     upright:
                                                                .block 1
                                                                .block
0000:6028 ??
                                                                 .block
0000:6028 ??

0000:6029 ??

0000:602A ??

0000:602C ??

0000:602C ??

0000:602E ??
                                                                 .block
                                                                 .block
                                                                 block
                                                                 .block
.block
0000:602F ??
                                                                 .block
0000:6030 ??
0000:6030
0000:6031 ??
                                    unk_0_6030:
                                                                 .block
                                                                                                                                                  ; DATA XREF: 0000:1499 o
                                                                                                                                                  ; 0000:14FC1o
                                    unk_0_6031:
                                                                .block 1
0000:6032 ??
                                    unk_0_6032:
                                                                .block 1
                                                                                                                                                  ; DATA XREF: 0000:158A<sup>†</sup>o
; 0000:15B2<sup>†</sup>w
0000:6032 FF
0000:6033 ??
0000:6034 ??
                                                                .block
                                                                                                                                                  ; DATA XREF: 0000:14DC10
                                     unk_0_6034:
                                                                 .block
0000:6034 ??

0000:6035 ??

0000:6036 ??

0000:6037 ??

0000:6038 ??

0000:6039 ??
                                    unk_0_6035:
unk_0_6036:
                                                                 .block
                                                                 .block
                                   unk_0_6038:
                                                                 .block
                                                                 .block
                                                                 .block
                                    unk_0_603A:
0000:603C ??
0000:603D ??
                                                                 .block
                                                                 block
0000:603E
0000:603F
                                                                 .block
                                                                                                                                                  ; DATA XREF: 0000:093E↑o
0000:6040 ??
                                    p1 level data:
                                                                .block 1
0000:6040
0000:6040
0000:6041 ??
                                                                                                                                                  ; 0000:09AB1o
                                                                                                                                                  ; game init data copied here
                                                                .block
0000:6042 ?? ??
0000:6044 ??
0000:6045 ??
0000:6046 ??
                                                                 .block
                                                                                                                                                  ; ptr sequence data
                                                                 .block
                                                                 .block
                                                                 .block
0000:6047 ??
0000:6048 ??
0000:6048
                                                                 .block
                                    p2_level_data:
                                                                                                                                                  ; DATA XREF: 0000:0909\cdot o ; 0000:091F\cdot o ...
0000:6049 ??
                                                                 .block
0000:604A ??
0000:604B ??
0000:604C ??
0000:604D ??
                                                                 .block
                                                                 .block
                                                                 .block
                                                                 .block
0000:604E
0000:604F
                                                                 .block
0000:6050 ??
                                                                 .block
0000:6052 ??
0000:6053 ??
0000:6054 ??
                                                                 .block
                                                                 .block
0000:6055 ??
0000:6056 ??
0000:6057 ??
0000:6058 ??
                                                                 .block
                                                                 .block
                                                                 .block
0000:6059 ??
0000:605A ??
0000:605B ??
0000:605C ??
                                                                 .block
                                                                 .block
                                                                 .block
0000:605D ??
0000:605E ??
0000:605F ??
                                                                 .block
                                                                 .block
0000:6060 ??
                                    unk 0 6060:
                                                                 .block
0000:6061
0000:6062
                                                                 .block
0000:6063 ??
                                                                 .block
                                                                 .block
0000:6065
0000:6066
                                                                 .block
0000:6067
                 ??
                                                                 .block
0000:6068 ??
0000:6069 ??
0000:606A ??
                                                                 .block
                                                                 .block
                                                                 .block
0000:606B ??
                                                                 .block
0000:606C ??
                                                                 .block
```

```
0000:606D ??
                                                                           .block 1
0000:606E ??
                                                                            .block
0000:606E ??
0000:606F ??
0000:6070 ??
0000:6071 ??
0000:6072 ??
0000:6073 ??
0000:6074 ??
                                                                            .block
.block
.block
                                                                            .block
                                                                            block
                                                                            .block
0000:6075 ??
0000:6077 ??
0000:6078 ??
0000:6079 ??
                                                                            .block
                                                                            .block
                                                                            .block
                                                                            .block
0000:607A ??
0000:607B ??
0000:607C ??
0000:607D ??
                                                                            .block
                                                                           .block
                                                                            .block
0000:607E ??
0000:607F ??
0000:6080 ??
                                                                            .block
                                          digital_snd_tmr_walk:.block 1
                                                                                                                                                                          ; DATA XREF: update_sounds o
                                                                                                                                                                          ; stop_sound+610 ...;
; DATA XREF: sub_0_laC3+E910;
; DATA XREF: animate_kong_and_pauline+521w;
; 0000:0B451w ...
0000:6080
0000:6081 ??
0000:6082 ??
0000:6082
                                           digital_snd_tmr_jump:.block 1
digital_snd_tmr_thump:.block 1
0000:6083 ??
                                           digital_snd_tmr_coin_spring:.block 1
0000:6084 ??
0000:6085 ??
                                           digital_snd_tmr_kong_fall:.block 1
digital_snd_tmr_barrel_jump_priz:.block 1
                                                                                                                                                                          ; DATA XREF: sub_0_1DBD+25\u00f10
0000:6085
                                                                                                                                                                         ; sub 0 1DBD+871o ...
                                          digital_snd_tmr_6:.block 1
digital_snd_tmr_7:.block 1
unk_0_6088: .block 1
0000:6086 ??
0000:6086 ??
0000:6087 ??
0000:6088 ??
0000:6088
                                                                                                                                                                          ; DATA XREF: update_sounds+2E↑o ; 0000:12A8↑w
                                                                                                                                                                          ; DATA XREF: 0000:067A†w; 0000:0CCO†w ...
0000:6089 ??
0000:6089
0000:608A ??
0000:608A
                                          unk_0_6089:
                                                                           .block 1
                                                                                                                                                                             DATA XREF: 0000:0ADB o 0000:0BB3 o ...
                                          unk_0_608A:
                                                                     .block 1
0000:608A
0000:608B ??
0000:608D ??
0000:608E ??
0000:608F ??
0000:6090 ??
0000:6091 ??
                                                                           .block
                                          unk_0_608B:
                                                                                                                                                                          ; DATA XREF: update_sounds+1A o
                                                                           .block
                                                                            .block
                                                                            .block
                                                                            .block
                                                                            .block
                                                                            .block
0000:6092 ??
0000:6093 ??
0000:6094 ??
0000:6095 ??
0000:6097 ??
0000:6098 ??
                                                                            .block
                                                                            .block
                                                                            block
                                                                            .block
.block
0000:6099 ??
                                                                            .block
0000:609A ??
0000:609B ??
0000:609C ??
                                                                            .block
                                                                            .block
                                                                            .block
0000:609D ??
0000:609E ??
0000:609F ??
                                                                            .block
                                                                            .block
0000:609F ??
0000:60A0 ??
                                                                            .block
0000:60A1 ??

