

```

0000:0000 ;
0000:0000 ;
0000:0000 ;
0000:0000 ; This file is generated by The Interactive Disassembler (IDA)
0000:0000 ; Licensed to: Unknown User (-)
0000:0000 ; Copyright (c) 1999 by DataRescue sa/nv, <ida@datarescue.com>
0000:0000 ;
0000:0000 ;
0000:0000 ;
0000:0000 ; File Name : E:\Projects\NeoKong\arcade\dkong.bin
0000:0000 ; Format : Binary File
0000:0000 ; Base Address: 0000h Range: 0000h - 4000h Loaded length: 4000h
0000:0000 ;
0000:0000 ; Processor: z80
0000:0000 ; Target assembler: Table Driven Assembler (TASM) by Speech Technology Inc.
0000:0000 ;
0000:0000 ;
0000:0000 ; Segment type: Pure code
0000:0000 ; segment 'ROM'
0000:0000
0000:0000 RESET: ; CODE XREF: 0000:00B2|j
0000:0000 3E 00 ; DATA XREF: 0000:0FCD|o
0000:0000 ld a, 0
0000:0002 32 84 7D ld (nmi_mask), a
0000:0005 C3 66 02 jp INIT
0000:0008 ; SUBROUTINE
0000:0008
0000:0008 return_if_attract_mode: ; CODE XREF: sub_0_315+7|p
0000:0008 3A 07 60 ; sub_0_51C+1|p ...
0000:0008 ld a, (attract_mode_flag)
0000:000B 0F rrca ; in attract mode?
0000:000C D0 ret nc ; no, return
0000:000D 33 inc sp
0000:000E 33 inc sp ; discard return address
0000:000F C9 ret
0000:000F ; End of function return_if_attract_mode
0000:0010 ; SUBROUTINE
0000:0010
0000:0010 return_if_mario_not_alive: ; CODE XREF: sub_0_3A2+3|p
0000:0010 3A 00 62 ; sub_0_2C03+3|p ...
0000:0010 ld a, (is_mario_alive)
0000:0013 0F rrca ; is mario alive?
0000:0014 D8 ret c ; yes, return
0000:0015 33 inc sp
0000:0016 33 inc sp ; discard return address
0000:0017 C9 ret
0000:0017 ; End of function return_if_mario_not_alive
0000:0018 ; SUBROUTINE
0000:0018
0000:0018 return_NOT_8bit_timeout: ; CODE XREF: return_NOT_16bit_timeout+4|j
0000:0018 21 09 60 ; 0000:0A63|p ...
0000:0018 ld hl, eight_bit_countdown
0000:001B 35 dec (hl)
0000:001C C8 ret z
0000:001D 33 inc sp
0000:001E 33 inc sp ; discard return address
0000:001F C9 ret
0000:001F ; End of function return_NOT_8bit_timeout
0000:0020 ; SUBROUTINE
0000:0020
0000:0020 return_NOT_16bit_timeout: ; CODE XREF: 0000:0763|p
0000:0020 21 08 60 ; 0000:084B|p
0000:0020 ld hl, sixteen_bit_countdown_msb
0000:0023 35 dec (hl)
0000:0024 28 F2 jr z, return_NOT_8bit_timeout
0000:0026
0000:0026 pop_hl_ret: ; CODE XREF: print_message_A+1A|j
0000:0026 E1 ; sub_0_1783+4|j
0000:0026 pop hl ; discard return address
0000:0027 C9 ret
0000:0027 ; End of function return_NOT_16bit_timeout
0000:0028 ; SUBROUTINE
0000:0028
0000:0028 jump_table_go_A: ; CODE XREF: 0000:00C9|p
0000:0028 87 ; 0000:0701|p ...
0000:0028 add a, a ; entries are words
0000:0029 E1 pop hl ; return address is table base
0000:002A 5F ld e, a
0000:002B 16 00 ld d, 0 ; DE = offset
0000:002D C3 32 00 jp loc_0_32 ; skip vector address
0000:002D ; End of function jump_table_go_A
0000:0030 ; SUBROUTINE
0000:0030
0000:0030 sub_0_30: ; CODE XREF: sub_0_3A2+2|p
0000:0030 18 12 ; 0000:1668|p ...
0000:0030 jr return_if_level_bit_not_set
0000:0032 ;
0000:0032
0000:0032 loc_0_32: ; CODE XREF: jump_table_go_A+5|j
0000:0032 19 add hl, de ; get address of entry
0000:0033 5E ld e, (hl)
0000:0034 23 inc hl
0000:0035 56 ld d, (hl) ; DE = jump address
0000:0036 EB ex de, hl ; HL = jump address
0000:0037 E9 jp (hl) ; go
0000:0038 ;
0000:0038
0000:0038
0000:0038

```

```

0000:0038      add_c_sprite_register_x10:                ; CODE XREF: animate_kong_and_pauline+F|p
0000:0038 11 04 00      ld      de, 4                ; animate_kong_and_pauline+65|p ...
0000:0038      ld      b, 10              ; every 4th byte
0000:003B 06 0A      ld      b, 10              ; loop 10 times
0000:003D      loc_0_3D:                ; CODE XREF: sub_0_30+11|j
0000:003D 79          ; 0000:0D9A|p ...
0000:003D      ld      a, c
0000:003E 86      add     a, (hl)
0000:003F 77      ld      (hl), a
0000:0040 19      add     hl, de
0000:0041 10 FA      djnz    loc_0_3D
0000:0043 C9      ret
0000:0044      ;
0000:0044      return_if_level_bit_not_set:    ; CODE XREF: sub_0_30|j
0000:0044 21 27 62      ld      hl, level_type
0000:0047 46      ld      b, (hl)
0000:0048      ; get level type
0000:0048      loc_0_48:                ; CODE XREF: sub_0_30+19|j
0000:0048 0F      rrca
0000:0049 10 FD      djnz    loc_0_48
0000:004B D8      ret     c
0000:004C E1      pop     hl
0000:004D C9      ret
0000:004D      ; End of function sub_0_30
0000:004D      ;
0000:004E      ; SUBROUTINE
0000:004E      ;
0000:004E      copy_sprites_2_11_data:      ; CODE XREF: animate_kong_and_pauline+4D|p
0000:004E 11 08 69      ld      de, soft_sprite_ram+8 ; animate_kong_and_pauline+77|p ...
0000:0051 01 28 00      ld      bc, 40
0000:0054 ED B0      ldir
0000:0056 C9      ret
0000:0056      ; End of function copy_sprites_2_11_data
0000:0056      ;
0000:0057      ; SUBROUTINE
0000:0057      ;
0000:0057      rand:                    ; CODE XREF: 0000:00B9|p
0000:0057 3A 18 60      ld      a, (random_no)
0000:0057      ld      hl, gen_purpose_timer
0000:005A 21 1A 60      add     a, (hl)
0000:005D 86      ld      hl, random_no+1
0000:005E 21 19 60      add     a, (hl)
0000:0061 86      ld      (random_no), a
0000:0062 32 18 60      ret
0000:0065 C9      ; End of function rand
0000:0065      ;
0000:0066      ;
0000:0066      nmi:
0000:0066 F5      push    af
0000:0067 C5      push    bc
0000:0068 D5      push    de
0000:0069 E5      push    hl
0000:006A DD E5      push    ix
0000:006C FD E5      push    iy
0000:006E AF      xor     a
0000:006F 32 84 7D      ld      (nmi_mask), a
0000:0072 3A 00 7D      ld      a, (in2_snd_latch)
0000:0075 E6 01      and     1
0000:0077 C2 00 40      jp      nz, 4000h
0000:007A 21 38 01      ld      hl, dma_reg_tbl
0000:007D CD 41 01      call    dma_sprite_data_to_hw
0000:0080 3A 07 60      ld      a, (attract_mode_flag)
0000:0083 A7      and     a
0000:0084 C2 B5 00      jp      nz, loc_0_B5
0000:0087 3A 26 60      ld      a, (upright)
0000:008A A7      and     a
0000:008B C2 98 00      jp      nz, loc_0_98
0000:008E 3A 0E 60      ld      a, (unk_0_600E)
0000:0091 A7      and     a
0000:0092 3A 80 7C      ld      a, (in1)
0000:0095 C2 9B 00      jp      nz, loc_0_9B
0000:0098      loc_0_98:                ; CODE XREF: 0000:008B|j
0000:0098 3A 00 7C      ld      a, (in0)
0000:009B      loc_0_9B:                ; CODE XREF: 0000:0095|j
0000:009B 47      ld      b, a
0000:009C E6 0F      and     0Fh
0000:009E 4F      ld      c, a
0000:009F 3A 11 60      ld      a, (last_raw_in)
0000:00A2 2F      cpl
0000:00A3 A0      and     b
0000:00A4 E6 10      and     10h
0000:00A6 17      rla
0000:00A7 17      rla
0000:00A8 17      rla
0000:00A9 B1      or      c
0000:00AA 60      ld      h, b
0000:00AB 6F      ld      l, a
0000:00AC 22 10 60      ld      (controller_in), hl
0000:00AF 78      ld      a, b
0000:00B0 CB 77      bit     6, a
0000:00B2 C2 00 00      jp      nz, RESET
0000:00B5      loc_0_B5:                ; CODE XREF: 0000:0084|j
0000:00B5 21 1A 60      ld      hl, gen_purpose_timer
0000:00B8 35      dec     (hl)
0000:00B9 CD 57 00      call    rand
0000:00BC CD 7B 01      call    sub_0_17B
0000:00BF CD E0 00      call    update_sounds
0000:00C2 21 D2 00      ld      hl, nmi_exit
0000:00C5 E5      push    hl
0000:00C6 3A 05 60      ld      a, (nmi_sequencer)
0000:00C9 EF      rst     28h
0000:00C9      ;
0000:00CA C3 01      .dw init_machine_settings
0000:00CC 3C 07      .dw vector_on_main_sequencer

```

```

0000:00CE B2 08      .dw vector_on_credit_sequencer
0000:00D0 FE 06      .dw vector_on_ingame_sequencer
0000:00D2
0000:00D2
0000:00D2 nmi_exit:
0000:00D2 FD E1      pop      iy      ; DATA XREF: 0000:00C2|o
0000:00D4 DD E1      pop      ix
0000:00D6 E1      pop      hl
0000:00D7 D1      pop      de
0000:00D8 C1      pop      bc
0000:00D9 3E 01      ld       a, 1
0000:00DB 32 84 7D      ld       (nmi_mask), a      ; enable_nmi
0000:00DE F1      pop      af
0000:00DF C9      ret
0000:00E0
0000:00E0 ; SUBROUTINE
0000:00E0
0000:00E0
0000:00E0
0000:00E0 update_sounds:
0000:00E0 21 80 60      ld       hl, digital_snd_tmrs      ; CODE XREF: 0000:00BF|p
0000:00E3 11 00 7D      ld       de, in2_snd_latch      ; base of digital sound triggers
0000:00E6 3A 07 60      ld       a, (attract_mode_flag)
0000:00E9 A7      and     a
0000:00EA C0      ret      ; in attract mode?
0000:00EB 06 08      ld       b, 8      ; yes, return
0000:00ED      ; 8 digital sound triggers
0000:00ED
0000:00ED 7E      ld       a, (hl)      ; CODE XREF: update_sounds+18|j
0000:00EE A7      and     a      ; timer for this sound
0000:00EF CA F5 00      jp      z, loc_0_F5      ; done?
0000:00F2 35      dec     (hl)      ; yes, skip
0000:00F3 3E 01      ld       a, 1      ; decrement timer
0000:00F5      ; enable
0000:00F5
0000:00F5 loc_0_F5:
0000:00F5 12      ld       (de), a      ; CODE XREF: update_sounds+F|j
0000:00F6 1C      inc     e      ; set trigger state for this sound
0000:00F7 2C      inc     l      ; next latch
0000:00F8 10 F3      djnz    loc_0_ED      ; next timer
0000:00FA 21 8B 60      ld       hl, unk_0_608B      ; loop for 8 sounds
0000:00FD 7E      ld       a, (hl)
0000:00FE A7      and     a
0000:00FF C2 08 01      jp      nz, loc_0_108
0000:0102 2D      dec     l
0000:0103 2D      dec     l
0000:0104 7E      ld       a, (hl)
0000:0105 C3 0B 01      jp      set_bg_sound_music
0000:0108
0000:0108
0000:0108
0000:0108 loc_0_108:
0000:0108 35      dec     (hl)      ; CODE XREF: update_sounds+1F|j
0000:0109 2D      dec     l
0000:010A 7E      ld       a, (hl)      ; get background sound/music
0000:010B
0000:010B
0000:010B set_bg_sound_music:
0000:010B 32 00 7C      ld       (in0), a      ; CODE XREF: update_sounds+25|j
0000:010E 21 88 60      ld       hl, unk_0_6088      ; background sound/music select
0000:0111 AF      xor     a
0000:0112 BE      cp      (hl)
0000:0113 CA 18 01      jp      z, loc_0_118
0000:0116 35      dec     (hl)
0000:0117 3C      inc     a
0000:0118
0000:0118
0000:0118 loc_0_118:
0000:0118 32 80 7D      ld       (dsw_audio_irq), a      ; CODE XREF: update_sounds+33|j
0000:011B C9      ret      ; digital sound - dead
0000:011B
0000:011B ; End of function update_sounds
0000:011B
0000:011C
0000:011C ; SUBROUTINE
0000:011C
0000:011C
0000:011C
0000:011C stop_sound:
0000:011C 06 08      ; CODE XREF: sub_0_17B+1A|p
0000:011C      ; 0000:02B5|p ...
0000:011C
0000:011C ld       b, 8
0000:011E AF      xor     a
0000:011F 21 00 7D      ld       hl, in2_snd_latch
0000:0122 11 80 60      ld       de, digital_snd_tmrs
0000:0125
0000:0125 loc_0_125:
0000:0125 77      ld       (hl), a      ; CODE XREF: stop_sound+D|j
0000:0126 12      ld       (de), a
0000:0127 2C      inc     l
0000:0128 1C      inc     e
0000:0129 10 FA      djnz    loc_0_125      ; write 8 bytes
0000:012B 06 04      ld       b, 4
0000:012D
0000:012D loc_0_12D:
0000:012D 12      ld       (de), a      ; CODE XREF: stop_sound+13|j
0000:012E 1C      inc     e
0000:012F 10 FC      djnz    loc_0_12D      ; another 4 copies
0000:0131 32 80 7D      ld       (dsw_audio_irq), a
0000:0134 32 00 7C      ld       (in0), a
0000:0137 C9      ret      ; background music = NONE
0000:0137
0000:0137 ; End of function stop_sound
0000:0137
0000:0137
0000:0137 dma_reg_tbl: .db 53h      ; DATA XREF: 0000:007A|o
0000:0138      ; DMA mode (TC stop, CH0,1)
0000:0138      ; CH0 address
0000:0139 00 69      .dw soft_sprite_ram
0000:013B 80 41      .dw 4180h      ; CH0 terminal count (RD 0x180 bytes)
0000:013D 00 70      .dw SPRAM_start
0000:013F 80 81      .dw 8180h      ; CH1 Address
0000:0141      ; CH1 terminal count (WR 0x180 bytes)
0000:0141
0000:0141 ; SUBROUTINE
0000:0141
0000:0141
0000:0141
0000:0141 dma_sprite_data_to_hw:
0000:0141 AF      xor     a      ; CODE XREF: 0000:007D|p
0000:0142 32 85 7D      ld       (p8257_drq), a
0000:0145 7E      ld       a, (hl)      ; deassert DRQ0&l
0000:0146 32 08 78      ld       (i8257_io+8), a      ; 0x53
0000:0149 23      inc     hl      ; mode set
0000:014A 7E      ld       a, (hl)
0000:014B 32 00 78      ld       (i8257_io), a      ; 0x00
0000:014E 23      inc     hl      ; CH0 DMA address LSB
0000:014F 7E      ld       a, (hl)      ; 0x69

```

```

0000:0150 32 00 78      ld      (i8257_io), a          ; CH0 DMA address MSB
0000:0153 23          inc      hl                    ;
0000:0154 7E          ld      a, (hl)              ; 0x80
0000:0155 32 01 78      ld      (i8257_io+1), a       ; terminal count LSB
0000:0158 23          inc      hl                    ;
0000:0159 7E          ld      a, (hl)              ; 0x41
0000:015A 32 01 78      ld      (i8257_io+1), a       ; terminal count MSB
0000:015D 23          inc      hl                    ;
0000:015E 7E          ld      a, (hl)              ; 0x00
0000:015F 32 02 78      ld      (i8257_io+2), a       ; CH1 DMA address LSB
0000:0162 23          inc      hl                    ;
0000:0163 7E          ld      a, (hl)              ; 0x70
0000:0164 32 02 78      ld      (i8257_io+2), a       ; CH1 DMA address MSB
0000:0167 23          inc      hl                    ;
0000:0168 7E          ld      a, (hl)              ; 0x80
0000:0169 32 03 78      ld      (i8257_io+3), a       ; CH1 terminal count LSB
0000:016C 23          inc      hl                    ;
0000:016D 7E          ld      a, (hl)              ; 0x81
0000:016E 32 03 78      ld      (i8257_io+3), a       ; CH1 terminal count MSB
0000:0171 3E 01          ld      a, 1                  ;
0000:0173 32 85 7D      ld      (p8257_drq), a        ; assert DRQ0&1
0000:0176 AF          xor      a                    ;
0000:0177 32 85 7D      ld      (p8257_drq), a        ; deassert DRQ0&1
0000:017A C9          ret
0000:017A          ; End of function dma_sprite_data_to_hw
0000:017A
0000:017B          ; ██████████ S U B R O U T I N E ██████████
0000:017B
0000:017B          sub_0_17B:                  ; CODE XREF: 0000:00BC↑p
0000:017B 3A 00 7D          ld      a, (in2_snd_latch)    ; read IN2
0000:017E CB 7F          bit      7, a                ; coin?
0000:0180 21 03 60          ld      hl, unk_0_6003
0000:0183 C2 89 01          jp      nz, loc_0_189        ; yes, skip
0000:0186 36 01          ld      (hl), 1
0000:0188 C9          ret
0000:0189          ;
0000:0189          loc_0_189:                  ; CODE XREF: sub_0_17B+8↑j
0000:0189 7E          ld      a, (hl)
0000:018A A7          and      a
0000:018B C8          ret      z
0000:018C E5          push     hl
0000:018D 3A 05 60          ld      a, (nmi_sequencer)
0000:0190 FE 03          cp      3
0000:0192 CA 9D 01          jp      z, loc_0_19D
0000:0195 CD 1C 01          call    stop_sound
0000:0198 3E 03          ld      a, 3
0000:019A 32 83 60          ld      (digital_snd_tmrs+3), a
0000:019D          loc_0_19D:                  ; CODE XREF: sub_0_17B+17↑j
0000:019D E1          pop      hl
0000:019E 36 00          ld      (hl), 0
0000:01A0 2B          dec      hl
0000:01A1 34          inc      (hl)
0000:01A2 11 24 60          ld      de, coinage+2
0000:01A5 1A          ld      a, (de)
0000:01A6 96          sub      (hl)
0000:01A7 C0          ret      nz
0000:01A8 77          ld      (hl), a
0000:01A9 13          inc      de
0000:01AA 2B          dec      hl
0000:01AB EB          ex      de, hl
0000:01AC 1A          ld      a, (de)
0000:01AD FE 90          cp      90h ; 'Ė'
0000:01AF D0          ret      nc
0000:01B0 86          add      a, (hl)
0000:01B1 27          daa
0000:01B2 12          ld      (de), a
0000:01B3 11 00 04          ld      de, 400h
0000:01B6 CD 9F 30          call    sub_0_309F
0000:01B9 C9          ret
0000:01B9          ; End of function sub_0_17B
0000:01B9          ;
0000:01B9          AA+byte_0_1BA:          .db 0, 37h, 0, 0AAh, 0AAh, 0AAh, 50h, 76h, 0 ; DATA XREF: 0000:159D↑o
0000:01BA AA AA 50 76+          ; Initial score and high score on bootup
0000:01C3          ;
0000:01C3          init_machine_settings:    ; DATA XREF: 0000:00CA↑o
0000:01C3 CD 74 08          call    clear_visible_area_and_sprites
0000:01C6 21 BA 01          ld      hl, 1BAh
0000:01C9 11 B2 60          ld      de, unk_0_60B2
0000:01CC 01 09 00          ld      bc, 9
0000:01CF ED B0          ldir
0000:01D1 3E 01          ld      a, 1
0000:01D3 32 07 60          ld      (attract_mode_flag), a ; set attract mode flag
0000:01D6 32 29 62          ld      (level), a
0000:01D9 32 28 62          ld      (life_no), a
0000:01DC CD B8 06          call    display_lives_and_level
0000:01DF CD 07 02          call    sub_0_207
0000:01E2 3E 01          ld      a, 1
0000:01E4 32 82 7D          ld      (flipscreen), a
0000:01E7 32 05 60          ld      (nmi_sequencer), a
0000:01EA 32 27 62          ld      (level_type), a
0000:01ED AF          xor      a
0000:01EE 32 0A 60          ld      (main_sequencer), a ; game screen sequencer
0000:01F1 CD 53 0A          call    display_LUP
0000:01F4 11 04 03          ld      de, 304h
0000:01F7 CD 9F 30          call    sub_0_309F
0000:01FA 11 02 02          ld      de, 202h
0000:01FD CD 9F 30          call    sub_0_309F
0000:0200 11 00 02          ld      de, 200h
0000:0203 CD 9F 30          call    sub_0_309F
0000:0206 C9          ret
0000:0207          ; ██████████ S U B R O U T I N E ██████████
0000:0207
0000:0207          sub_0_207:                  ; CODE XREF: 0000:01DF↑p
0000:0207 3A 80 7D          ld      a, (dsw_audio_irq)    ; read DIPSW
0000:020A 4F          c, a                        ; store
0000:020B 21 20 60          ld      hl, lives_per_game
0000:020E E6 03          and      3                    ; lives setting
0000:0210 C6 03          add      a, 3                  ; init no. of lives

```

```

0000:0212 77      ld      (hl), a          ; store no. of lives
0000:0213 23      inc     hl              ;
0000:0214 79      ld      a, c              ; DIPSW
0000:0215 0F      rrca              ;
0000:0216 0F      rrca              ;
0000:0217 E6 03      and     3              ; bonus life setting
0000:0219 47      ld      b, a              ;
0000:021A 3E 07      ld      a, 7              ; 7,000?
0000:021C CA 26 02      jp      z, loc_0_226      ; yes, skip
0000:021F 3E 05      ld      a, 5              ; 5,000?
0000:0221
0000:0221      loc_0_221:          ; CODE XREF: sub_0_207+1D↑j
0000:0221 C6 05      add     a, 5              ;
0000:0223 27      daa              ;
0000:0224 10 FB      djnz   loc_0_221        ; calculate 10/15/20K points
0000:0226
0000:0226      loc_0_226:          ; CODE XREF: sub_0_207+15↑j
0000:0226 77      ld      (hl), a          ; bonus_setting
0000:0227 23      inc     hl              ;
0000:0228 79      ld      a, c              ; DIPSW
0000:0229 01 01 01      ld      bc, 101h         ; 1C P1
0000:022C 11 02 01      ld      de, 102h         ; 1C P2
0000:022F E6 70      and     70h ; 'p'       ; coinage setting
0000:0231 17      rla              ;
0000:0232 17      rla              ;
0000:0233 17      rla              ;
0000:0234 17      rla              ; coinage 0-7
0000:0235 CA 47 02      jp      z, loc_0_247      ; 1C1C
0000:0238 DA 41 02      jp      c, loc_0_241      ; 2-5 coins
0000:023B 3C      inc     a              ; no. credits
0000:023C 4F      ld      c, a              ; C = credits
0000:023D 5A      ld      e, d              ; D = coins
0000:023E C3 47 02      jp      loc_0_247
; -----
0000:0241
0000:0241      loc_0_241:          ; CODE XREF: sub_0_207+31↑j
0000:0241 C6 02      add     a, 2              ; no. coins
0000:0243 47      ld      b, a              ; B = coins
0000:0244 57      ld      d, a              ; D = coins
0000:0245 87      add     a, a              ;
0000:0246 5F      ld      e, a              ; E = coins x2
0000:0247
0000:0247      loc_0_247:          ; CODE XREF: sub_0_207+2E↑j
0000:0247 72      ; sub_0_207+37↑j
0000:0247      ld      (hl), d          ;
0000:0248 23      inc     hl              ;
0000:0249 73      ld      (hl), e          ;
0000:024A 23      inc     hl              ;
0000:024B 70      ld      (hl), b          ;
0000:024C 23      inc     hl              ;
0000:024D 71      ld      (hl), c          ;
0000:024E 23      inc     hl              ;
0000:024F 3A 80 7D      ld      a, (dsw_audio_irq) ; read DIPSW
0000:0252 07      rlca              ; upright?
0000:0253 3E 01      ld      a, 1              ;
0000:0255 DA 59 02      jp      c, loc_0_259      ; yes, skip
0000:0258 3D      dec     a              ;
0000:0259
0000:0259      loc_0_259:          ; CODE XREF: sub_0_207+4E↑j
0000:0259 77      ld      (hl), a          ; store cocktail/upright
0000:025A 21 65 35      ld      hl, high_score_tbl ;
0000:025D 11 00 61      ld      de, high_score_tbl_ram ; destination in RAM
0000:0260 01 AA 00      ld      bc, 0AAh ; '↵' ; length of table
0000:0263 ED B0      ldir              ; copy to ram
0000:0265 C9      ret
; End of function sub_0_207
; -----
0000:0265
0000:0265
0000:0266
0000:0266      INIT:              ; CODE XREF: 0000:0005↑j
0000:0266 06 10      ld      b, 16              ;
0000:0268 21 00 60      ld      hl, RAM_start      ; start of RAM
0000:026B AF      xor     a              ; zero byte
0000:026C
0000:026C      loc_0_26C:          ; CODE XREF: 0000:0272↑j
0000:026C 4F      ld      c, a              ;
0000:026D
0000:026D      loc_0_26D:          ; CODE XREF: 0000:0270↑j
0000:026D 77      ld      (hl), a          ; zero memory
0000:026E 23      inc     hl              ; next location
0000:026F 0D      dec     c              ;
0000:0270 20 FB      jr      nz, loc_0_26D      ; clear 256 bytes
0000:0272 10 F8      djnz   loc_0_26C          ; clear 4K bytes
0000:0274 06 04      ld      b, 4              ;
0000:0276 21 00 70      ld      hl, SPRAM_start    ; start of sprite RAM
0000:0279
0000:0279      loc_0_279:          ; CODE XREF: 0000:027F↑j
0000:0279 4F      ld      c, a              ;
0000:027A
0000:027A      loc_0_27A:          ; CODE XREF: 0000:027D↑j
0000:027A 77      ld      (hl), a          ; zero memory
0000:027B 23      inc     hl              ; next location
0000:027C 0D      dec     c              ;
0000:027D 20 FB      jr      nz, loc_0_27A      ; clear 256 bytes
0000:027F 10 F8      djnz   loc_0_279          ; clear 1K bytes
0000:0281 06 04      ld      b, 4              ;
0000:0283 3E 10      ld      a, 10h           ; space character
0000:0285 21 00 74      ld      hl, VRAM_start    ; start of VRAM
0000:0288
0000:0288      loc_0_288:          ; CODE XREF: 0000:028F↑j
0000:0288 0E 00      ld      c, 0              ;
0000:028A
0000:028A      loc_0_28A:          ; CODE XREF: 0000:028D↑j
0000:028A 77      ld      (hl), a          ; clear memory
0000:028B 23      inc     hl              ; next location
0000:028C 0D      dec     c              ;
0000:028D 20 FB      jr      nz, loc_0_28A      ; clear 256 bytes
0000:028F 10 F7      djnz   loc_0_288          ; clear 1K bytes
0000:0291 21 C0 60      ld      hl, unk_0_60C0     ;
0000:0294 06 40      ld      b, 64              ; fill 64 bytes
0000:0296 3E FF      ld      a, 0FFh          ; fill byte
0000:0298
0000:0298      loc_0_298:          ; CODE XREF: 0000:029A↑j
0000:0298 77      ld      (hl), a          ; set to $FF
0000:0299 23      inc     hl              ; next location
0000:029A 10 FC      djnz   loc_0_298          ; set 64 bytes

```

```

0000:029C 3E C0      ld      a, 0C0h ; 'L'
0000:029E 32 B0 60      ld      (unk_0_60B0), a
0000:02A1 32 B1 60      ld      (unk_0_60B1), a
0000:02A4 AF        xor      a
0000:02A5 32 83 7D      ld      (spritebank), a
0000:02A8 32 86 7D      ld      (palette_bank), a ; b0=0
0000:02AB 32 87 7D      ld      (palette_bank+1), a ; b1=0
0000:02AE 3C        inc      a
0000:02AF 32 82 7D      ld      (flipscreen), a
0000:02B2 31 00 6C      ld      sp, 6C00h
0000:02B5 CD 1C 01      call    stop_sound
0000:02B8 3E 01      ld      a, 1
0000:02BA 32 84 7D      ld      (nmi_mask), a ; enable interrupts
0000:02BD
0000:02BD      main_loop: ; CODE XREF: 0000:02D8|j
0000:02BD 26 60      ; 0000:02E1|j
0000:02BD      ; DATA XREF: ...
0000:02BD      ld      h, 60h ; ''
0000:02BF 3A B1 60      ld      a, (unk_0_60B1)
0000:02C2 6F        ld      l, a
0000:02C3 7E        ld      a, (hl)
0000:02C4 87        add      a, a
0000:02C5 30 1C      jr      nc, loc_0_2E3
0000:02C7 CD 15 03      call    sub_0_315
0000:02CA CD 50 03      call    sub_0_350
0000:02CD 21 19 60      ld      hl, random_no+1
0000:02D0 34        inc      (hl)
0000:02D1 21 83 63      ld      hl, unk_0_6383
0000:02D4 3A 1A 60      ld      a, (gen_purpose_timer)
0000:02D7 BE        cp      (hl)
0000:02D8 28 E3      jr      z, main_loop
0000:02DA 77        ld      (hl), a
0000:02DB CD 7F 03      call    sub_0_37F
0000:02DE CD A2 03      call    sub_0_3A2
0000:02E1 18 DA      jr      main_loop
0000:02E3
0000:02E3      ;
0000:02E3      loc_0_2E3: ; CODE XREF: 0000:02C5|j
0000:02E3 E6 1F        and      1Fh
0000:02E5 5F        ld      e, a
0000:02E6 16 00      ld      d, 0
0000:02E8 36 FF      ld      (hl), 0FFh
0000:02EA 2C        inc      l
0000:02EB 4E        ld      c, (hl)
0000:02EC 36 FF      ld      (hl), 0FFh
0000:02EE 2C        inc      l
0000:02EF 7D        ld      a, 1
0000:02F0 FE C0      cp      0C0h ; 'L'
0000:02F2 30 02      jr      nc, loc_0_2F6
0000:02F4 3E C0      ld      a, 0C0h ; 'L'
0000:02F6
0000:02F6      loc_0_2F6: ; CODE XREF: 0000:02F2|j
0000:02F6 32 B1 60      ld      (unk_0_60B1), a
0000:02F9 79        ld      a, c
0000:02FA 21 BD 02      ld      hl, main_loop
0000:02FD E5        push     hl
0000:02FE 21 07 03      ld      hl, off_0_307 ; $02BD is the return address
0000:0301 19        add      hl, de ; jump table
0000:0302 5E        ld      e, (hl) ; entry index
0000:0303 23        inc      hl
0000:0304 56        ld      d, (hl) ; get entry
0000:0305 EB        ex      de, hl
0000:0306 E9        jp      (hl) ; jump
0000:0306
0000:0307 1C 05      off_0_307: .dw sub_0_51C ; DATA XREF: 0000:02FE|o
0000:0307      ; jump table
0000:0309 9B 05      .dw sub_0_59B
0000:030B C6 05      .dw sub_0_5C6
0000:030D E9 05      .dw print_message_A
0000:030F 11 06      .dw display_credits_if_attract_mode
0000:0311 2A 06      .dw loc_0_62A
0000:0313 B8 06      .dw display_lives_and_level
0000:0315
0000:0315      ; SUBROUTINE
0000:0315
0000:0315      sub_0_315: ; CODE XREF: 0000:02C7|p
0000:0315 3A 1A 60      ld      a, (gen_purpose_timer)
0000:0318 47        ld      b, a
0000:0319 E6 0F        and      0Fh
0000:031B C0        ret      nz
0000:031C CF        rst      8 ; return if attract mode
0000:031D 3A 0D 60      ld      a, (unk_0_600D)
0000:0320 CD 47 03      call    sub_0_347
0000:0323 11 E0 FF      ld      de, 0FFE0h
0000:0326 CB 60        bit      4, b
0000:0328 28 14      jr      z, loc_0_33E
0000:032A 3E 10      ld      a, 10h
0000:032C 77        ld      (hl), a
0000:032D 19        add      hl, de
0000:032E 77        ld      (hl), a
0000:032F 19        add      hl, de
0000:0330 77        ld      (hl), a
0000:0331 3A 0F 60      ld      a, (two_players)
0000:0334 A7        and      a
0000:0335 C8        ret      z
0000:0336 3A 0D 60      ld      a, (unk_0_600D)
0000:0339 EE 01      xor      l
0000:033B CD 47 03      call    sub_0_347
0000:033E
0000:033E      loc_0_33E: ; CODE XREF: sub_0_315+13|j
0000:033E 3C        inc      a
0000:033F 77        ld      (hl), a
0000:0340 19        add      hl, de
0000:0341 36 25      ld      (hl), 25h ; '%'
0000:0343 19        add      hl, de
0000:0344 36 20      ld      (hl), 20h ; ' '
0000:0346 C9        ret
0000:0346      ; End of function sub_0_315
0000:0347
0000:0347      ; SUBROUTINE
0000:0347
0000:0347      sub_0_347: ; CODE XREF: sub_0_315+B|p
0000:0347      ; sub_0_315+26|p
0000:0347 21 40 77