0000:60A1 ??

0000:60A2 ??

0000:60A3 ??

0000:60A4 ??

0000:60A5 ??
                                                                            .block
                                                                            .block
                                                                            .block
                                                                            .block
0000:60A5 ??
0000:60A6 ??
0000:60A7 ??
0000:60A9 ??
0000:60AA ??
0000:60AB ??
                                                                            .block
                                                                            .block
                                                                            block
                                                                           .block
.block
0000:60AC
                    ??
                                                                            .block
0000:60AD ??
0000:60AE ??
0000:60AF ??
                                                                            .block
                                                                            .block
                                                                            .block
0000:60B0 ??
0000:60B1 ??
0000:60B2 ?? ?? ??
0000:60B2
                                           unk_0_60B0:
                                                                            .block
                                          unk_0_60B1:
pl_score:
                                                                            .block
                                                                                                                                                                             DATA XREF: 0000:01C91o
                                                                           .block 3
                                                                                                                                                                             current_player_score_DEfo ...
0000:60B5 ?? ?? ??
0000:60B5
0000:60B8 ?? ?? ??
                                                                                                                                                                          ; DATA XREF: current_player_score_DE+8\(^{\)}\)
; zero_score_or_high_score+1\(^{\}\)
; DATA XREF: add_bonus_and_update_high_score+37\(^{\}\)
; zero_score_or_high_score+15\(^{\}\)
; zero_score_or_high_score+15\(^{\}\)
                                          p2_score:
                                                                           .block 3
                                          high_score:
                                                                           .block 3
0000:60B8
0000:60BB ??
0000:60BD ??
0000:60BE ??
                                                                           .block
                                                                            .block
                                                                            .block
0000:60BE ?? .block 1
0000:60C9 ?? ?? ?? +fg_vector_fn_params:.block 40h
0000:60C0 ?? ?? ?? ?? +fg_vector_fn_params:.block 40h
0000:61C0 ?? ?? ?? ?? +high_score_tbl_ram:.block 0AAh
0000:61AA ?? .block 1
0000:61AB ?? .block 1
0000:61AC ?? .block 1
                                                                                                                                                                          ; DATA XREF: 0000:0291\u00f30
                                                                                                                                                                          ; sub_0_309F+1↑o
; DATA XREF: read dips and high score tbl+56↑o
0000:61AD ??
0000:61AE ??
0000:61AF ??
0000:61BO ??
                                                                            .block
                                                                            .block
                                                                            .block
0000:61B1 ??
0000:61B2 ??
0000:61B3 ??
0000:61B4 ??
                                          unk_0_61B1:
                                                                            .block
                                                                                                                                                                          ; DATA XREF: sub_0_13CA+D↑o
                                                                            .block
                                                                            .block
0000:61B5 ??
0000:61B6 ??
0000:61B7 ??
                                                                            .block
                                                                            .block
                                                                            .block
0000:61B8 ??
                                                                            .block
0000:61B9 ??
0000:61BA ??
                                                                            .block
0000:61BB ??
0000:61BC ??
                                                                            .block
                                                                            .block
0000:61BD ??
0000:61BE ??
                                                                            .block
0000:61BF ??
                                                                            .block
0000:61C0 ??
0000:61C1 ??
0000:61C2 ??
                                                                            .block
                                                                            .block
                                                                            .block
0000:6103 ??
                                                                            .block
0000:61C4 ??
                                                                            .block
```

```
.block 1
0000:61C6 ??
0000:61C7 ??
0000:61C8 ??
0000:61C9 ??
                                                                                                                                                 ; DATA XREF: sub_0_13CA\u00e1o ; DATA XREF: sub_0_13CA+2F\u00e1o
                                    unk 0 61C6:
                                                                 .block
                                                                 .block
.block
.block
                                    unk_0_61C7:
0000:61CA ??
0000:61CB ??
0000:61CC ??
0000:61CD ??
                                                                .block
                                                                 block
                                                                .block
0000:61CE ??
0000:61CF ??
0000:61D0 ??
0000:61D1 ??
                                                                 .block
                                                                 .block
                                                                 .block
                                                                 .block
0000:61D2 ??
0000:61D3 ??
0000:61D4 ??
0000:61D5 ??
                                                                 .block
                                                                .block
                                                                 .block
0000:61D6 ??
0000:61D7 ??
0000:61D8 ??
                                                                 .block
                                                                .block
0000:61D9 ??
                                                                 .block
0000:61DA ??
0000:61DB ??
0000:61DC ??
0000:61DD ??
                                                                 .block
                                                                 .block
                                                                .block
                                                                 .block
                                                                 .block
0000:61E0 ??
0000:61E1 ??
                                                                .block
                                                                 block
0000:61E1 ??
0000:61E2 ??
0000:61E3 ??
0000:61E4 ??
                                                                .block
.block
                                                                .block
0000:61E5 ??
0000:61E6 ??
0000:61E7 ??
0000:61E8 ??
                                                                 .block
                                                                 .block
                                                                .block
                                                                 .block
0000:61E9 ??
0000:61EA ??
0000:61EB ??
                                                                 .block
                                                                .block
0000:61EC ??
                                                                 .block
0000:61ED ??
0000:61EE ??
                                                                 .block
                                                                 .block
0000:61EF
                                                                 .block
0000:61F0 ??
                                                                 .block
                                                                 .block
0000:61F3 ??
0000:61F4 ??
                                                                .block
                                                                 block
0000:61F5
0000:61F6
                ??
                                                                 .block
.block
0000:61F7
                ??
                                                                 .block
0000:61F8 ??
0000:61F9 ??
0000:61FA ??
                                                                 .block
                                                                 .block
                                                                .block
0000:61FB ??
0000:61FC ??
0000:61FD ??
                                                                 .block
                                                                 .block
0000:61FD ??
0000:61FE ??
                                                                 .block
                                                                 .block
0000:61FF ??
0000:6200 ??
0000:6200
                                                                 .block
                                                                                                                                                   DATA XREF: return_if_mario_not_alive|r0000:0BE3|r ...
                                    mario_alive_flag:.block
0000:6201 ??
                                                                .block 1
0000:6202 ??
                                    unk 0 6202:
                                                                 .block
0000:6203 ??
0000:6203
                                    mario_y_coord: .block
                                                                                                                                                 ; DATA XREF: animate_kong_and_pauline+D6fr; animate_kong_and_pauline+10Efr ...
                                    unk_0_6204: .block 1 mario_x_coord: .block 1
0000:6204 ??
                                                                                                                                                 ; DATA XREF: sub_0_19DA+13 r
0000:6205 22
0000:6205
0000:6206
??
                                                                                                                                                 ; sub_0_1A33+22↑r ...
                                    unk_0_6206:
                                                                .block 1
                                                                                                                                                ; DATA XREF: sub_0_1AC3+54\(^{\)} o ; sub_0_1AC3+9D\(^{\)} o \ldots
                                    mario_flipy_sprite_tile:.block 1
0000:6207 ??
0000:6207
0000:6207
0000:6208 ??
0000:6209 ??
                                     mario_flipx_colour:.block 1
                                                                                                                                                 ; DATA XREF: 0000:0FA510
                                    unk_0_6209:
                                                               .block 1
0000:620A ??
0000:620B ??
0000:620C ??
0000:620D ??
                                                                .block 1
                                    mario_x_before_jump:.block 1
mario_y_before_jump:.block 1
                                                                .block 1
                                                          .block 1
                                                                                                                                                ; DATA XREF: sub_0_1AC3+E6\dagger\text{w} ; sub_0_1AC3+1E6\dagger\text{o} ... ; DATA XREF: sub_0_1AC3+1CE\dagger\text{r} ; sub_0_1AC3+1EA\dagger\text{r} ...
                                    unk_0_620E:
0000:620E ??
0000:620E ??
0000:620F ??
0000:620F
                                   unk_0_620F: .block 1
                                                                                                                                                 / sub_0_tacs+TEA+1 ...
/ mario_???
/ DATA XREF: sub_0_1AC3+B0\u00e90
/ sub_0_1F46+F\u00e9w ...
0000:620F
0000:6210 ??
0000:6210
                                    unk_0_6210:
                                                                .block 1
0000:6211 ??
                                    unk 0 6211:
                                                                .block 1
0000:6212 ??
0000:6213 ??
                                    unk_0_6212:
unk_0_6213:
                                                                .block
0000:6214 ??
0000:6215 ??
                                    unk 0 6214:
                                                                 .block
                                     mario climbing:
                                                                .block
0000:6216 ??
0000:6217 ??
0000:6218 ??
                                    mario_jumping:
unk_0_6217:
unk_0_6218:
                                                                 .block
                                                                 .block
                                                                .block
0000:6219 ??
0000:621A ??
                                    unk_0_6219:
unk_0_621A:
                                                                 .block
                                                                .block
                                                                                                                                                 ; DATA XREF: sub_0_1AC3+5Dfo
0000:621A
0000:621A
0000:621B ??
                                                                                                                                                 ; sub_0_1AC3+2B3|r ...
                                                                .block 1
0000:621D ??
0000:621D ??
                                    unk_0_621C:
                                                                .block 1
                                                                                                                                                 ; DATA XREF: sub_0_1AC3+262↑o
                                                                                                                                                    sub_0_1AC3+2BD r
                                                                .block 1
                                                                                                                                                ; DATA XREF: sub_0_1AC3+7 r; sub_0_1AC3+92 r . . .
0000:621E ??
                                    unk 0 621E:
                                                                .block 1
0000:621E
0000:621F ??
0000:621F ??
                                    unk_0_621F:
                                                                 .block
                                    unk_0_6220:
unk_0_6221:
                                                                .block
0000:6221 ??
                                                                .block
                                                                 .block
                                    unk_0_6222:
                                    unk_0_6224:
unk_0_6225:
0000:6224 ??
                                                                .block
                                                                 .block
                                                                .block
                                    level_type:
                                                                                                                                                    DATA XREF: sub_0_30+14\u00e10
                                                                                                                                                    0000:01EA w ...
DATA XREF: 0000:01D9 w
0000:6227
0000:6228 ??
0000:6228
0000:6229 ??
                                    lives_left:
                                                                .block 1
                                                                                                                                                   DATA XREF: 0000:01D91w check_and_award_bonus+281o ... DATA XREF: 0000:01D61w sub__37F+151r ... keeps incrementing
                                    level:
                                                               .block 1
0000:6229
0000:6229
```