```

```

0000:0347      ld      hl, 7740h
0000:034A A7      and      a
0000:034B C8      ret      z
0000:034C 21 E0 74    ld      hl, 74E0h
0000:034F C9      ret
0000:034F      ; End of function sub_0_347
0000:0350
0000:0350      ; ██████████ SUBROUTINE ██████████
0000:0350
0000:0350      sub_0_350:                                ; CODE XREF: 0000:02CA↑p
0000:0350 3A 2D 62      ld      a, (awarded_bonus_life)
0000:0353 A7      and      a                                ; already got bonus life?
0000:0354 C0      ret      nz                                ; yes, return
0000:0355 21 B3 60      ld      hl, unk_0_60B3
0000:0358 3A 0D 60      ld      a, (unk_0_600D)
0000:035B A7      and      a
0000:035C 28 03      jr      z, loc_0_361
0000:035E 21 B6 60      ld      hl, unk_0_60B6
0000:0361
0000:0361      loc_0_361:                                ; CODE XREF: sub_0_350+C↑j
0000:0361 7E      ld      a, (hl)
0000:0362 E6 F0      and     0F0h ; '-'
0000:0364 47      ld      b, a
0000:0365 23      inc     hl
0000:0366 7E      ld      a, (hl)
0000:0367 E6 0F      and     0Fh
0000:0369 B0      or      b
0000:036A 0F      rrca
0000:036B 0F      rrca
0000:036C 0F      rrca
0000:036D 0F      rrca
0000:036E 21 21 60    ld      hl, bonus_setting
0000:0371 BE      cp      (hl)                                ; reached bonus score?
0000:0372 D8      ret      c                                ; no, return
0000:0373 3E 01      ld      a, 1
0000:0375 32 2D 62      ld      (awarded_bonus_life), a
0000:0378 21 28 62      ld      hl, life_no
0000:037B 34      inc     hl                                ; extra life
0000:037C C3 B8 06      jp      display_lives_and_level
0000:037C      ; End of function sub_0_350
0000:037C
0000:037F      ; ██████████ SUBROUTINE ██████████
0000:037F
0000:037F      sub_0_37F:                                ; CODE XREF: 0000:02DB↑p
0000:037F 21 84 63      ld      hl, unk_0_6384
0000:0382 7E      ld      a, (hl)
0000:0383 34      inc     hl
0000:0384 A7      and      a
0000:0385 C0      ret      nz
0000:0386 21 81 63      ld      hl, unk_0_6381
0000:0389 7E      ld      a, (hl)
0000:038A 47      ld      b, a
0000:038B 34      inc     hl
0000:038C E6 07      and     7
0000:038E C0      ret      nz
0000:038F 78      ld      a, b
0000:0390 0F      rrca
0000:0391 0F      rrca
0000:0392 0F      rrca
0000:0393 47      ld      b, a
0000:0394 3A 29 62      ld      a, (level)
0000:0397 80      add     a, b
0000:0398 FE 05      cp      5
0000:039A 38 02      jr      c, loc_0_39E
0000:039C 3E 05      ld      a, 5
0000:039E
0000:039E      loc_0_39E:                                ; CODE XREF: sub_0_37F+1B↑j
0000:039E 32 80 63      ld      (unk_0_6380), a
0000:03A1 C9      ret
0000:03A1      ; End of function sub_0_37F
0000:03A1
0000:03A2      ; ██████████ SUBROUTINE ██████████
0000:03A2
0000:03A2      sub_0_3A2:                                ; CODE XREF: 0000:02DE↑p
0000:03A2 3E 03      ld      a, 3
0000:03A4 F7      rst      30h                                ; return if level bit not set
0000:03A5 D7      rst      10h                                ; return if mario not alive
0000:03A6 3A 50 63      ld      a, (unk_0_6350)
0000:03A9 0F      rrca
0000:03AA D8      ret      c
0000:03AB 21 B8 62      ld      hl, unk_0_62B8
0000:03AE 35      dec     hl
0000:03AF C0      ret      nz
0000:03B0 36 04      ld      hl, 4
0000:03B2 3A B9 62      ld      a, (unk_0_62B9)
0000:03B5 0F      rrca
0000:03B6 D0      ret      nc
0000:03B7 21 29 6A      ld      hl, soft_sprite_ram+129h
0000:03BA 06 40      ld      b, 40h ; '@'
0000:03BC DD 21 A0 66      ld      ix, unk_0_66A0
0000:03C0 0F      rrca
0000:03C1 D2 E4 03      jp      nc, loc_0_3E4
0000:03C4 DD 36 09 02      ld      (ix+9), 2
0000:03C8 DD 36 0A 02      ld      (ix+0Ah), 2
0000:03CC 04      inc     b
0000:03CD 04      inc     b
0000:03CE CD F2 03      call    sub_0_3F2
0000:03D1 21 BA 62      ld      hl, unk_0_62BA
0000:03D4 35      dec     hl
0000:03D5 C0      ret      nz
0000:03D6 3E 01      ld      a, 1
0000:03D8 32 B9 62      ld      (unk_0_62B9), a
0000:03DB 32 A0 63      ld      (unk_0_63A0), a
0000:03DE
0000:03DE      loc_0_3DE:                                ; CODE XREF: sub_0_3A2+4D↑j
0000:03DE 3E 10      ld      a, 10h
0000:03E0 32 BA 62      ld      (unk_0_62BA), a
0000:03E3 C9      ret
0000:03E4
0000:03E4      ;

```

```

0000:03E4      loc_0_3E4:      ld      (ix+9), 2      ; CODE XREF: sub_0_3A2+1F↑j
0000:03E4 DD 36 09 02      ld      (ix+0Ah), 0
0000:03E8 DD 36 0A 00      call    sub_0_3F2
0000:03EC CD F2 03      jp      loc_0_3DE
0000:03EF C3 DE 03      ; End of function sub_0_3A2
0000:03EF
0000:03F2      ; ██████████ SUBROUTINE ██████████
0000:03F2
0000:03F2      sub_0_3F2:      ; CODE XREF: sub_0_3A2+2C↑p
0000:03F2 70      ; sub_0_3A2+4A↑p
0000:03F2      ld      (hl), b
0000:03F3 3A 19 60      ld      a, (random_no+1)
0000:03F6 0F      rrca
0000:03F7 D8      ret      c
0000:03F8 04      inc     b
0000:03F9 70      ld      (hl), b
0000:03FA C9      ret
0000:03FA      ; End of function sub_0_3F2
0000:03FA
0000:03FB      ; ██████████ SUBROUTINE ██████████
0000:03FB
0000:03FB      animate_kong_and_pauline:      ; CODE XREF: 0000:19B0↑p
0000:03FB 3A 27 62      ld      a, (level_type)
0000:03FE 02      cp      2      ; cement pies?
0000:0400 C2 13 04      jp      nz, loc_0_413      ; no, skip
0000:0403 21 08 69      ld      hl, soft_sprite_ram+8      ; sprite #2 y coord
0000:0406 3A A3 63      ld      a, (unk_0_63A3)      ; get top conveyer speed/direction
0000:0409 4F      ld      c, a      ; kong location adjustment
0000:040A FF      rst      38h      ; add +/-1 to y for 10 sprites
0000:040B 3A 10 69      ld      a, (soft_sprite_ram+10h)      ; sprite #4, y coord
0000:040E D6 3B      sub     59
0000:0410 32 B7 63      ld      (unk_0_63B7), a
0000:0413
0000:0413      loc_0_413:      ; CODE XREF: animate_kong_and_pauline+5↑j
0000:0413 3A 91 63      ld      a, (kong_thrash_flag)
0000:0416 A7      and     a      ; thrashing arms?
0000:0417 C2 26 04      jp      nz, loc_0_426      ; yes, continue
0000:041A 3A 1A 60      ld      a, (gen_purpose_timer)
0000:041D A7      and     a      ; expired?
0000:041E C2 86 04      jp      nz, animate_pauline      ; no, animate Pauline
0000:0421 3E 01      ld      a, 1      ; flag thrashing
0000:0423 32 91 63      ld      (kong_thrash_flag), a
0000:0426
0000:0426      loc_0_426:      ; CODE XREF: animate_kong_and_pauline+1C↑j
0000:0426 21 90 63      ld      hl, kong_thrash_tmr
0000:0429 34      inc     (hl)      ; inc
0000:042A 7E      ld      a, (hl)      ; get timer
0000:042B FE 80      cp      128      ; finished thrashing?
0000:042D CA 64 04      jp      z, draw_kong_mouth_closed      ; yes, continue
0000:0430 3A 93 63      ld      a, (barrel_deployment)
0000:0433 A7      and     a      ; deployment in progress?
0000:0434 C2 86 04      jp      nz, animate_pauline      ; yes, skip (no thrashing)
0000:0437 7E      ld      a, (hl)      ; get timer
0000:0438 47      ld      b, a
0000:0439 E6 1F      and     31      ; time to thrash arms?
0000:043B C2 86 04      jp      nz, animate_pauline      ; no, skip (animate Pauline)
0000:043E 21 CF 39      ld      hl, dk_thrash_right_spr
0000:0441 CB 68      bit     5, b      ; left/right depending on timer
0000:0443 20 03      jr      nz, do_kong_thrash
0000:0445 21 F7 39      ld      hl, dk_thrash_left_spr
0000:0448
0000:0448      do_kong_thrash:      ; CODE XREF: animate_kong_and_pauline+48↑j
0000:0448 CD 4E 00      call    copy_sprites_2_11_data
0000:044B 3E 03      ld      a, 3
0000:044D 32 82 60      ld      (digital_snd_tmrs+2), a
0000:0450
0000:0450      loc_0_450:      ; CODE XREF: animate_kong_and_pauline+7A↑j
0000:0450 3A 27 62      ld      a, (level_type)
0000:0453 0F      rrca      ; level 2/4?
0000:0454 D2 78 04      jp      nc, loc_0_478      ; yes, skip
0000:0457 0F      rrca      ; level 3?
0000:0458 DA 86 04      jp      c, animate_pauline      ; yes, skip
0000:045B 21 0B 69      ld      hl, soft_sprite_ram+0Bh      ; sprite #2, x coord
0000:045E 0E FC      ld      c, 0FCh ; '3'
0000:0460 FF      rst      38h      ; subtract 4 from x for 10 sprites
0000:0461 C3 86 04      jp      animate_pauline
0000:0464
0000:0464      draw_kong_mouth_closed:      ; CODE XREF: animate_kong_and_pauline+32↑j
0000:0464 AF      xor     a      ; zero kong_animation_tmr
0000:0465 77      ld      (hl), a
0000:0466 23      inc     hl
0000:0467 77      ld      (hl), a
0000:0468 3A 93 63      ld      a, (barrel_deployment)
0000:046B A7      and     a      ; deployment in progress?
0000:046C C2 86 04      jp      nz, animate_pauline      ; no, continue
0000:046F 21 5C 38      ld      hl, kong_normal_spr
0000:0472 CD 4E 00      call    copy_sprites_2_11_data
0000:0475 C3 50 04      jp      loc_0_450
0000:0478
0000:0478      loc_0_478:      ; CODE XREF: animate_kong_and_pauline+59↑j
0000:0478 21 08 69      ld      hl, soft_sprite_ram+8      ; ptr sprite #2 (x coord)
0000:047B 0E 44      ld      c, 44h ; 'D'
0000:047D 0F      rrca      ; level 2?
0000:047E D2 85 04      jp      nc, loc_0_485      ; yes, skip
0000:0481 3A B7 63      ld      a, (unk_0_63B7)
0000:0484 4F      ld      c, a
0000:0485
0000:0485      loc_0_485:      ; CODE XREF: animate_kong_and_pauline+83↑j
0000:0485 FF      rst      38h      ; add C to y coord of 10 sprites
0000:0486
0000:0486      animate_pauline:      ; CODE XREF: animate_kong_and_pauline+23↑j
0000:0486 3A 90 63      ; animate_kong_and_pauline+39↑j ...
0000:0486      ld      a, (kong_thrash_tmr)
0000:0489 4F      ld      c, a
0000:048A 11 20 00      ld      de, 20h ; ' '
0000:048D 3A 27 62      ld      a, (level_type)
0000:0490 FE 04      cp      4      ; rivets?
0000:0492 CA BE 04      jp      z, display_help_rivets_level      ; yes, skip
0000:0495 79      ld      a, c      ; kong_thrash_tmr