```
0000:622A ?? ??
0000:622C ??
0000:622C
0000:622D ??
0000:622E ??
                                                  seq_data:
                                                                                      .block 2
                                                 unk 0 622C:
                                                                                      .block 1
                                                                                                                                                                                                  ; DATA XREF: 0000:0A6E o
                                                                                                                                                                                                  ; 0000:12F6†w ...
                                                awarded_bonus_life:.block 1
unk_0_622E: .block 1
                                                                                                                                                                                                 ; DATA XREF: 0000:0C05\r; 0000:0C0E\r\ ...
0000:622E ??
0000:622F ??
0000:6230 ??
0000:6231 ??
0000:6232 ??
0000:6233 ??
0000:6234 ??
0000:6235 ??
                                                 unk_0_622F:
                                                                                      block
                                                                                      .block
                                                                                       .block
                                                                                       .block
                                                                                       .block
                                                                                      .block
0000:6236 ??
0000:6237 ??
0000:6238 ??
0000:6239 ??
                                                                                      .block
                                                                                      .block
                                                                                       .block
0000:623A ??
0000:623B ??
0000:623C ??
                                                                                      .block
                                                                                      .block
0000:623D ??
0000:623F ??
0000:623F ??
0000:6241 ??
0000:6241 ??
0000:6242 ??
0000:6244 ??
0000:6245 ??
0000:6246 ??
0000:6247 ??
0000:6247 ??
0000:623D ??
                                                                                       .block
                                                                                      .block
                                                                                      .block
                                                                                      .block
                                                                                      .block
                                                                                      .block
                                                                                       block
                                                                                      .block
.block
                                                                                      .block
0000:6249 ??
0000:624A ??
0000:624B ??
0000:624C ??
                                                                                       .block
                                                                                       .block
                                                                                      .block
0000:624C ??
0000:624D ??
0000:624E ??
0000:624F ??
0000:6250 ??
0000:6251 ??
0000:6253 ??
0000:6253 ??
0000:6255 ??
0000:6256 ??
0000:6258 ??
0000:6258 ??
0000:6258 ??
                                                                                       .block
                                                                                      .block
                                                                                      .block
                                                                                       .block
                                                                                      .block
                                                                                       .block
                                                                                      .block
                                                                                      .block
                                                                                      .block
                                                                                       block
                                                                                      .block
.block
0000:625B ??
                                                                                      .block
0000:625C ??
0000:625D ??
0000:625E ??
                                                                                       .block
                                                                                      .block
0000:625F ??
0000:625F ??
0000:6260 ??
0000:6261 ??
                                                                                       .block
                                                                                      .block
                                                                                       .block
0000:6262 ??
0000:6263 ??
0000:6264 ??
0000:6265 ??
0000:6267 ??
                                                                                      .block
.block
                                                                                      .block
                                                                                       .block
0000:6268 ??
0000:6269 ??
                                                                                       .block
0000:6269 ??
0000:626A ??
0000:626E ??
0000:626E ??
0000:626E ??
0000:6277 ??
0000:6271 ??
0000:6273 ??
0000:6273 ??
0000:6274 ??
0000:6275 ??
                                                                                      .block
                                                                                       block
                                                                                      .block
.block
                                                                                      .block
                                                                                       .block
                                                                                       .block
                                                                                      .block
                                                                                       .block
                                                                                      .block
                                                                                       .block
0000:6276 ??
0000:6277 ??
0000:6278 ??
0000:6279 ??
                                                                                      .block
                                                                                      .block
                                                                                       .block
0000:6279 ??

0000:627A ??

0000:627B ??

0000:627C ??

0000:627D ??

0000:627F ??
                                                                                      .block
                                                                                       .block
                                                                                       .block
                                                                                       .block
0000:627F ??

0000:6280 ??

0000:6281 ??

0000:6282 ??

0000:6283 ??
                                                                                                                                                                                                 ; DATA XREF: 0000:0F64\u00e10
; 0000:0F72\u00f10 ...
                                                unk 0 6280:
                                                                                      .block
                                                                                      hlock
                                                                                       .block
                                                                                      .block
0000:6284 ??
0000:6285 ??
0000:6286 ??
0000:6287 ??
                                                                                       .block
                                                                                       .block
                                                                                       .block
                                                                                       .block
0000:6287 ??
0000:6288 ??
0000:6288 ??
0000:628A ??
0000:628B ??
0000:628D ??
0000:628E ??
0000:628F ??
                                                unk_0_6288:
                                                                                       .block
                                                                                                                                                                                                 ; DATA XREF: sub_0_2207+E↑o
                                                                                       .block
                                                                                       .block
                                                                                       .block
                                                                                       .block
                                                                                       .block
                                                                                       .block
0000:629F ??

0000:6290 ??

0000:6291 ??

0000:6292 ??

0000:6293 ??