```



```

0000:0496 A7          and     a          ; finished?
0000:0497 CA A1 04    jp      z, wipe_help ; yes, skip
0000:049A 3E EF          ld      a, 0EFh ; "HELP!"
0000:049C CB 71          bit     6, c        ; time to display help?
0000:049E C2 A3 04    jp      nz, display_or_wipe_help ; yes, skip
0000:04A1          wipe_help:
0000:04A1          ld      a, 10h      ; CODE XREF: animate_kong_and_pauline+9C|j
0000:04A3          ; blank tiles
0000:04A3          display_or_wipe_help:
0000:04A3          ld      hl, VRAM_start+1C4h ; CODE XREF: animate_kong_and_pauline+A3|j
0000:04A6 CD 14 05    call   display_3_tiles_HL ; screen position for HELP!
0000:04A9 3A 05 69    ld      a, (soft_sprite_ram+5) ; display/wipe HELP!
0000:04AC          ; sprite #1, flipy & code
0000:04AC          make_pauline_run:
0000:04AC          ; CODE XREF: animate_kong_and_pauline+F3|j
0000:04AC          ; animate_kong_and_pauline+10B|j
0000:04AC          ld      (soft_sprite_ram+5), a ; sprite #1, flipy & code
0000:04AF CB 71          bit     6, c
0000:04B1 C8          ret     z
0000:04B2 47          ld      b, a
0000:04B3 79          ld      a, c
0000:04B4 E6 07          and     7
0000:04B6 C0          ret     nz
0000:04B7 78          ld      a, b        ; sprite #1, flipy & code
0000:04B8 EE 03          xor     3          ; toggle sprites 0x11/0x12 pauline running
0000:04BA 32 05 69    ld      (soft_sprite_ram+5), a ; sprite #1, flipy & code
0000:04BD C9          ret
0000:04BE          ;
0000:04BE          display_help_rivets_level:
0000:04BE          ; CODE XREF: animate_kong_and_pauline+97|j
0000:04BE          ld      a, 10h      ; blank tiles
0000:04C0 21 23 76    ld      hl, VRAM_start+223h ; screen pos
0000:04C3 CD 14 05    call   display_3_tiles_HL
0000:04C6 21 83 75    ld      hl, VRAM_start+183h ; screen pos
0000:04C9 CD 14 05    call   display_3_tiles_HL
0000:04CC CB 71          bit     6, c
0000:04CE CA 09 05    jp      z, loc_0_509
0000:04D1 3A 03 62    ld      a, (mario_x)
0000:04D4 FE 80          cp      80h ; 'C' ; mario left/right side of screen?
0000:04D6 D2 F1 04    jp      nc, display_help_right ; right, skip
0000:04D9 3E DF          ld      a, 0DFh ; '■' ; "HELP!" to the left
0000:04DB 21 23 76    ld      hl, VRAM_start+223h ; screen pos
0000:04DE CD 14 05    call   display_3_tiles_HL ; display "HELP!"
0000:04E1          display_pauline_left:
0000:04E1          ; CODE XREF: animate_kong_and_pauline+116|j
0000:04E1          ld      a, (soft_sprite_ram+1) ; sprite #0, flipy & code
0000:04E4 F6 80          or      80h ; 'C' ; flipy
0000:04E6 32 01 69    ld      (soft_sprite_ram+1), a ; save
0000:04E9 3A 05 69    ld      a, (soft_sprite_ram+5) ; sprite #1, flipy & code
0000:04EC F6 80          or      80h ; 'C' ; flipy
0000:04EE C3 AC 04    jp      make_pauline_run
0000:04F1          ;
0000:04F1          display_help_right:
0000:04F1          ; CODE XREF: animate_kong_and_pauline+DB|j
0000:04F1          ld      a, 0EFh ; " " ; "HELP!" to the right
0000:04F3 21 83 75    ld      hl, VRAM_start+183h ; screen pos
0000:04F6 CD 14 05    call   display_3_tiles_HL ; display "HELP!"
0000:04F9          display_pauline_right:
0000:04F9          ; CODE XREF: animate_kong_and_pauline+113|j
0000:04F9          ld      a, (soft_sprite_ram+1) ; sprite #0, flipy & code
0000:04FC E6 7F          and     7Fh ; ' ' ; not flipped
0000:04FE 32 01 69    ld      (soft_sprite_ram+1), a ; save
0000:0501 3A 05 69    ld      a, (soft_sprite_ram+5) ; sprite #1, flipy & code
0000:0504 E6 7F          and     7Fh ; ' ' ; not flipped
0000:0506 C3 AC 04    jp      make_pauline_run
0000:0509          ;
0000:0509          loc_0_509:
0000:0509          ; CODE XREF: animate_kong_and_pauline+D3|j
0000:0509          ld      a, (mario_x)
0000:050C FE 80          cp      80h ; 'C'
0000:050E D2 F9 04    jp      nc, display_pauline_right
0000:0511 C3 E1 04    jp      display_pauline_left
0000:0511          ; End of function animate_kong_and_pauline
0000:0511          ;
0000:0511          ; SUBROUTINE
0000:0511          ;
0000:0511          display_3_tiles_HL:
0000:0511          ; CODE XREF: animate_kong_and_pauline+AB|p
0000:0511          ; animate_kong_and_pauline+C8|p ...
0000:0511          ; 3 tiles
0000:0511          loc_0_516:
0000:0511          ; CODE XREF: display_3_tiles_HL+5|j
0000:0511          ; store tile
0000:0511          ld      (hl), a
0000:0517 19          add     hl, de
0000:0518 3D          dec     a
0000:0519 10 FB          djnz   loc_0_516 ; next row/column
0000:051B C9          ret     ; prev tile
0000:051B          ; loop for 3 tiles
0000:051B          ; End of function display_3_tiles_HL
0000:051B          ;
0000:051B          ; SUBROUTINE
0000:051B          ;
0000:051B          sub_0_51C:
0000:051B          ; CODE XREF: 0000:0698|p
0000:051B          ; 0000:06A5|j
0000:051B          ; DATA XREF: ...
0000:051C          ld      c, a
0000:051D CF          rst     8
0000:051E CD 5F 05    call   sub_0_55F ; return if attract mode
0000:0521 79          ld      a, c
0000:0522 81          add     a, c
0000:0523 81          add     a, c
0000:0524 4F          ld      c, a
0000:0525 21 29 35    ld      hl, Bonus_Points_Tbl
0000:0528 06 00          ld      b, 0
0000:052A 09          add     hl, bc
0000:052B A7          and     a
0000:052C 06 03          ld      b, 3
0000:052E          loc_0_52E:
0000:052E          ; CODE XREF: sub_0_51C+18|j
0000:052E          ld      a, (de)
0000:052F 8E          adc     a, (hl)
0000:0530 27          daa
0000:0531 12          ld      (de), a
0000:0532 13          inc     de

```

```

0000:0533 23          inc     hl
0000:0534 10 F8          djnz   loc_0_52E
0000:0536 D5          push  de
0000:0537 1B          dec     de
0000:0538 3A 0D 60       ld      a, (unk_0_600D)
0000:053B CD 6B 05       call   sub_0_56B
0000:053E D1          pop     de
0000:053F 1B          dec     de
0000:0540 21 BA 60       ld      hl, unk_0_60BA
0000:0543 06 03          ld      b, 3
0000:0545
0000:0545          loc_0_545:                                ; CODE XREF: sub_0_51C+31↑j
0000:0545 1A          ld      a, (de)
0000:0546 BE          cp      (hl)
0000:0547 D8          ret     c
0000:0548 C2 50 05       jp      nz, loc_0_550
0000:054B 1B          dec     de
0000:054C 2B          dec     hl
0000:054D 10 F6       djnz   loc_0_545
0000:054F C9          ret
;
0000:0550
0000:0550          loc_0_550:                                ; CODE XREF: sub_0_51C+2C↑j
0000:0550 CD 5F 05       call   sub_0_55F
0000:0553 21 B8 60       ld      hl, unk_0_60B8
0000:0556
0000:0556          loc_0_556:                                ; CODE XREF: sub_0_51C+3E↑j
0000:0556 1A          ld      a, (de)
0000:0557 77          ld      (hl), a
0000:0558 13          inc     de
0000:0559 23          inc     hl
0000:055A 10 FA       djnz   loc_0_556
0000:055C C3 DA 05       jp      loc_0_5DA
0000:055C          ; End of function sub_0_51C
0000:055C
0000:055F          ; SUBROUTINE
0000:055F
0000:055F          sub_0_55F:                                ; CODE XREF: sub_0_51C+2↑p
0000:055F 11 B2 60       ld      de, unk_0_60B2
0000:055F          ; sub_0_51C+34↑p
0000:0562 3A 0D 60       ld      a, (unk_0_600D)
0000:0565 A7          and     a
0000:0566 C8          ret     z
0000:0567 11 B5 60       ld      de, unk_0_60B5
0000:056A C9          ret
0000:056A          ; End of function sub_0_55F
0000:056A
0000:056B          ; SUBROUTINE
0000:056B
0000:056B          sub_0_56B:                                ; CODE XREF: sub_0_51C+1F↑p
0000:056B DD 21 81 77       ld      ix, VRAM_start+381h
0000:056B          ; sub_0_5C6+11↑j
0000:056B A7          and     a
0000:0570 28 0A       jr     z, display_score_HL
0000:0572 DD 21 21 75       ld      ix, VRAM_start+121h
0000:0576 18 04       jr     display_score_HL
;
0000:0578
0000:0578          loc_0_578:                                ; CODE XREF: sub_0_5C6+17↑j
0000:0578 DD 21 41 76       ld      ix, VRAM_start+241h
0000:0578          ; screen position for score
0000:057C          display_score_HL:                        ; CODE XREF: sub_0_56B+5↑j
0000:057C EB          ex      de, hl
0000:057C          ; sub_0_56B+B↑j ...
0000:057D 11 E0 FF       ld      de, 0FFE0h
0000:0580 01 04 03       ld      bc, 304h
0000:0583          ; column address delta
0000:0583          ; 3=6 digits
0000:0583          display_B_bcd_digit_pairs:                ; CODE XREF: sub_0_56B+25↑j
0000:0583          ; display_credits+11↑j
0000:0583          ; get bcd digit pair
0000:0583          ld      a, (hl)
0000:0584 0F          rrca
0000:0585 0F          rrca
0000:0586 0F          rrca
0000:0587 0F          rrca
0000:0588 CD 93 05       call   display_score_digit
0000:058B 7E          ld      a, (hl)
0000:058C CD 93 05       call   display_score_digit
0000:058F 2B          dec     hl
0000:0590 10 F1       djnz   display_B_bcd_digit_pairs
0000:0592 C9          ret
0000:0592          ; End of function sub_0_56B
0000:0592
0000:0593          ; SUBROUTINE
0000:0593
0000:0593          display_score_digit:                    ; CODE XREF: sub_0_56B+1D↑p
0000:0593          ; sub_0_56B+21↑p
0000:0593          ; low nibble only
0000:0593          ; display digit
0000:0593          ; next column
0000:0593          and     0Fh
0000:0595 DD 77 00       ld      (ix+0), a
0000:0598 DD 19          add     ix, de
0000:059A C9          ret
0000:059A          ; End of function display_score_digit
0000:059A
0000:059B          ; SUBROUTINE
0000:059B
0000:059B          sub_0_59B:                                ; CODE XREF: sub_0_59B+24↑p
0000:059B          ; DATA XREF: 0000:0309↑o
0000:059B          cp      3
0000:059D D2 BD 05       jp      nc, loc_0_5BD
0000:05A0 F5          push  af
0000:05A1 21 B2 60       ld      hl, unk_0_60B2
0000:05A4 A7          and     a
0000:05A5 CA AB 05       jp      z, loc_0_5AB
0000:05A8 21 B5 60       ld      hl, unk_0_60B5
0000:05AB          loc_0_5AB:                                ; CODE XREF: sub_0_59B+A↑j
0000:05AB FE 02          cp      2
0000:05AD C2 B3 05       jp      nz, loc_0_5B3
0000:05B0 21 B8 60       ld      hl, unk_0_60B8

```

```

0000:05B3      loc_0_5B3:                                     ; CODE XREF: sub_0_59B+12|j
0000:05B3      xor     a, a
0000:05B4 77      ld     (hl), a
0000:05B5 23      inc    hl
0000:05B6 77      ld     (hl), a
0000:05B7 23      inc    hl
0000:05B8 77      ld     (hl), a
0000:05B9 F1      pop    af
0000:05BA C3 C6 05      pop    af
                                jp     sub_0_5C6
                                ;
0000:05BD      loc_0_5BD:                                     ; CODE XREF: sub_0_59B+2|j
0000:05BD      ; sub_0_59B+29|j
0000:05BD 3D      dec     a
0000:05BE F5      push   af
0000:05BF CD 9B 05      call   sub_0_59B
0000:05C0 F1      pop    af
0000:05C1 C8      ret     z
0000:05C2 18 F7      jr     loc_0_5BD
                                ; End of function sub_0_59B
0000:05C4
0000:05C4
0000:05C6      ;
0000:05C6      ; SUBROUTINE
0000:05C6
0000:05C6      sub_0_5C6:                                     ; CODE XREF: sub_0_59B+1F|j
0000:05C6      ; sub_0_5C6+1C|p
0000:05C6      ; DATA XREF: ...
0000:05C6      cp     3
0000:05C8 CA E0 05      jp     z, loc_0_5E0
0000:05CB 11 B4 60      ld     de, unk_0_60B4
0000:05CE A7      and    a
0000:05CF CA D5 05      jp     z, loc_0_5D5
0000:05D2 11 B7 60      ld     de, unk_0_60B7
0000:05D5      loc_0_5D5:                                     ; CODE XREF: sub_0_5C6+9|j
0000:05D5      cp     2
0000:05D7 C2 6B 05      jp     nz, sub_0_56B
0000:05DA      loc_0_5DA:                                     ; CODE XREF: sub_0_51C+40|j
0000:05DA      ld     de, unk_0_60BA
0000:05DD C3 78 05      jp     loc_0_578
                                ;
0000:05E0      loc_0_5E0:                                     ; CODE XREF: sub_0_5C6+2|j
0000:05E0      ; sub_0_5C6+21|j
0000:05E0      dec     a
0000:05E1 F5      push   af
0000:05E2 CD C6 05      call   sub_0_5C6
0000:05E5 F1      pop    af
0000:05E6 C8      ret     z
0000:05E7 18 F7      jr     loc_0_5E0
                                ; End of function sub_0_5C6
0000:05E7
0000:05E9      ; SUBROUTINE
0000:05E9
0000:05E9
0000:05E9      print_message_A:                             ; CODE XREF: display_credits+2|p
0000:05E9      ; display_start_12P_get_selection+18|p
0000:05E9      ; DATA XREF: ...
0000:05E9      ld     hl, message_table
0000:05EC 87      add    a, a
0000:05ED F5      push   af
0000:05EE E6 7F      and    7Fh ; ' '
                                ; mask off 'wipe' bit
0000:05F0 5F      ld     e, a
0000:05F1 16 00      ld     d, 0
                                ; DE = offset
0000:05F3 19      add    hl, de
                                ; pointer to entry
0000:05F4 5E      ld     e, (hl)
0000:05F5 23      inc    hl
0000:05F6 56      ld     d, (hl)
                                ; DE = entry (word)
0000:05F7 EB      ex     de, hl
0000:05F8 5E      ld     e, (hl)
0000:05F9 23      inc    hl
0000:05FA 56      ld     d, (hl)
                                ; DE = screen address to print
0000:05FB 23      inc    hl
                                ; HL = message text
0000:05FC 01 E0 FF      ld     bc, 0FFE0h
                                ; screen column address inc value
0000:05FF EB      ex     de, hl
                                ; DE = text, HL = screen address
0000:0600      loc_0_600:                                     ; CODE XREF: print_message_A+26|j
0000:0600      ; get message character
0000:0600 1A      ld     a, (de)
0000:0601      loc_0_601:                                     ; DATA XREF: 0000:1275|o
0000:0601      ; end of message?
0000:0601 FE 3F      cp     3Fh ; '?'
0000:0603 CA 26 00      jp     z, pop_hl_ret
                                ; yes, exit
0000:0606 77      ld     (hl), a
                                ; display character on screen
0000:0607 F1      pop    af
                                ; restore original entry index
0000:0608 30 02      jr     nc, loc_0_60C
                                ; not wiping, skip
0000:060A 36 10      ld     (hl), 10h
                                ; display space character on screen
0000:060C      loc_0_60C:                                     ; CODE XREF: print_message_A+1F|j
0000:060C      ; store original entry index
0000:060C F5      push   af
0000:060D 13      inc    de
0000:060E 09      add    hl, bc
0000:060F 18 EF      jr     loc_0_600
                                ; next message character
                                ; next screen location
                                ; loop through message
                                ; End of function print_message_A
0000:0611
0000:0611
0000:0611      display_credits_if_attract_mode:             ; DATA XREF: 0000:030F|o
0000:0611      ld     a, (attract_mode_flag)
0000:0614 0F      rrca
                                ; in attract mode?
0000:0615 D0      ret     nc
                                ; no, return
0000:0616      ; SUBROUTINE
0000:0616
0000:0616
0000:0616      display_credits:                             ; CODE XREF: display_start_12P_get_selection+1B|p
0000:0616      ; 0000:141E|p ...
0000:0616      ; "credit"
0000:0616      ld     a, 5
0000:0618 CD E9 05      call   print_message_A
0000:061B 21 01 60      ld     hl, no_of_credits
0000:061E 11 E0 FF      ld     de, 0FFE0h
                                ; column address delta
0000:0621 DD 21 BF 74      ld     ix, VRAM_start+0BFh
                                ; screen position of credits
0000:0625 06 01      ld     b, 1
                                ; 1=2 digits