0000:6294 ??
                                                                                                                                                                                                  ; DATA XREF: sub_0_1A33+53\u00f10
; sub_0_1E57+29\u00f10

                                                unk_0_6290:
                                                                                      .block
                                                 unk_0_6291:
unk_0_6292:
                                                                                      .block
                                                                                       .block
                                                                                                                                                                                                  ; DATA XREF: sub 0 1A33+481o
                                                                                       .block
0000:6295
                      ??
                                                                                      .block
0000:6296 ??
0000:6297 ??
0000:6298 ??
                                                                                       .block
                                                                                      .block
.block
0000:6299 ??
                                                                                       .block
0000:629A ??
                                                                                      .block
```

```
0000:629B ??
                                                                      .block 1
0000:629C ??
                                                                      .block
0000:629D ??
0000:629E ??
0000:629F ??
                                                                      .block
.block
.block
0000:62A0 ??
0000:62A0
0000:62A1 ??
0000:62A2 ??
                                                                                                                                                             ; DATA XREF: 0000:16BC\u00fcw
                                       unk 0 62A0:
                                                                     .block 1
                                                                                                                                                                0000:16D21w
                                       unk_0_62A1:
                                                                      .block 1
                                                                                                                                                             ; DATA XREF: sub_0_2602+14\rightarrow
                                                                      .block
                                                                                                                                                             ; DATA XREF: sub 0 2523+2E|r
0000:62A3 ??
                                       unk 0 62A3:
                                                                     .block 1
0000:62A3
0000:62A4 ??
0000:62A5 ??
                                                                                                                                                             ; sub_0_262F o ...
                                                                                                                                                             ; DATA XREF: sub_0_2679+7↑o
                                        unk_0_62A5:
                                                                      .block
0000:62A6 ??
0000:62A6
0000:62A7 ??
0000:62A8 ??
                                                                                                                                                             ; DATA XREF: sub_0_2523+39\r; sub_0_2679+14\rightarrow ; DATA XREF: sub_0_27DA\rightarrow o
                                       unk_0_62A6:
                                                                     .block 1
                                       unk_0_62A7:
unk_0_62A8:
                                                                     .block
                                                                      .block
0000:62A9 ??
0000:62AA ??
0000:62AB ??
                                                                      .block
                                       unk_0_62AA:
                                                                      .block
0000:62AC ??
0000:62AD ??
0000:62AE ??
0000:62AF ??
                                       unk 0 62AC:
                                                                      .block
                                                                      .block
                                                                                                                                                             ; DATA XREF: 0000:0AA61w
                                       unk 0 62AF:
                                                                     .block 1
                                                                                                                                                             ; 0000:0AEB1r
0000:62AF
                                                                                                                                                               DATA XREF: 0000:063A\r
0000:0F8E\rangle o ...
DATA XREF: sub_0_2C03+9\rangle r
0000:62B0 ??
0000:62B0
0000:62B1 ??
                                       unk_0_62B0:
                                                                     .block 1
                                       unk 0 62B1:
                                                                     .block 1
0000:62B1
0000:62B2 ??
0000:62B3 ??
0000:62B4 ??
                                                                                                                                                             ; sub 0 2C8F+4B1o
                                        unk_0_62B2:
                                                                      .block
                                       unk_0_62B3:
unk_0_62B4:
                                                                      .block
                                                                                                                                                             ; DATA XREF: sub_0_2FCB+3↑o
0000:62B5 ??
0000:62B6 ??
0000:62B7 ??
0000:62B8 ??
                                                                      .block
                                                                      .block
                                                                      .block
                                                                                                                                                            ; DATA XREF: sub_0_3A2+9↑o
                                        unk 0 62B8:
                                                                      .block
0000:62B9 ??
0000:62BA ??
0000:62BA
                                        unk_0_62B9:
unk_0_62BA:
                                                                      .block
                                                                      .block
                                                                                                                                                             ; DATA XREF: sub_0_3A2+2F\dagger
                                                                                                                                                             ; sub_0_3A2+3E↑w
0000:62BB ??
                                                                      .block
0000:62BC ??
0000:62BD ??
0000:62BE ??
                                                                      .block
                                                                      .block
0000:62BF ??
                                                                      .block
0000:62C0 ??
0000:62C1 ??
                                                                      .block
0000:62C1 ??
0000:62C2 ??
0000:62C3 ??
0000:62C4 ??
0000:62C5 ??
0000:62C6 ??
0000:62C7 ??
0000:62C8 ??
                                                                      .block
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                                                                      .block
0000:62CA ??
0000:62CB ??
0000:62CC ??
0000:62CD ??
                                                                      .block
                                                                      .block
                                                                      .block
0000:62CD ??

0000:62CE ??

0000:62CF ??

0000:62D0 ??

0000:62D1 ??

0000:62D2 ??
                                                                      .block
                                                                      .block
                                                                      .block
                                                                      .block
0000:62D3 ??
0000:62D4 ??
                                                                      .block
0000:62D4 ??

0000:62D5 ??

0000:62D6 ??

0000:62D7 ??

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0000:62D9 ??
                                                                      .block
                                                                      block
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                                                                      .block
0000:62DA ??
0000:62DB ??
0000:62DC ??
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                                                                       .block
                                                                      .block
0000:62DD ??
0000:62DE ??
0000:62DF ??
0000:62EO ??
                                                                      .block
                                                                     .block
                                                                      .block
0000:62E1 ??
0000:62E2 ??
0000:62E3 ??
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0000:62E4 ??
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0000:62E5 ??
0000:62E6 ??
0000:62E7 ??
0000:62E8 ??
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0000:62E9
0000:62EA
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0000:62EB ??
0000:62EC ??
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0000:62ED ??
0000:62EE ??
0000:62EF ??
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                                                                      .block
0000:62F0 ??
0000:62F1 ??
0000:62F2 ??
0000:62F3 ??
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0000:62F4 ??
0000:62F5 ??
0000:62F6 ??
0000:62F7 ??
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                                                                      .block
                                                                      .block
0000:62F7 ??
0000:62F9 ??
0000:62FA ??
                                                                      .block
                                                                      .block
0000:62FB ??
                                                                      .block
0000:62FC ??
0000:62FD ??
                                                                      .block
0000:62FE ??
0000:62FF ??
                                                                      .block
                                                                       .block
                                       unk_0_6300:
                                                                      .block
                                                                                                                                                             ; DATA XREF: sub_0_236E^{\uparrow}o; sub_0_2441+30^{\uparrow}o
0000:6301 ??
                                                                      .block
0000:6302 ??
0000:6303 ??
0000:6304 ??
                                                                      .block
                                                                      .block
                                                                      .block
0000:6305
                                                                      .block
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0000:6306 ??

.block

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.block 1
0000:6308 ??
0000:6309 ??
0000:630A ??
0000:630B ??
                                                                                  .block
                                                                                  .block
.block
.block
0000:630B ??
0000:630D ??
0000:630D ??
0000:630E ??
0000:631D ??
0000:6311 ??
0000:6313 ??
                                                                                  .block
                                                                                  .block
                                                                                  .block
.block
                                             unk 0 6310:
                                                                                  .block
                                                                                                                                                                                       ; DATA XREF: sub 0 2441+B10
                                                                                  .block
                                                                                  .block
0000:6314 ??
0000:6315 ??
0000:6316 ??
0000:6317 ??
                                                                                  .block
                                                                                 .block
                                                                                  .block
0000:6318 ??
0000:6319 ??
0000:631A ??
0000:631B ??
                                                                                  .block
                                                                                  .block
                                                                                  .block
0000:631C ??
0000:631D ??
0000:631E ??
0000:631F ??
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0000:6321 ??
0000:6322 ??
0000:6323 ??
0000:6324 ??
0000:6325 ??
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0000:6327 ??
0000:6328 ??
0000:6329 ??
0000:632A ??
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                                                                                 .block
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0000:632A ??
0000:632B ??
0000:632C ??
0000:632D ??
0000:632F ??
0000:6330 ??
0000:6331 ??
                                                                                  .block
                                                                                  .block
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0000:6332 ??
0000:6333 ??
0000:6335 ??
0000:6336 ??
0000:6337 ??
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.block
0000:6339 ??
0000:633A ??
0000:633B ??
0000:633C ??
                                                                                  .block
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                                                                                  .block
0000:633D ??
0000:633E ??
0000:633F ??
0000:6340 ??
                                                                                  .block
                                                                                  .block
                                              unk_0_6340:
                                                                                  .block
0000:6340 ??

0000:6341 ??

0000:6341 ??

0000:6342 ??