```



```

0000:06CE 47          ld      b, a          ; number of lives
0000:06CF 21 83 77      ld      hl, VRAM_start+383h ; screen location
0000:06D2          loc_0_6D2:
0000:06D2          ld      (hl), 0FFh      ; CODE XREF: display_lives_and_level+1D|j
0000:06D4 36 FF          add     hl, de          ; mario icon
0000:06D5 10 FB          djnz    loc_0_6D2      ; next screen location
0000:06D7          loc_0_6D7:            ; loop for no. of lives
0000:06D7          ld      hl, VRAM_start+103h ; CODE XREF: display_lives_and_level+13|j
0000:06DA 36 1C          ld      (hl), 1Ch      ; 'L'
0000:06DC 21 E3 74          ld      hl, VRAM_start+0E3h
0000:06DF 36 34          ld      (hl), 34h ; '4'
0000:06E1 3A 29 62          ld      a, (level)
0000:06E4 FE 64          cp      100           ; too high?
0000:06E6 38 05          jr      c, loc_0_6ED   ; no, skip
0000:06E8 3E 63          ld      a, 99          ; max out at 99
0000:06EA 32 29 62          ld      (level), a     ; adjust
0000:06ED          loc_0_6ED:            ; CODE XREF: display_lives_and_level+2E|j
0000:06ED 01 0A FF          ld      bc, 0FF0Ah
0000:06F0          loc_0_6F0:            ; CODE XREF: display_lives_and_level+3A|j
0000:06F0          inc     b
0000:06F1 91          sub     c
0000:06F2 D2 F0 06          jp      nc, loc_0_6F0
0000:06F5 81          add     a, c           ; level tens digit
0000:06F6 32 A3 74          ld      (VRAM_start+0A3h), a
0000:06F9 78          ld      a, b           ; level units digit
0000:06FA 32 C3 74          ld      (VRAM_start+0C3h), a
0000:06FD C9          ret
0000:06FD          ; End of function display_lives_and_level
0000:06FE          ;
0000:06FE          vector_on_ingame_sequencer: ; DATA XREF: 0000:00D0|o
0000:06FE 3A 0A 60          ld      a, (main_sequencer)
0000:0701 EF          rst     28h           ; go!
0000:0701          ;
0000:0702 86 09          .dw loc_0_986         ; Jump table
0000:0704 AB 09          .dw loc_0_9AB
0000:0706 D6 09          .dw loc_0_9D6
0000:0708 FE 09          .dw loc_0_9FE
0000:070A 1B 0A          .dw display_p2_screen?
0000:070C 37 0A          .dw display_p1_screen?
0000:070E 63 0A          .dw wait
0000:0710 76 0A          .dw do_intro_sequence
0000:0712 DA 0B          .dw draw_how_high_can_you_get
0000:0714 00 00          .dw 0
0000:0716 91 0C          .dw do_how_high_can_you_get
0000:0718 3C 12          .dw start_gameplay
0000:071A 7A 19          .dw gameplay
0000:071C 7C 12          .dw died_in_gameplay
0000:071E F2 12          .dw copy_current_lvl_data_to_P1
0000:0720 44 13          .dw copy_current_lvl_data_to_P2
0000:0722 8F 13          .dw p1_game_over
0000:0724 A1 13          .dw p2_game_over
0000:0726 AA 13          .dw loc_0_13AA
0000:0728 BB 13          .dw loc_0_13BB
0000:072A 1E 14          .dw draw_name_registered
0000:072C 86 14          .dw do_initials_entry
0000:072E 15 16          .dw mario_pauline_reunion
0000:0730 6B 19          .dw loc_0_196B
0000:0732 00 00          .dw 0
0000:0734 00 00          .dw 0
0000:0736 00 00          .dw 0
0000:0738 00 00          .dw 0
0000:073A 00 00          .dw 0
0000:073C          ;
0000:073C          vector_on_main_sequencer: ; DATA XREF: 0000:00CC|o
0000:073C          ld      hl, main_sequencer
0000:073F 3A 01 60          ld      a, (no_of_credits)
0000:0742 A7          and     a
0000:0743 C2 5C 07          jp      nz, inc_nmi_sequencer ; any credits?
0000:0746 7E          ld      a, (hl)        ; yes, skip
0000:0747 EF          rst     28h           ; go!
0000:0747          ;
0000:0748 79 07          .dw insert_coin_screen ; Jump Table (game sequencer)
0000:074A 63 07          .dw init_attract_mode
0000:074C 3C 12          .dw start_gameplay
0000:074E 77 19          .dw attract_mode_gameplay
0000:0750 7C 12          .dw died_in_gameplay
0000:0752 C3 07          .dw switch_to_title_screen
0000:0754 CB 07          .dw title_screen_flash
0000:0756 4B 08          .dw title_screen_no_flash
0000:0758 00 00          .dw 0
0000:075A 00 00          .dw 0
0000:075C          ;
0000:075C          inc_nmi_sequencer:      ; CODE XREF: 0000:0743|j
0000:075C          ld      (hl), 0        ; reset game sequencer
0000:075E 21 05 60          ld      hl, nmi_sequencer
0000:0761 34          inc     (hl)           ; inc nmi_sequencer
0000:0762 C9          ret
0000:0763          ;
0000:0763          init_attract_mode:      ; DATA XREF: 0000:074A|o
0000:0763          rst     20h           ; wait for 16-bit countdown
0000:0764 AF          xor     a
0000:0765 32 92 63          ld      (unk_0_6392), a
0000:0768 32 A0 63          ld      (unk_0_63A0), a
0000:076B 3E 01          ld      a, 1
0000:076D 32 27 62          ld      (level_type), a
0000:0770 32 29 62          ld      (level), a
0000:0773 32 28 62          ld      (life_no), a
0000:0776 C3 92 0C          jp      loc_0_C92
0000:0779          ;
0000:0779          insert_coin_screen:      ; DATA XREF: 0000:0748|o
0000:0779          ld      hl, palette_bank
0000:077C 36 00          ld      (hl), 0
0000:077E 23          inc     hl
0000:077F 36 00          ld      (hl), 0        ; palette bank = 0
0000:0781 11 1B 03          ld      de, 31Bh
0000:0784 CD 9F 30          call    sub_0_309F

```

```

0000:0787 1C          inc     e
0000:0788 CD 9F 30    call   sub_0_309F
0000:078B CD 65 09    call   sub_0_965
0000:078E 21 09 60    ld     hl, eight_bit_countdown
0000:0791 36 02          ld     (hl), 2
0000:0793 23          inc     hl
0000:0794 34          inc     (hl)
0000:0795 CD 74 08    call   clear_visible_area_and_sprites
0000:0798 CD 53 0A    call   display_1UP
0000:079B 3A 0F 60    ld     a, (two_players)
0000:079E FE 01          cp     1
0000:07A0 CC EE 09    call   z, display_2UP
0000:07A3 ED 5B 22 60 ld     de, (coinage)
0000:07A7 21 6C 75    ld     hl, VRAM_start+16Ch
0000:07AA CD AD 07    call   loc_0_7AD
0000:07AD          loc_0_7AD:
0000:07AD 73          ld     (hl), e
0000:07AE 23          inc     hl
0000:07AF 23          inc     hl
0000:07B0 72          ld     (hl), d
0000:07B1 7A          ld     a, d
0000:07B2 D6 0A          sub    0Ah
0000:07B4 C2 BC 07    jp     nz, loc_0_7BC
0000:07B7 77          ld     (hl), a
0000:07B8 3C          inc     a
0000:07B9 32 8E 75    ld     (VRAM_start+18Eh), a
0000:07BC          loc_0_7BC:
0000:07BC          ld     de, 201h
0000:07BF 21 8C 76    ld     hl, VRAM_start+28Ch
0000:07C2 C9          ret
0000:07C3          ;
0000:07C3          switch_to_title_screen:
0000:07C3          call   clear_visible_area_and_sprites
0000:07C6 21 0A 60    ld     hl, main_sequencer
0000:07C9 34          inc     (hl)
0000:07CA C9          ret
0000:07CB          ;
0000:07CB          title_screen_flash:
0000:07CB 3A 8A 63    ld     a, (unk_0_638A)
0000:07CE FE 00          cp     0
0000:07D0 C2 2D 08    jp     nz, loc_0_82D
0000:07D3 3E 60          ld     a, 60h
0000:07D5 32 8A 63    ld     (unk_0_638A), a
0000:07D8 0E 5F          ld     c, 5Fh
0000:07DA          loc_0_7DA:
0000:07DA          cp     0
0000:07DC CA 3B 08    jp     z, loc_0_83B
0000:07DF 21 86 7D    ld     hl, palette_bank
0000:07E2 36 00          ld     (hl), 0
0000:07E4 79          ld     a, c
0000:07E5 CB 07          rlc     a
0000:07E7 30 02          jr     nc, loc_0_7EB
0000:07E9 36 01          ld     (hl), 1
0000:07EB          loc_0_7EB:
0000:07EB          inc     hl
0000:07EC 36 00          ld     (hl), 0
0000:07EE CB 07          rlc     a
0000:07F0 30 02          jr     nc, loc_0_7F4
0000:07F2 36 01          ld     (hl), 1
0000:07F4          loc_0_7F4:
0000:07F4          ld     (unk_0_638B), a
0000:07F7 21 08 3D    ld     hl, title_screen
0000:07FA          display_donkey_kong_title:
0000:07FA 3E B0          ld     a, 0B0h
0000:07FC 46          ld     b, (hl)
0000:07FD 23          inc     hl
0000:07FE 5E          ld     e, (hl)
0000:07FF 23          inc     hl
0000:0800 56          ld     d, (hl)
0000:0801          loc_0_801:
0000:0801          ld     (de), a
0000:0802 13          inc     de
0000:0803 10 FC          djnz   loc_0_801
0000:0805 23          inc     hl
0000:0806 7E          ld     a, (hl)
0000:0807 FE 00          cp     0
0000:0809 C2 FA 07    jp     nz, display_donkey_kong_title
0000:080C 11 1E 03    ld     de, 31Eh
0000:080F CD 9F 30    call   sub_0_309F
0000:0812 13          inc     de
0000:0813 CD 9F 30    call   sub_0_309F
0000:0816 21 CF 39    ld     hl, dk_thrash_right_spr
0000:0819 CD 4E 00    call   copy_sprites_2_11_data
0000:081C CD 24 3F    call   sub_0_3F24
0000:081F 00          nop
0000:0820 21 08 69    ld     hl, soft_sprite_ram+8
0000:0823 0E 44          ld     c, 68
0000:0825 FF          rst     38h
0000:0826 21 0B 69    ld     hl, soft_sprite_ram+0Bh
0000:0829 0E 78          ld     c, 120
0000:082B FF          rst     38h
0000:082C C9          ret
0000:082D          ;
0000:082D          loc_0_82D:
0000:082D          ld     a, (unk_0_638B)
0000:0830 4F          ld     c, a
0000:0831 3A 8A 63    ld     a, (unk_0_638A)
0000:0834 3D          dec     a
0000:0835 32 8A 63    ld     (unk_0_638A), a
0000:0838 C3 DA 07    jp     loc_0_7DA
0000:083B          ;
0000:083B          loc_0_83B:
0000:083B          ld     hl, eight_bit_countdown
0000:083E 36 02          ld     (hl), 2
0000:0840 23          inc     hl

```

```

0000:0841 34          inc      (hl)
0000:0842 21 8A 63        ld      hl, unk_0_638A
0000:0845 36 00          ld      (hl), 0
0000:0847 23          inc      hl
0000:0848 36 00          ld      (hl), 0
0000:084A C9          ret
0000:084B
0000:084B
0000:084B title_screen_no_flash:          ; DATA XREF: 0000:0756|o
0000:084B E7          rst      20h          ; wait for 16-bit countdown
0000:084C 21 0A 60        ld      hl, main_sequencer
0000:084F 36 00          ld      (hl), 0          ; reset game sequencer
0000:0851 C9          ret
0000:0852
0000:0852 ; ██████████ SUBROUTINE ██████████
0000:0852
0000:0852 clear_tiles_and_sprites:          ; CODE XREF: 0000:0986|p
0000:0852 21 00 74        ld      hl, VRAM_start          ; 0000:196B|p
0000:0852          ld      c, 4          ; 4x256 bytes to clear
0000:0855 0E 04          djnz    loc_0_857
0000:0857          ; CODE XREF: clear_tiles_and_sprites+E|j
0000:0857 06 00          ld      b, 0          ; 256 bytes to clear
0000:0859 3E 10          ld      a, 10h          ; space character
0000:085B
0000:085B loc_0_85B:          ; CODE XREF: clear_tiles_and_sprites+B|j
0000:085B 77          ld      (hl), a          ; display space
0000:085C 23          inc      hl
0000:085D 10 FC        djnz    loc_0_85B          ; clear 256 bytes
0000:085F 0D          dec      c
0000:0860 C2 57 08        jp      nz, loc_0_857          ; do 1024 bytes
0000:0863 21 00 69        ld      hl, soft_sprite_ram
0000:0866 0E 02          djnz    loc_0_868
0000:0868          ; 2x192 bytes to clear
0000:0868 loc_0_868:          ; CODE XREF: clear_tiles_and_sprites+1E|j
0000:0868 06 C0          ld      b, 192          ; 192 bytes to clear
0000:086A AF          xor      a
0000:086B
0000:086B loc_0_86B:          ; CODE XREF: clear_tiles_and_sprites+1B|j
0000:086B 77          ld      (hl), a          ; clear soft sprite ram byte
0000:086C 23          inc      hl          ; next address
0000:086D 10 FC        djnz    loc_0_86B          ; clear 192 bytes
0000:086F 0D          dec      c
0000:0870 C2 68 08        jp      nz, loc_0_868          ; clear 384 bytes
0000:0873 C9          ret
0000:0873 ; End of function clear_tiles_and_sprites
0000:0873
0000:0873 ; ██████████ SUBROUTINE ██████████
0000:0873
0000:0873 clear_visible_area_and_sprites:          ; CODE XREF: 0000:01C3|p
0000:0873 21 04 74        ld      hl, VRAM_start+4          ; 0000:0795|p ...
0000:0874          ld      c, 32          ; 32 columns
0000:0877 0E 20          djnz    loc_0_879
0000:0879          ; CODE XREF: clear_visible_area_and_sprites+12|j
0000:0879 06 1C          ld      b, 28          ; 28 rows
0000:087B 3E 10          ld      a, 10h          ; <space>
0000:087D 11 04 00        ld      de, 4          ; bottm-to-top next column increment
0000:0880
0000:0880 loc_0_880:          ; CODE XREF: clear_visible_area_and_sprites+E|j
0000:0880 77          ld      (hl), a          ; display space character
0000:0881 23          inc      hl          ; next line
0000:0882 10 FC        djnz    loc_0_880          ; loop screen height
0000:0884 19          add      hl, de          ; next column
0000:0885 0D          dec      c          ; done all columns?
0000:0886 C2 79 08        jp      nz, loc_0_879          ; no, loop
0000:0889 21 22 75        ld      hl, VRAM_start+122h
0000:088C 11 20 00        ld      de, 32
0000:088F 0E 02          djnz    loc_0_893
0000:0891 3E 10          ld      a, 10h          ; <space>
0000:0893
0000:0893 loc_0_893:          ; CODE XREF: clear_visible_area_and_sprites+29|j
0000:0893 06 0E          ld      b, 14          ; 14 columns
0000:0895
0000:0895 loc_0_895:          ; CODE XREF: clear_visible_area_and_sprites+23|j
0000:0895 77          ld      (hl), a          ; display space character
0000:0896 19          add      hl, de          ; next column
0000:0897 10 FC        djnz    loc_0_895          ; loop for 14 columns
0000:0899 21 23 75        ld      hl, VRAM_start+123h
0000:089C 0D          dec      c
0000:089D C2 93 08        jp      nz, loc_0_893          ; repeat at new location
0000:08A0 21 00 69        ld      hl, soft_sprite_ram
0000:08A3 06 00          ld      b, 0          ; 256 bytes to clear
0000:08A5 3E 00          ld      a, 0          ; clear to 0x00
0000:08A7
0000:08A7 loc_0_8A7:          ; CODE XREF: clear_visible_area_and_sprites+35|j
0000:08A7 77          ld      (hl), a          ; clear soft sprite ram byte
0000:08A8 23          inc      hl          ; next location
0000:08A9 10 FC        djnz    loc_0_8A7          ; do 256 bytes
0000:08AB 06 80          ld      b, 128          ; 128 bytes to clear
0000:08AD
0000:08AD loc_0_8AD:          ; CODE XREF: clear_visible_area_and_sprites+3B|j
0000:08AD 77          ld      (hl), a          ; clear soft sprite ram byte
0000:08AE 23          inc      hl          ; next location
0000:08AF 10 FC        djnz    loc_0_8AD          ; clear 128 bytes
0000:08B1 C9          ret
0000:08B1 ; End of function clear_visible_area_and_sprites
0000:08B1
0000:08B1 ;
0000:08B1
0000:08B2 vector_on_credit_sequencer:          ; DATA XREF: 0000:00CE|o
0000:08B2 3A 0A 60        ld      a, (main_sequencer)
0000:08B5 EF          rst      28h          ; go!
0000:08B5
0000:08B5 ;
0000:08B5 .dw loc_0_8BA          ; jump table
0000:08B6 BA 08          .dw display_start_12P_init_???
0000:08B8 F8 08          ;
0000:08BA
0000:08BA loc_0_8BA:          ; DATA XREF: 0000:08B6|o
0000:08BA CD 74 08        call    clear_visible_area_and_sprites
0000:08BD AF          xor      a
0000:08BE 32 07 60        ld      (attract_mode_flag), a          ; clear attract mode flag
0000:08C1 11 0C 03        ld      de, 30Ch