0000:6344 ??
                                               unk_0_6341:
                                                                                  .block
                                                                                                                                                                                        ; DATA XREF: sub_0_1DBD+E^w; 0000:1E4A^o
                                               unk_0_6342:
                                                                                  .block 1
                                              unk 0 6343:
                                                                                  .block
                                                                                  .block
                                                                                                                                                                                       ; DATA XREF: sub_0_1E96†r
; sub_0_1E96+60†o
; DATA XREF: 0000:1F09†o
0000:6345 ??
0000:6345
                                              unk_0_6345:
                                                                                  .block
0000:6345
0000:6346
0000:6347
??
0000:6348
??
0000:6348
??
0000:634B
??
0000:634C
??
                                              unk_0_6346:
                                                                                 .block 1
                                                                                                                                                                                        : 0000:1F2310
                                                                                  .block
                                              unk_0_6348:
                                                                                  .block
                                                                                  .block
                                                                                  .block
                                                                                  .block
                                                                                  .block
0000:634D ??
0000:634E ??
0000:634F ??
0000:6350 ??
                                                                                  .block
                                                                                  .block
                                              unk_0_6350:
                                                                                  .block
0000:6350 ??
0000:6351 ??
0000:6352 ??
0000:6353 ??
0000:6355 ??
0000:6355 ??
0000:6356 ??
0000:6358 ??
0000:6358 ??
                                               unk_0_6351:
unk_0_6352:
unk_0_6353:
                                                                                  .block
                                                                                 .block
                                               unk 0 6354:
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0000:635B ??
0000:635C ??
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0000:635D ??
0000:635E ??
0000:635F ??
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0000:6360 ??
0000:6361 ??
0000:6362 ??
0000:6363 ??
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0000:6363 ??
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0000:6366 ??
0000:6366 ??
0000:6368 ??
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0000:6368 ??
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0000:636C ??
0000:636D ??
0000:636E ??
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                                                                                  .block
                                                                                  .block
0000:6372 ??
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0000:6373 ??
0000:6374 ??
0000:6375 ??
                                                                                  .block
                                                                                  .block
                                                                                  .block
0000:6376 ??
                                                                                  .block
0000:6377 ??
                                                                                  .block
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.block 1
0000:6379 ??
                                                                 .block
0000:637A ??
0000:637B ??
0000:637C ??
                                                                .block
.block
.block
0000:637A ??
0000:637B ??
0000:637C ??
0000:637D ??
0000:637F ??
0000:6380 ??
                                                                .block
                                                                 block
                                                                .block
.block
                                    unk_0_6380:
0000:6381 ??
0000:6382 ??
0000:6383 ??
0000:6384 ??
                                    unk_0_6381:
unk_0_6382:
unk_0_6383:
unk_0_6384:
                                                                 .block
                                                                                                                                                 ; DATA XREF: sub 0 37F+7 o
                                                                 .block
                                                                                                                                                 ; DATA XREF: 0000:02D1\u00f30
; DATA XREF: sub_0_37F\u00f30
; DATA XREF: 0000:0A76\u00f3r
                                                                 .block
                                                                 .block
0000:6385 ??
                                    intro_sequencer:.block
0000:6385
0000:6386 ??
0000:6387 ??
                                                                                                                                                 ; 0000:0ABA1o
                                     unk_0_6386:
                                                                .block
                                    unk 0 6387:
                                                                 .block
                                                                                                                                                 ; DATA XREF: 0000:161f<sup>†</sup>r; 0000:1633<sup>†</sup>r ...
0000:6388 ??
                                    unk_0_6388:
                                                                .block 1
0000:6388
0000:6389 ??
                                     unk_0_6389:
                                                                .block 1
                                                                                                                                                 ; DATA XREF: 0000:07CB1r
0000:638A ??
                                    unk 0 638A:
                                                                .block 1
0000:638A
0000:638B ??
0000:638C ??
                                                                                                                                                 ; 0000:07D51w
                                     unk_0_638B:
                                                                .block 1
0000:638C ??
0000:638D ??
                                    bonus_timer:
unk_0_638D:
                                                                 .block 1
                                                                .block 1
                                                                                                                                                 ; DATA XREF: 0000:0B581w
                                                                                                                                                  ; 0000:0B94\r ...
; DATA XREF: 0000:0AD4\r
                                    unk_0_638E:
                                                           .block 1
0000:638E
0000:638F ??
                                                                                                                                                    0000:0B3B1r ...
DATA XREF: sub_0_2C03+4C1w
                                    unk_0_638F:
                                                               block 1
0000:638F ??
0000:6390 ??
0000:6390
                                                                                                                                                 , BATA XREF: SUD_0_2C05+4C|W
; sub_0_2C8F+8D↑r ...
; DATA XREF: animate_kong_and_pauline+2B↑o
; animate_kong_and_pauline+8B↑r ...
                                    kong_thrash_tmr:.block 1
0000:6391 ??
0000:6392 ??
0000:6393 ??
0000:6394 ??
                                    kong_thrash_flag:.block 1
unk_0_6392: .block 1
                                    unk_0_6392: .block 1
barrel_deployment:.block 1
                                                                                                                                                 ; DATA XREF: sub_0_2ED4+4A r
                                    unk 0 6394:
                                                                .block 1
0000:6394
0000:6395
0000:6395
                                                                                                                                                 ; sub_0_2ED4+75†0
; DATA XREF: sub_0_2ED4+7C†0
; sub_0_2ED4+87†w ...
                                    unk_0_6395:
                                                                .block 1
0000:6396 ??
                                    unk_0_6396:
                                                                .block 1
0000:6397 ??
0000:6398 ??
0000:6399 ??
                                    .block 1
mario_on_elevator:.block 1
                                                                .block 1
0000:639A ??
                                    unk 0 639A:
                                                                .block 1
0000:639B ??
0000:639B
                                    unk_0_639B:
                                                                                                                                                 ; DATA XREF: sub_0_2523<sup>†</sup>o; sub_0_2523+65<sup>†</sup>w
0000:639C ??
                                                                .block 1
0000:639D 22
                                                                                                                                                 : DATA XREF: 0000:127F1r
                                    unk_0_639D:
                                                                block 1
0000:639D ::
0000:639D ::
0000:639E ??
                                                                                                                                                    0000:1295 o ...
DATA XREF: 0000:129B w
                                    unk_0_639E:
                                                               .block 1
0000:639E
                                                                                                                                                 ; 0000:12B2<sup>†</sup>o
0000:639F ??
0000:63A0 ??
0000:63A0
                                                                 block 1
                                    unk_0_63A0:
                                                                .block 1
                                                                                                                                                 ; DATA XREF: sub_0_3A2+39\w0000:0768\w0000.
0000:63A1 ??
0000:63A2 ??
0000:63A3 ??
0000:63A4 ??
                                    unk 0 63A1:
                                                                .block
                                    unk_0_63A1:
unk_0_63A2:
unk_0_63A4:
                                                                .block
                                                                 .block
0000:63A5 ??
0000:63A6 ??
0000:63A7 ??
0000:63A7
                                    unk_0_63A5:
unk_0_63A6:
unk_0_63A7:
                                                                .block
                                                                .block
                                                                                                                                                 ; DATA XREF: 0000:0BFA\u00e10
                                                                                                                                                 ; 0000:0C431r ...
0000:63A8 ??
                                    unk_0_63A8:
                                                                .block 1
0000:63A9 ??
0000:63AA ??
                                                                 .block
0000:63AB ??
                                    unk_0_63AB:
                                                                .block
0000:63AC ??
0000:63AD ??
0000:63AE ??
                                                                 block
                                                                .block
.block
                                    unk_0_63AD:
                                    unk 0 63AF:
0000:63AF ??
                                                                 .block
0000:63B0 ??
0000:63B1 ??
0000:63B2 ??
                                    unk_0_63B0:
unk_0_63B1:
unk_0_63B2:
                                                                 .block
                                                                 .block
                                                                .block
0000:63B3 ??
0000:63B4 ??
0000:63B5 ??
0000:63B6 ??
                                    unk_0_63B3:
unk_0_63B4:
unk_0_63B5:
                                                                 .block
                                                                .block
                                                                 .block
0000:63B7 ??
0000:63B8 ??
0000:63B8
                                    unk_0_63B7:
unk_0_63B8:
                                                                 .block
                                                                                                                                                 ; DATA XREF: 0000:06351r; 0000:06AC10
0000:63B9 ??
                                    unk 0 63B9:
                                                                .block
0000:63BA ??
0000:63BB ??
0000:63BC ??
0000:63BD ??
                                                                .block
                                                                 .block
                                                                 .block
                                                                 .block
                                    unk 0 63C0:
0000:63C0 ??
0000:63C1 ??
                                                                 .block
                                                                 .block
0000:63C2 ??
0000:63C3 ??
0000:63C4 ??
                                    unk_0_63C2:
                                                                 .block
                                    unk_0_63C4:
                                                                 .block
0000:63C5 ??
0000:63C6 ??
0000:63C7 ??
0000:63C8 ??
                                                                 .block
                                                                 .block
                                                                 .block
                                    unk 0 63C8:
                                                                 .block
0000:63C9 ??
0000:63CA ??
0000:63CB ??
0000:63CC ??
                                                                 .block
                                                                 .block
                                    attract movement entry:.block 1
                                                                                                                                                 ; DATA XREF: next attract action+31o
0000:63CD ??
0000:63CE ??
0000:63CF ??
                                                                .block
                                                                 .block
0000:63D0 ??
                                                                .block
0000:63D1
0000:63D2
                                                                .block
0000:63D3 ??
0000:63D4 ??
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                                                                 .block
0000:63D5
0000:63D6
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0000:63D7
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                                                                .block
0000:63D8 ??
                                                                 .block
0000:63D0 ??
0000:63DA ??
                                                                 .block
                                                                .block
0000:63DB ??
                                                                 .block
0000:63DC ??
                                                                .block
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0000:63DD ??
                                                                                            .block 1
 0000:63DE ??
0000:63DF ??
0000:63E0 ??
0000:63E1 ??
                                                                                             .block
                                                                                             .block
.block
.block
                                                    unk_0_63E0:
                                                                                                                                                                                                               ; DATA XREF: sub_0_31B1+7↑o
0000:63E1 ??
0000:63E2 ??
0000:63E3 ??
0000:63E4 ??
0000:63E5 ??
0000:63E7 ??
0000:63E8 ??
                                                                                             .block
                                                                                             .block
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                                                                                            .block
0000:63EA ??
0000:63EB ??
0000:63EC ??
0000:63ED ??
                                                                                            .block
                                                                                            .block
0000:63ED ??
0000:63EF ??
0000:63FF ??
0000:63F1 ??
0000:63F3 ??
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0000:63FD ??
0000:63FE ??
0000:63FF ??
0000:6400 ??
                                                                                             .block
                                                                                             .block
                                                                                             .block
                                                                                                                                                                                                               ; DATA XREF: 0000:10E9 o
                                                    unk 0 6400:
                                                                                             .block
0000:6400 ?
0000:6401 ?
0000:6402 ??
0000:6403 ??
0000:6406 ??
0000:6407 ?
0000:6407 ?
0000:6408 ??
0000:6408 ??
0000:6408 ??
0000:6408 ??
0000:6408 ??
0000:6401 ??
0000:6401 ??
0000:6401 ??
0000:6401 ??
0000:6401 ??
                                                                                                                                                                                                               ; sub_0_286F+2A1o
                                                                                             .block
                                                                                             .block
                                                                                             .block
                                                                                             .block
                                                                                             .block
                                                                                             .block
                                                                                                                                                                                                               ; DATA XREF: 0000:0FE5<sup>o</sup>
                                                    unk_0_6407:
                                                                                            .block
                                                                                                                                                                                                               ; 0000:1022<sup>†</sup>o ...
                                                                                            .block
                                                                                            .block
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0000:6414 ??
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0000:6416 ??
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0000:6410 ??
0000:6410 ??
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0000:6424 ??
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0000:6426 ??
0000:6427 ??
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0000:6427 ??
0000:6428 ??
0000:6428 ??
0000:642B ??
0000:642C ??
0000:642C ??
0000:642E ??
0000:643C ??
0000:6431 ??
0000:6434 ??
0000:6435 ??
0000:6437 ??
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0000:6437 ??
0000:6438 ??
0000:6439 ??
0000:643A ??
                                                                                             .block
                                                                                             .block
.block
                                                    unk_0_6439:
                                                                                                                                                                                                              ; DATA XREF: sub_0_31DD+C\daggero
0000:643A ??
0000:643B ??
0000:643C ??
0000:643E ??
0000:643E ??
0000:6441 ??
0000:6441 ??
0000:6444 ??
0000:6444 ??
0000:6447 ??
0000:6447 ??
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0000:6449 ??
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 0000:6449 ??
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 0000:644A ??
0000:644B ??
0000:644C ??
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.block
 0000:644D ??
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 0000:644E ??
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.block .block .block .block .block .block

.block

.block .block .block

.block

.block

0000:64BD ??

0000:64BE ?? 0000:64BF ?? 0000:64CO ??

0000:64C2 ??

0000:6401

.block .block .block .block

.block .block .block .block

.block

.block

0000:6530 ?? 0000:6531 ?? 0000:6532 ?? 0000:6533 ??

0000:6534 ??

0000:6535 ??

; DATA XREF: 0000:103A\u00e90 ; sub_0_24EA+9\u00e90 ...

; DATA XREF: 0000:103110

unk 0 65A0:

unk 0 65A7:

0000:65A7

0000:65A8 ??

.block .block .block .block .block .block .block

.block

.block

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0000:661C ??
0000:661C ??
0000:661E ??
0000:661F ??
0000:6621 ??
0000:6621 ??
0000:6622 ??
0000:6623 ??
0000:6624 ??
0000:6625 ??
0000:6626 ??
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0000:6629 ??
0000:662A ??
0000:662B ??
0000:662C ??
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                                                                                                  .block
0000:662C ??
0000:662E ??
0000:662E ??
0000:6631 ??
0000:6631 ??
0000:6633 ??
0000:6636 ??
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0000:663C ??
0000:663D ??
0000:663E ??
0000:663F ??
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0000:663F ??
0000:6641 ??
0000:6642 ??
0000:6643 ??
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 0000:664E ??
0000:664F ??
0000:6650 ??
0000:6651 ??
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0000:6652 ??
0000:6653 ??
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0000:6655 ??
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0000:6656 ??
0000:6650 ??
0000:6650 ??
0000:6656 ??
0000:6667 ??
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0000:677F	??	.block 1
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