```

```

0000:08C4 CD 9F 30      call    sub_0_309F
0000:08C7 21 0A 60      ld      hl, main_sequencer
0000:08CA 34              inc     (hl)
0000:08CB CD 65 09      call    sub_0_965
0000:08CE AF              xor     a
0000:08CF 21 86 7D      ld      hl, palette_bank
0000:08D2 77              ld      (hl), a
0000:08D3 2C              inc     l
0000:08D4 77              ld      (hl), a                      ; palette bank 0
0000:08D5
0000:08D5 ; ██████████ SUBROUTINE ██████████
0000:08D5
0000:08D5 display_start_12P_get_selection:      ; CODE XREF: 0000:08F8|p
0000:08D5      ld      b, 4
0000:08D7 1E 09      ld      e, return_if_attract_mode+1 ; "ONLY 1 PLAYER BUTTON"
0000:08D9 3A 01 60      ld      a, (no_of_credits)
0000:08DC FE 01      cp      1
0000:08DE CA E4 08      jp      z, loc_0_8E4
0000:08E1 06 0C      ld      b, 0Ch                      ; mask for START1/START2
0000:08E3 1C              inc     e                      ; "1 or 2 PLAYERS"
0000:08E4
0000:08E4 loc_0_8E4:      ; CODE XREF: display_start_12P_get_selection+9|j
0000:08E4      ld      a, (gen_purpose_timer)
0000:08E7 E6 07      and     7
0000:08E9 C2 F3 08      jp      nz, loc_0_8F3
0000:08EC 7B              ld      a, e                      ; message 9/10
0000:08ED CD E9 05      call    print_message_A            ; display
0000:08F0 CD 16 06      call    display_credits
0000:08F3
0000:08F3 loc_0_8F3:      ; CODE XREF: display_start_12P_get_selection+14|j
0000:08F3      ld      a, (in2_snd_latch)          ; read IN2
0000:08F6 A0              and     b                      ; only START1/START2
0000:08F7 C9              ret
0000:08F7 ; End of function display_start_12P_get_selection
0000:08F8
0000:08F8 ;
0000:08F8 display_start_12P_init_???:          ; DATA XREF: 0000:08B8|o
0000:08F8      call    display_start_12P_get_selection
0000:08FB FE 04      cp      4                      ; START1?
0000:08FD CA 06 09      jp      z, start_1_selected        ; yes, skip
0000:0900 FE 08      cp      8                      ; START2?
0000:0902 CA 19 09      jp      z, start_2_selected        ; yes, skip
0000:0905 C9              ret
0000:0906
0000:0906 ;
0000:0906 start_1_selected:      ; CODE XREF: 0000:08FD|j
0000:0906      call    dec_credits_and_???
0000:0909 21 48 60      ld      hl, p2_level_data
0000:090C 06 08      ld      b, 8
0000:090E AF              xor     a
0000:090F
0000:090F loc_0_90F:      ; CODE XREF: 0000:0911|j
0000:090F      ld      (hl), a
0000:0910 2C              inc     l
0000:0911 10 FC      djnz    loc_0_90F
0000:0913 21 00 00      ld      hl, 0
0000:0916 C3 38 09      jp      loc_0_938
0000:0919
0000:0919 ;
0000:0919 start_2_selected:      ; CODE XREF: 0000:0902|j
0000:0919      call    dec_credits_and_???
0000:091C CD 77 09      call    dec_credits_and_???
0000:091F 11 48 60      ld      de, p2_level_data
0000:0922 3A 20 60      ld      a, (lives_per_game)
0000:0925 12              ld      (de), a
0000:0926 1C              inc     e
0000:0927 21 5E 09      ld      hl, 95Eh
0000:092A 01 07 00      ld      bc, 7
0000:092D ED B0      ldir
0000:092F 11 01 01      ld      de, 101h
0000:0932 CD 9F 30      call    sub_0_309F
0000:0935 21 00 01      ld      hl, 100h
0000:0938
0000:0938 loc_0_938:      ; CODE XREF: 0000:0916|j
0000:0938      ld      (unk_0_600E), hl
0000:093B CD 74 08      call    clear_visible_area_and_sprites
0000:093E 11 40 60      ld      de, p1_level_data
0000:0941 3A 20 60      ld      a, (lives_per_game)
0000:0944 12              ld      (de), a
0000:0945 1C              inc     e
0000:0946 21 5E 09      ld      hl, game_init_data
0000:0949 01 07 00      ld      bc, 7                      ; 7 bytes
0000:094C ED B0      ldir
0000:094E 11 00 01      ld      de, 100h
0000:0951 CD 9F 30      call    sub_0_309F
0000:0954 AF              xor     a
0000:0955 32 0A 60      ld      (main_sequencer), a
0000:0958 3E 03      ld      a, 3
0000:095A 32 05 60      ld      (nmi_sequencer), a
0000:095D C9              ret
0000:095D
0000:095D game_init_data: .db 1                      ; DATA XREF: 0000:0946|o
0000:095E 01                      ; Start of game level init data
0000:095F 65 3A      .dw level_seq_1
0000:0961 01 00 00 00      .db 1, 0, 0, 0
0000:0965
0000:0965 ; ██████████ SUBROUTINE ██████████
0000:0965
0000:0965 sub_0_965:          ; CODE XREF: 0000:078B|p
0000:0965      ; 0000:08CB|p
0000:0965      ld      de, 400h
0000:0968 CD 9F 30      call    sub_0_309F
0000:096B 11 14 03      ld      de, 314h
0000:096E 06 06      ld      b, 6
0000:0970
0000:0970 loc_0_970:      ; CODE XREF: sub_0_965+F|j
0000:0970      call    sub_0_309F
0000:0973 1C              inc     e
0000:0974 10 FA      djnz    loc_0_970
0000:0976 C9              ret
0000:0976 ; End of function sub_0_965
0000:0976
0000:0977

```



```

0000:0977 ; SUBROUTINE
0000:0977
0000:0977
0000:0977 dec_credits_and_???: ; CODE XREF: 0000:0906|p
0000:0977 21 01 60 ; 0000:0919|p ...
0000:0977 ld hl, no_of_credits
0000:097A 3E 99 ld a, 99h ; '0'
0000:097C 86 add a, (hl)
0000:097D 27 daa ; decrement credits
0000:097E 77 ld (hl), a ; save
0000:097F 11 00 04 ld de, 400h
0000:0982 CD 9F 30 call sub_0_309F
0000:0985 C9 ret
0000:0985 ; End of function dec_credits_and_???
0000:0985
0000:0986 ;
0000:0986
0000:0986 loc_0_986: ; DATA XREF: 0000:0702|o
0000:0986 CD 52 08 call clear_tiles_and_sprites
0000:0989 CD 1C 01 call stop_sound
0000:098C 11 82 7D ld de, flipscreen
0000:098F 3E 01 ld a, 1
0000:0991 12 ld (de), a
0000:0992 21 0A 60 ld hl, main_sequencer
0000:0995 3A 0E 60 ld a, (unk_0_600E)
0000:0998 A7 and a
0000:0999 C2 9F 09 jp nz, loc_0_99F
0000:099C 36 01 ld (hl), 1
0000:099E C9 ret
0000:099F ;
0000:099F
0000:099F loc_0_99F: ; CODE XREF: 0000:0999|j
0000:099F 3A 26 60 ld a, (upright)
0000:09A2 3D dec a
0000:09A3 CA A8 09 jp z, loc_0_9A8
0000:09A6 AF xor a
0000:09A7 12 ld (de), a
0000:09A8
0000:09A8 loc_0_9A8: ; CODE XREF: 0000:09A3|j
0000:09A8 36 03 ld (hl), 3
0000:09AA C9 ret
0000:09AB ;
0000:09AB
0000:09AB loc_0_9AB: ; DATA XREF: 0000:0704|o
0000:09AB 21 40 60 ld hl, p1_level_data
0000:09AE 11 28 62 ld de, life_no ; player_current_data
0000:09B1 01 08 00 ld bc, 8
0000:09B4 ED B0 ldir
0000:09B6 2A 2A 62 ld hl, (seq_data) ; ptr current sequence table
0000:09B9 7E ld a, (hl) ; get level type
0000:09BA 32 27 62 ld (level_type), a ; store as current
0000:09BD 3A 0F 60 ld a, (two_players)
0000:09C0 A7 and a
0000:09C1 21 09 60 ld hl, eight_bit_countdown
0000:09C4 11 0A 60 ld de, main_sequencer
0000:09C7 CA D0 09 jp z, loc_0_9D0
0000:09CA 36 78 ld (hl), 78h ; 'x'
0000:09CC EB ex de, hl
0000:09CD 36 02 ld (hl), 2
0000:09CF C9 ret
0000:09D0 ;
0000:09D0
0000:09D0 loc_0_9D0: ; CODE XREF: 0000:09C7|j
0000:09D0 36 01 ld (hl), 1
0000:09D2 EB ex de, hl
0000:09D3 36 05 ld (hl), 5
0000:09D5 C9 ret
0000:09D6 ;
0000:09D6
0000:09D6 loc_0_9D6: ; DATA XREF: 0000:0706|o
0000:09D6 AF xor a
0000:09D7 32 86 7D ld (palette_bank), a
0000:09DA 32 87 7D ld (palette_bank+1), a ; palette bank 0
0000:09DD 11 02 03 ld de, 302h
0000:09E0 CD 9F 30 call sub_0_309F
0000:09E3 11 01 02 ld de, 201h
0000:09E6 CD 9F 30 call sub_0_309F
0000:09E9 3E 05 ld a, 5
0000:09EB 32 0A 60 ld (main_sequencer), a
0000:09EE ; SUBROUTINE
0000:09EE
0000:09EE
0000:09EE display_2UP: ; CODE XREF: 0000:07A0|p
0000:09EE 3E 02 ; 0000:0A2E|p
0000:09EE ld a, 2 ; '2'
0000:09F0 32 E0 74 ld (VRAM_start+0E0h), a
0000:09F3 3E 25 ld a, 25h ; '%' ; 'U'
0000:09F5 32 C0 74 ld (VRAM_start+0C0h), a
0000:09F8 3E 20 ld a, 20h ; ' ' ; 'P'
0000:09FA 32 A0 74 ld (VRAM_start+0A0h), a
0000:09FD C9 ret
0000:09FD ; End of function display_2UP
0000:09FD
0000:09FE ;
0000:09FE
0000:09FE loc_0_9FE: ; DATA XREF: 0000:0708|o
0000:09FE 21 48 60 ld hl, p2_level_data
0000:09A0 11 28 62 ld de, life_no ; player_current_data
0000:0A04 01 08 00 ld bc, 8
0000:0A07 ED B0 ldir
0000:0A09 2A 2A 62 ld hl, (seq_data) ; ptr current seq table
0000:0A0C 7E ld a, (hl) ; get level type
0000:0A0D 32 27 62 ld (level_type), a ; store as current
0000:0A10 3E 78 ld a, 78h ; 'x'
0000:0A12 32 09 60 ld (eight_bit_countdown), a
0000:0A15 3E 04 ld a, 4
0000:0A17 32 0A 60 ld (main_sequencer), a
0000:0A1A C9 ret
0000:0A1B ;
0000:0A1B
0000:0A1B display_p2_screen?: ; DATA XREF: 0000:070A|o
0000:0A1B AF xor a
0000:0A1C 32 86 7D ld (palette_bank), a
0000:0A1F 32 87 7D ld (palette_bank+1), a ; palette bank 0
0000:0A22 11 03 03 ld de, 303h

```

```

0000:0A25 CD 9F 30      call    sub_0_309F
0000:0A28 11 01 02      ld      de, 201h
0000:0A2B CD 9F 30      call    sub_0_309F
0000:0A2E CD EE 09      call    display_2UP
0000:0A31 3E 05          ld      a, 5
0000:0A33 32 0A 60      ld      (main_sequencer), a
0000:0A36 C9              ret
;
0000:0A37
0000:0A37      display_pl_screen?:          ; DATA XREF: 0000:070C|o
0000:0A37 11 04 03      ld      de, 304h
0000:0A3A CD 9F 30      call    sub_0_309F
0000:0A3D 11 02 02      ld      de, 202h
0000:0A40 CD 9F 30      call    sub_0_309F
0000:0A43 11 00 02      ld      de, 200h
0000:0A46 CD 9F 30      call    sub_0_309F
0000:0A49 11 00 06      ld      de, 600h
0000:0A4C CD 9F 30      call    sub_0_309F
0000:0A4F 21 0A 60      ld      hl, main_sequencer
0000:0A52 34              inc     (hl)
0000:0A53
0000:0A53      ; ██████████ SUBROUTINE ██████████
0000:0A53
0000:0A53      display_lup:                ; CODE XREF: 0000:01F1|p
0000:0A53 3E 01          ld      a, 1                ; 0000:0798|p
0000:0A55 32 40 77      ld      (VRAM_start+340h), a ; '1'
0000:0A58 3E 25          ld      a, 25h ; '%'        ; 'U'
0000:0A5A 32 20 77      ld      (VRAM_start+320h), a ; 'U'
0000:0A5D 3E 20          ld      a, 20h ; ' '        ; 'P'
0000:0A5F 32 00 77      ld      (VRAM_start+300h), a
0000:0A62 C9              ret
; End of function display_lup
;
0000:0A63
0000:0A63      wait:                        ; DATA XREF: 0000:070E|o
0000:0A63 DF              rst      18h                ; wait for 8-bit countdown
0000:0A64 CD 74 08      call    clear_visible_area_and_sprites
0000:0A67 21 09 60      ld      hl, eight_bit_countdown
0000:0A6A 36 01          ld      (hl), 1
0000:0A6C 2C          inc     l
0000:0A6D 34          inc     (hl)                ; game_sequencer
0000:0A6E 11 2C 62      ld      de, unk_0_622C      ; inc
0000:0A71 1A          ld      a, (de)
0000:0A72 A7          and     a                    ; already seen intro?
0000:0A73 C0          ret     nz                  ; no, return
0000:0A74 34          inc     (hl)                ; skip intro sequence
0000:0A75 C9              ret
;
0000:0A76
0000:0A76      do_intro_sequence:          ; DATA XREF: 0000:0710|o
0000:0A76 3A 85 63      ld      a, (intro_sequencer)
0000:0A79 EF              rst      28h                ; go!
;
0000:0A7A 8A 0A          .dw draw_climb_screen      ; Jump table
0000:0A7C BF 0A          .dw loc_0_ABF
0000:0A7E E8 0A          .dw loc_0_AE8
0000:0A80 69 30          .dw loc_0_3069
0000:0A82 06 0B          .dw draw_1st_girder_dformation
0000:0A84 69 30          .dw loc_0_3069
0000:0A86 68 0B          .dw draw_rest_of_deformations
0000:0A88 B3 0B          .dw growl
;
0000:0A8A
0000:0A8A      draw_climb_screen:          ; DATA XREF: 0000:0A7A|o
0000:0A8A AF              xor     a
0000:0A8B 32 86 7D      ld      (palette_bank), a
0000:0A8E 3C          inc     a
0000:0A8F 32 87 7D      ld      (palette_bank+1), a ; palette bank 2
0000:0A92 11 0D 38      ld      de, draw_data_climb
0000:0A95 CD A7 0D      call    sub_0_DA7
0000:0A98 3E 10          ld      a, 10h
0000:0A9A 32 A3 76      ld      (VRAM_start+2A3h), a ; <space>
0000:0A9D 32 63 76      ld      (VRAM_start+263h), a
0000:0AA0 3E D4          ld      a, 0D4h ; 'E'
0000:0AA2 32 AA 75      ld      (VRAM_start+1AAh), a ; half ladder, half girder
0000:0AA5 AF              xor     a
0000:0AA6 32 AF 62      ld      (unk_0_62AF), a
0000:0AA9 21 B4 38      ld      hl, dk_intro_jump_up_data
0000:0AAC 22 C2 63      ld      (unk_0_63C2), hl
0000:0AAF 21 CB 38      ld      hl, dk_intro_jump_across_data
0000:0AB2 22 C4 63      ld      (unk_0_63C4), hl
0000:0AB5 3E 40          ld      a, 40h ; '@'
0000:0AB7 32 09 60      ld      (eight_bit_countdown), a
0000:0ABA 21 85 63      ld      hl, intro_sequencer
0000:0ABD 34          inc     (hl)
0000:0ABE C9              ret
;
0000:0ABF
0000:0ABF      loc_0_ABF:                  ; DATA XREF: 0000:0A7C|o
0000:0ABF DF              rst      18h                ; wait for 8-bit countdown
0000:0AC0 21 8C 38      ld      hl, kong_climbing_spr
0000:0AC3 CD 4E 00      call    copy_sprites_2_11_data
0000:0AC6 21 08 69      ld      hl, soft_sprite_ram+8 ; sprite #2, y coord
0000:0AC9 0E 30          ld      c, 48
0000:0ACB FF              rst      38h                ; add 48 to y coord for 10 sprites
0000:0ACC 21 0B 69      ld      hl, soft_sprite_ram+0Bh ; sprite #2, x coord
0000:0ACF 0E 99          ld      c, 153
0000:0AD1 FF              rst      38h                ; add 153 to x coord for 10 sprites
0000:0AD2 3E 1F          ld      a, 1Fh
0000:0AD4 32 8E 63      ld      (unk_0_638E), a
0000:0AD7 AF              xor     a
0000:0AD8 32 0C 69      ld      (soft_sprite_ram+0Ch), a ; sprite #3, y coord
0000:0ADB 21 8A 60      ld      hl, unk_0_608A
0000:0ADE 36 01          ld      (hl), 1
0000:0AE0 23          inc     hl
0000:0AE1 36 03          ld      (hl), 3
0000:0AE3 21 85 63      ld      hl, intro_sequencer
0000:0AE6 34          inc     (hl)
0000:0AE7 C9              ret
;
0000:0AE8
0000:0AE8      loc_0_AE8:                  ; DATA XREF: 0000:0A7E|o
0000:0AE8 CD 6F 30      call    sub_0_306F

```

```

0000:0AEB 3A AF 62      ld      a, (unk_0_62AF)
0000:0AEE E6 0F      and     0Fh
0000:0AF0 CC 4A 30      call    sub_0_304A
0000:0AF3 3A 0B 69      ld      a, (soft_sprite_ram+0Bh) ; sprite #2, x coord
0000:0AF6 FE 5D      cp      5Dh ; ']'
0000:0AF8 D0      ret     nc
0000:0AF9 3E 20      ld      a, 20h ; ' '
0000:0AFB 32 09 60      ld      (eight_bit_countdown), a
0000:0AFE 21 85 63      ld      hl, 6385h
0000:0B01 34      inc     (hl)
0000:0B02 22 C0 63      ld      (unk_0_63C0), hl
0000:0B05 C9      ret
;
0000:0B06
0000:0B06
0000:0B06      draw_1st_girder_dformation: ; DATA XREF: 0000:0A82|o
0000:0B06 3A 1A 60      ld      a, (gen_purpose_timer)
0000:0B09 0F      rrca
0000:0B0A D8      ret     c
0000:0B0B 2A C2 63      ld      hl, (unk_0_63C2)
0000:0B0E 7E      ld      a, (hl)
0000:0B0F FE 7F      cp      7Fh ; ' '
0000:0B11 CA 1E 0B      jp      z, loc_0_B1E
0000:0B14 23      inc     hl
0000:0B15 22 C2 63      ld      (unk_0_63C2), hl
0000:0B18 4F      ld      c, a
0000:0B19 21 0B 69      ld      hl, 690Bh
0000:0B1C FF      rst     38h
0000:0B1D C9      ret
;
0000:0B1E
0000:0B1E
0000:0B1E      loc_0_B1E: ; CODE XREF: 0000:0B11|j
0000:0B1E 21 5C 38      ld      hl, kong_normal_spr
0000:0B21 CD 4E 00      call    copy_sprites_2_ll_data
0000:0B24 11 00 69      ld      de, soft_sprite_ram
0000:0B27 01 08 00      ld      bc, 8
0000:0B2A ED B0      ldirl   hl, soft_sprite_ram+8 ; sprite #2, y coord
0000:0B2C 21 08 69      ld      c, 50h ; 'P'
0000:0B2F 0E 50      rst     38h
0000:0B31 FF      rst     38h ; sprite #2, x coord
0000:0B32 21 0B 69      ld      hl, soft_sprite_ram+0Bh
0000:0B35 0E FC      ld      c, 0FCh ; '3'
0000:0B37 FF      rst     38h
0000:0B38
0000:0B38      loc_0_B38: ; CODE XREF: 0000:0B40|j
0000:0B38 CD 4A 30      call    sub_0_304A
0000:0B3B 3A 8E 63      ld      a, (unk_0_638E)
0000:0B3E FE 0A      cp      0Ah
0000:0B40 C2 38 0B      jp      nz, loc_0_B38
0000:0B43 3E 03      ld      a, 3
0000:0B45 32 82 60      ld      (digital_snd_tmrs+2), a
0000:0B48 11 2C 39      ld      de, draw_data_bend_girders_1
0000:0B4B CD A7 0D      call    sub_0_DA7
0000:0B4E 3E 10      ld      a, 10h
0000:0B50 32 AA 74      ld      (VRAM_start+0AAh), a
0000:0B53 32 8A 74      ld      (VRAM_start+8Ah), a
0000:0B56 3E 05      ld      a, 5
0000:0B58 32 8D 63      ld      (unk_0_638D), a
0000:0B5B 3E 20      ld      a, 20h ; ' '
0000:0B5D 32 09 60      ld      (eight_bit_countdown), a
0000:0B60 21 85 63      ld      hl, 6385h
0000:0B63 34      inc     (hl)
0000:0B64 22 C0 63      ld      (unk_0_63C0), hl
0000:0B67 C9      ret
;
0000:0B68
0000:0B68
0000:0B68      draw_rest_of_deformations: ; DATA XREF: 0000:0A86|o
0000:0B68 3A 1A 60      ld      a, (gen_purpose_timer)
0000:0B6B 0F      rrca
0000:0B6C D8      ret     c
0000:0B6D 2A C4 63      ld      hl, (unk_0_63C4)
0000:0B70 7E      ld      a, (hl)
0000:0B71 FE 7F      cp      7Fh ; ' '
0000:0B73 CA 86 0B      jp      z, loc_0_B86
0000:0B76 23      inc     hl
0000:0B77 22 C4 63      ld      (unk_0_63C4), hl
0000:0B7A 21 0B 69      ld      hl, soft_sprite_ram+0Bh ; sprite #2, x coord
0000:0B7D 4F      ld      c, a
0000:0B7E FF      rst     38h
0000:0B7F 21 08 69      ld      hl, soft_sprite_ram+8 ; sprite #2, y coord
0000:0B82 0E FF      ld      c, 0FFh
0000:0B84 FF      rst     38h ; subtract 1 from y coord for 10 sprites
0000:0B85 C9      ret
;
0000:0B86
0000:0B86
0000:0B86      loc_0_B86: ; CODE XREF: 0000:0B73|j
0000:0B86 21 CB 38      ld      hl, dk_intro_jump_across_data
0000:0B89 22 C4 63      ld      (unk_0_63C4), hl
0000:0B8C 3E 03      ld      a, 3
0000:0B8E 32 82 60      ld      (digital_snd_tmrs+2), a
0000:0B91 21 DC 38      ld      hl, draw_data_bend_girders_2
0000:0B94 3A 8D 63      ld      a, (unk_0_638D)
0000:0B97 3D      dec     a
0000:0B98 07      rlca
0000:0B99 07      rlca
0000:0B9A 07      rlca
0000:0B9B 07      rlca
0000:0B9C 5F      ld      e, a
0000:0B9D 16 00      ld      d, 0
0000:0B9F 19      add     hl, de
0000:0BA0 EB      ex      de, hl
0000:0BA1 CD A7 0D      call    sub_0_DA7
0000:0BA4 21 8D 63      ld      hl, unk_0_638D
0000:0BA7 35      dec     (hl)
0000:0BA8 C0      ret     nz
0000:0BA9 3E B0      ld      a, 0B0h ; '0'
0000:0BAB 32 09 60      ld      (eight_bit_countdown), a
0000:0BAE 21 85 63      ld      hl, intro_sequencer
0000:0BB1 34      inc     (hl)
0000:0BB2 C9      ret
;
0000:0BB3
0000:0BB3
0000:0BB3      growl: ; DATA XREF: 0000:0A88|o
0000:0BB3 21 8A 60      ld      hl, unk_0_608A
0000:0BB6 3A 09 60      ld      a, (eight_bit_countdown)
0000:0BB9 FE 90      cp      90h ; 'E'
0000:0BBB 20 0B      jr      nz, loc_0_BC8

```

```

0000:0BBD 36 0F      ld      (hl), 0Fh
0000:0BBF 23      inc     hl
0000:0BC0 36 03      ld      (hl), 3
0000:0BC2 21 19 69    ld      hl, soft_sprite_ram+19h      ; sprite #6, flipy & code
0000:0BC5 34      inc     (hl)
0000:0BC6 18 09      jr      loc_0_BD1
0000:0BC8
0000:0BC8      ; _____
0000:0BC8      loc_0_BC8:                                ; CODE XREF: 0000:0BBB|j
0000:0BC8 FE 18      cp      18h
0000:0BCA 20 05      jr      nz, loc_0_BD1
0000:0BCC 21 19 69    ld      hl, soft_sprite_ram+19h      ; sprite #6, flipy & code
0000:0BCF 35      dec     (hl)
0000:0BD0 00      nop
0000:0BD1
0000:0BD1      loc_0_BD1:                                ; CODE XREF: 0000:0BC6|j
0000:0BD1 DF      ; 0000:0BCA|j
0000:0BD1      rst      18h                                ; wait for 8-bit countdown
0000:0BD2 AF      xor     a
0000:0BD3 32 85 63    ld      (intro_sequencer), a
0000:0BD6 34      inc     (hl)
0000:0BD7 23      inc     hl
0000:0BD8 34      inc     (hl)
0000:0BD9 C9      ret
0000:0BDA
0000:0BDA      ; _____
0000:0BDA      draw_how_high_can_you_get:                ; DATA XREF: 0000:0712|o
0000:0BDA CD 1C 01      call    stop_sound
0000:0BDD DF      rst      18h                                ; wait for 8-bit countdown
0000:0BDE CD 74 08      call    clear_visible_area_and_sprites
0000:0BE1 16 06      ld      d, 6
0000:0BE3 3A 00 62    ld      a, (is_mario_alive)
0000:0BE6 5F      ld      e, a
0000:0BE7 CD 9F 30      call    sub_0_309F
0000:0BEA 21 86 7D      ld      hl, palette_bank
0000:0BED 36 01      ld      (hl), 1
0000:0BEF 23      inc     hl
0000:0BF0 36 00      ld      (hl), 0
0000:0BF2 21 8A 60      ld      hl, unk_0_608A
0000:0BF5 36 02      ld      (hl), 2
0000:0BF7 23      inc     hl
0000:0BF8 36 03      ld      (hl), 3
0000:0BFA 21 A7 63      ld      hl, unk_0_63A7
0000:0BFD 36 00      ld      (hl), 0
0000:0BFF 21 DC 76      ld      hl, VRAM_start+2DCh
0000:0C02 22 A8 63      ld      (unk_0_63A8), hl
0000:0C05 3A 2E 62      ld      a, (unk_0_622E)
0000:0C08 FE 06      cp      6
0000:0C0A 38 05      jr      c, loc_0_C11
0000:0C0C 3E 05      ld      a, 5
0000:0C0E 32 2E 62      ld      (unk_0_622E), a
0000:0C11
0000:0C11      loc_0_C11:                                ; CODE XREF: 0000:0C0A|j
0000:0C11 3A 2F 62      ld      a, (unk_0_622F)
0000:0C14 47      ld      b, a
0000:0C15 3A 2A 62      ld      a, (seq_data)
0000:0C18 B8      cp      b
0000:0C19 28 04      jr      z, loc_0_C1F
0000:0C1B 21 2E 62      ld      hl, unk_0_622E
0000:0C1E 34      inc     (hl)
0000:0C1F
0000:0C1F      loc_0_C1F:                                ; CODE XREF: 0000:0C19|j
0000:0C1F 32 2F 62      ld      (unk_0_622F), a
0000:0C22 3A 2E 62      ld      a, (unk_0_622E)
0000:0C25 47      ld      b, a
0000:0C26 21 BC 75      ld      hl, VRAM_start+1BCh
0000:0C29
0000:0C29      loc_0_C29:                                ; CODE XREF: 0000:0C7F|j
0000:0C29 0E 50      ld      c, 50h ; 'P'
0000:0C2B
0000:0C2B      loc_0_C2B:                                ; CODE XREF: 0000:0C40|j
0000:0C2B 71      ld      (hl), c
0000:0C2C 0C      inc     c
0000:0C2D 2B      dec     hl
0000:0C2E 71      ld      (hl), c
0000:0C2F 0C      inc     c
0000:0C30 2B      dec     hl
0000:0C31 71      ld      (hl), c
0000:0C32 0C      inc     c
0000:0C33 2B      dec     hl
0000:0C34 71      ld      (hl), c
0000:0C35 79      ld      a, c
0000:0C36 FE 67      cp      67h ; 'g'
0000:0C38 CA 43 0C      jp      z, loc_0_C43
0000:0C3B 0C      inc     c
0000:0C3C 11 23 00      ld      de, 23h ; '#'
0000:0C3F 19      add     hl, de
0000:0C40 C3 2B 0C      jp      loc_0_C2B
0000:0C43
0000:0C43      ; _____
0000:0C43      loc_0_C43:                                ; CODE XREF: 0000:0C38|j
0000:0C43 3A A7 63      ld      a, (unk_0_63A7)
0000:0C46 3C      inc     a
0000:0C47 32 A7 63      ld      (unk_0_63A7), a
0000:0C4A 3D      dec     a
0000:0C4B CB 27      sla     a
0000:0C4D CB 27      sla     a
0000:0C4F E5      push    hl
0000:0C50 21 F0 3C      ld      hl, draw_data_how_high
0000:0C53 C5      push    bc
0000:0C54 DD 2A A8 63      ld      ix, (unk_0_63A8)
0000:0C58 4F      ld      c, a
0000:0C59 06 00      ld      b, 0
0000:0C5B 09      add     hl, bc
0000:0C5C 7E      ld      a, (hl)
0000:0C5D DD 77 60      ld      (ix+60h), a
0000:0C60 23      inc     hl
0000:0C61 7E      ld      a, (hl)
0000:0C62 DD 77 40      ld      (ix+40h), a
0000:0C65 23      inc     hl
0000:0C66 7E      ld      a, (hl)
0000:0C67 DD 77 20      ld      (ix+20h), a
0000:0C6A DD 36 E0 8B      ld      (ix-20h), 8Bh ; 'i'
0000:0C6E C1      pop     bc
0000:0C6F DD E5      push    ix
0000:0C71 E1      pop     hl

```

```

0000:0C72 11 FC FF      ld      de, 0FFFCh
0000:0C75 19              add     hl, de
0000:0C76 22 A8 63      ld      (unk_0_63A8), hl
0000:0C79 E1              pop     hl
0000:0C7A 11 5F FF      ld      de, 0FF5Fh
0000:0C7D 19              add     hl, de
0000:0C7E 05              dec     b
0000:0C7F C2 29 0C      jp      nz, loc_0_C29
0000:0C82 11 07 03      ld      de, 307h
0000:0C85 CD 9F 30      call    sub_0_309F
0000:0C88 21 09 60      ld      hl, eight_bit_countdown
0000:0C8B 36 A0      ld      (hl), 0A0h ; 'á'
0000:0C8D 23              inc     hl
0000:0C8E 34              inc     (hl)
0000:0C8F 34              inc     (hl)
0000:0C90 C9              ret
0000:0C91
0000:0C91
0000:0C91 do_how_high_can_you_get:
0000:0C91 DF      rst      18h ; DATA XREF: 0000:0716|o
0000:0C92 ; wait for 8-bit countdown
0000:0C92 loc_0_C92: ; CODE XREF: 0000:0776|j
0000:0C92 CD 74 08      call    clear_visible_area_and_sprites
0000:0C95 AF      xor      a
0000:0C96 32 8C 63      ld      (bonus_timer), a
0000:0C99 11 01 05      ld      de, 501h
0000:0C9C CD 9F 30      call    sub_0_309F
0000:0C9F 21 86 7D      ld      hl, palette_bank
0000:0CA2 36 00      ld      (hl), 0
0000:0CA4 23              inc     hl
0000:0CA5 36 01      ld      (hl), 1
0000:0CA7 3A 27 62      ld      a, (level_type)
0000:0CAA 3D              dec     a
0000:0CAB CA D4 0C      jp      z, loc_0_CD4
0000:0CAE 3D              dec     a
0000:0CAF CA DF 0C      jp      z, loc_0_CDF
0000:0CB2 3D              dec     a
0000:0CB3 CA F2 0C      jp      z, loc_0_CF2
0000:0CB6 CD 43 0D      call    sub_0_D43
0000:0CB9 21 86 7D      ld      hl, palette_bank
0000:0CBC 36 01      ld      (hl), 1
0000:0CBE 3E 0B      ld      a, 0Bh
0000:0CC0 32 89 60      ld      (unk_0_6089), a
0000:0CC3 11 8B 3C      ld      de, draw_data_rivets
0000:0CC6
0000:0CC6 loc_0_CC6: ; CODE XREF: 0000:0CDC|j
0000:0CC6 CD A7 0D      ; 0000:0CEF|j ...
0000:0CC6 call    sub_0_DA7
0000:0CC9 3A 27 62      ld      a, (level_type)
0000:0CCC FE 04      cp      4 ; rivets?
0000:0CCE CC 00 0D      call    z, sub_0_D00 ; yes, call
0000:0CD1 C3 A0 3F      jp      loc_0_3FA0
0000:0CD4
0000:0CD4 loc_0_CD4: ; CODE XREF: 0000:0CAB|j
0000:0CD4 11 E4 3A      ld      de, draw_data_girder
0000:0CD7 3E 08      ld      a, 8
0000:0CD9 32 89 60      ld      (unk_0_6089), a
0000:0CDC C3 C6 0C      jp      loc_0_CC6
0000:0CDF
0000:0CDF loc_0_CDF: ; CODE XREF: 0000:0CAF|j
0000:0CDF 11 5D 3B      ld      de, draw_data_cement
0000:0CE2 21 86 7D      ld      hl, palette_bank
0000:0CE5 36 01      ld      (hl), 1
0000:0CE7 23              inc     hl
0000:0CE8 36 00      ld      (hl), 0
0000:0CEA 3E 09      ld      a, 9
0000:0CEC 32 89 60      ld      (unk_0_6089), a
0000:0CEF C3 C6 0C      jp      loc_0_CC6
0000:0CF2
0000:0CF2 loc_0_CF2: ; CODE XREF: 0000:0CB3|j
0000:0CF2 CD 27 0D      call    sub_0_D27
0000:0CF5 3E 0A      ld      a, 0Ah
0000:0CF7 32 89 60      ld      (unk_0_6089), a
0000:0CFA 11 E5 3B      ld      de, draw_data_elevator
0000:0CFD C3 C6 0C      jp      loc_0_CC6
0000:0D00
0000:0D00 ; SUBROUTINE
0000:0D00
0000:0D00 sub_0_D00: ; CODE XREF: 0000:0CCE|p
0000:0D00 06 08      ld      b, 8
0000:0D02 21 17 0D      ld      hl, 0D17h
0000:0D05
0000:0D05 loc_0_D05: ; CODE XREF: sub_0_D00+14|j
0000:0D05 3E B8      ld      a, 0B8h ; '@'
0000:0D07 0E 02      ld      c, 2
0000:0D09 5E      ld      e, (hl)
0000:0D0A 23              inc     hl
0000:0D0B 56      ld      d, (hl)
0000:0D0C 23              inc     hl
0000:0D0D
0000:0D0D loc_0_D0D: ; CODE XREF: sub_0_D00+11|j
0000:0D0D 12      ld      (de), a
0000:0D0E 3D              dec     a
0000:0D0F 13              inc     de
0000:0D10 0D              dec     c
0000:0D11 C2 0D 0D      jp      nz, loc_0_D0D
0000:0D14 10 EF      djnz    loc_0_D05
0000:0D16 C9              ret
0000:0D16 ; End of function sub_0_D00
0000:0D16
0000:0D16
0000:0D16 rivet_loc_tbl: .dw VRAM_start+2CAh ; Rivets level, location of rivets
0000:0D19 CF 76      .dw VRAM_start+2CFh
0000:0D1B D4 76      .dw VRAM_start+2D4h
0000:0D1D D9 76      .dw VRAM_start+2D9h
0000:0D1F 2A 75      .dw VRAM_start+12Ah
0000:0D21 2F 75      .dw VRAM_start+12Fh
0000:0D23 34 75      .dw VRAM_start+134h
0000:0D25 39 75      .dw VRAM_start+139h
0000:0D27
0000:0D27 ; SUBROUTINE
0000:0D27

```

```

0000:0D27
0000:0D27
0000:0D27 21 0D 77      sub_0_D27:                ; CODE XREF: 0000:0CF2|p
0000:0D2A CD 30 0D      ld      hl, VRAM_start+30Dh
0000:0D2D 21 0D 76      call   sub_0_D30
0000:0D2D      ld      hl, VRAM_start+20Dh
0000:0D2D      ; End of function sub_0_D27
0000:0D2D
0000:0D30
0000:0D30
0000:0D30
0000:0D30
0000:0D30
0000:0D30 06 11      sub_0_D30:                ; CODE XREF: sub_0_D27+3|p
0000:0D32      ld      b, 11h
0000:0D32      loc_0_D32:                ; CODE XREF: sub_0_D30+5|j
0000:0D32 36 FD      ld      (hl), 0FDh ; '2'
0000:0D34 23      inc     hl
0000:0D35 10 FB      djnz    loc_0_D32
0000:0D37 11 0F 00      ld      de, 0Fh
0000:0D3A 19      add     hl, de
0000:0D3B 06 11      ld      b, 11h
0000:0D3D
0000:0D3D 36 FC      loc_0_D3D:                ; CODE XREF: sub_0_D30+10|j
0000:0D3F 23      ld      (hl), 0FCh ; '3'
0000:0D40 10 FB      inc     hl
0000:0D42 C9      djnz    loc_0_D3D
0000:0D42      ret
0000:0D42      ; End of function sub_0_D30
0000:0D42
0000:0D43
0000:0D43
0000:0D43
0000:0D43
0000:0D43
0000:0D43
0000:0D43 21 87 76      sub_0_D43:                ; CODE XREF: 0000:0CB6|p
0000:0D46 CD 4C 0D      ld      hl, VRAM_start+287h
0000:0D49 21 47 75      call   sub_0_D4C
0000:0D49      ld      hl, VRAM_start+147h
0000:0D49      ; End of function sub_0_D43
0000:0D4C
0000:0D4C
0000:0D4C
0000:0D4C
0000:0D4C
0000:0D4C
0000:0D4C 06 04      sub_0_D4C:                ; CODE XREF: sub_0_D43+3|p
0000:0D4E      ld      b, 4
0000:0D4E      loc_0_D4E:                ; CODE XREF: sub_0_D4C+5|j
0000:0D4E 36 FD      ld      (hl), 0FDh ; '2'
0000:0D50 23      inc     hl
0000:0D51 10 FB      djnz    loc_0_D4E
0000:0D53 11 1C 00      ld      de, 1Ch
0000:0D56 19      add     hl, de
0000:0D57 06 04      ld      b, 4
0000:0D59
0000:0D59 36 FC      loc_0_D59:                ; CODE XREF: sub_0_D4C+10|j
0000:0D5B 23      ld      (hl), 0FCh ; '3'
0000:0D5C 10 FB      inc     hl
0000:0D5E C9      djnz    loc_0_D59
0000:0D5E      ret
0000:0D5E      ; End of function sub_0_D4C
0000:0D5F
0000:0D5F
0000:0D5F
0000:0D5F
0000:0D5F
0000:0D5F
0000:0D5F CD 56 0F      loc_0_D5F:                ; CODE XREF: 0000:3FA3|j
0000:0D62 CD 41 24      call   loc_0_F56
0000:0D65 21 09 60      call   sub_0_2441
0000:0D68 36 40      ld      hl, eight_bit_countdown
0000:0D6A 23      ld      (hl), 40h ; '@'
0000:0D6B 34      inc     hl
0000:0D6C 21 5C 38      inc     hl
0000:0D6F CD 4E 00      ld      hl, kong_normal_spr
0000:0D72 11 00 69      call   copy_sprites_2_l1_data
0000:0D75 01 08 00      ld      de, soft_sprite_ram
0000:0D78 ED B0      ld      bc, 8
0000:0D7A 3A 27 62      ldir
0000:0D7D FE 04      ld      a, (level_type)
0000:0D7F 28 0A      cp      4
0000:0D81 0F      jr      z, loc_0_D8B
0000:0D82 0F      rrca
0000:0D83 D8      rrca
0000:0D84 21 0B 69      ret
0000:0D87 0E FC      ld      c, 0FCh ; '3'
0000:0D89 FF      rst     38h
0000:0D8A C9      ; subtract 4 from x coord for 10 sprites
0000:0D8B
0000:0D8B
0000:0D8B
0000:0D8B
0000:0D8B 21 08 69      loc_0_D8B:                ; CODE XREF: 0000:0D7F|j
0000:0D8E 0E 44      ld      hl, soft_sprite_ram+8
0000:0D90 FF      ld      c, 68
0000:0D91 11 04 00      rst     38h
0000:0D94 01 10 02      ld      de, 4
0000:0D97 21 00 69      ld      bc, 210h
0000:0D9A CD 3D 00      ld      hl, soft_sprite_ram
0000:0D9D 01 F8 02      call   loc_0_3D
0000:0DA0 21 03 69      ld      bc, 2F8h
0000:0DA3 CD 3D 00      ld      hl, soft_sprite_ram+3
0000:0DA6 C9      call   loc_0_3D
0000:0DA7      ret
0000:0DA7
0000:0DA7
0000:0DA7
0000:0DA7
0000:0DA7
0000:0DA7
0000:0DA7 1A      sub_0_DA7:                ; CODE XREF: 0000:0A95|p
0000:0DA7      ; 0000:0B4B|p ...
0000:0DA8 32 B3 63      ld      a, (de)
0000:0DAB FE AA      ld      (unk_0_63B3), a
0000:0DAD C8      cp      0AAh ; '-'
0000:0DAE 13      ret     z
0000:0DAF 1A      ; done?
0000:0DB0 67      ld      z
0000:0DB1 44      ; yes, return
0000:0DB2 13      inc     de
0000:0DB3 1A      ld      a, (de)
0000:0DB4 6F      ld      h, a
0000:0DB4 6F      ld      b, h
0000:0DB4 6F      inc     de
0000:0DB4 6F      ld      a, (de)
0000:0DB4 6F      ld      l, a
0000:0DB4 6F      ; next table address
0000:0DB4 6F      ; get byte
0000:0DB4 6F      ; H=bytel
0000:0DB4 6F      ; B=bytel
0000:0DB4 6F      ; next table address
0000:0DB4 6F      ; get byte
0000:0DB4 6F      ; L=byte2

```

```

0000:0DB5 4D          ld      c, 1                ; C=byte2
0000:0DB6 D5          push    de
0000:0DB7 CD F0 2F    call    sub_0_2FF0
0000:0DBA D1          pop     de
0000:0DBB 22 AB 63    ld      (unk_0_63AB), hl
0000:0DBE 78          ld      a, b
0000:0DBF E6 07          and     7
0000:0DC1 32 B4 63    ld      (unk_0_63B4), a
0000:0DC4 79          ld      a, c
0000:0DC5 E6 07          and     7
0000:0DC7 32 AF 63    ld      (unk_0_63AF), a
0000:0DCA 13          inc     de
0000:0DCB 1A          ld      a, (de)
0000:0DCC 67          ld      h, a
0000:0DCD 90          sub     b
0000:0DCE D2 D3 0D    jpb     nc, loc_0_DD3
0000:0DD1 ED 44          neg
0000:0DD3          loc_0_DD3:                ; CODE XREF: sub_0_DA7+27↑j
0000:0DD3 32 B1 63    ld      (unk_0_63B1), a
0000:0DD6 13          inc     de
0000:0DD7 1A          ld      a, (de)
0000:0DD8 6F          ld      l, a
0000:0DD9 91          sub     c
0000:0DDA 32 B2 63    ld      (unk_0_63B2), a
0000:0DDD 1A          ld      a, (de)
0000:0DDE E6 07          and     7
0000:0DE0 32 B0 63    ld      (unk_0_63B0), a
0000:0DE3 D5          push    de
0000:0DE4 CD F0 2F    call    sub_0_2FF0
0000:0DE7 D1          pop     de
0000:0DE8 22 AD 63    ld      (unk_0_63AD), hl
0000:0DEB 3A B3 63    ld      a, (unk_0_63B3)
0000:0DEE FE 02          cp      2
0000:0DF0 F2 4F 0E    jpb     p, loc_0_E4F
0000:0DF3 3A B2 63    ld      a, (unk_0_63B2)
0000:0DF6 D6 10          sub     10h
0000:0DF8 47          ld      b, a
0000:0DF9 3A AF 63    ld      a, (unk_0_63AF)
0000:0DFC 80          add     a, b
0000:0DFD 32 B2 63    ld      (unk_0_63B2), a
0000:0E00 3A AF 63    ld      a, (unk_0_63AF)
0000:0E03 C6 F0          add     a, 0F0h ; '-'
0000:0E05 2A AB 63    ld      hl, (unk_0_63AB)
0000:0E08 77          ld      (hl), a
0000:0E09 2C          inc     l
0000:0E0A D6 30          sub     30h ; '0'
0000:0E0C 77          ld      (hl), a
0000:0E0D 3A B3 63    ld      a, (unk_0_63B3)
0000:0E10 FE 01          cp      1
0000:0E12 C2 19 0E    jpb     nz, loc_0_E19
0000:0E15 AF          xor     a
0000:0E16 32 B2 63    ld      (unk_0_63B2), a
0000:0E19          loc_0_E19:                ; CODE XREF: sub_0_DA7+6B↑j
                                ; sub_0_DA7+80↑j
0000:0E19 3A B2 63    ld      a, (unk_0_63B2)
0000:0E19          sub     8
0000:0E1C D6 08          sub     8
0000:0E1E 32 B2 63    ld      (unk_0_63B2), a
0000:0E21 DA 2A 0E    jpb     c, loc_0_E2A
0000:0E24 2C          inc     l
0000:0E25 36 C0          ld      (hl), 0C0h ; 'L'
0000:0E27 C3 19 0E    jpb     loc_0_E19
; _____
0000:0E2A          loc_0_E2A:                ; CODE XREF: sub_0_DA7+7A↑j
0000:0E2A          ld      a, (unk_0_63B0)
0000:0E2D C6 D0          add     a, 0D0h ; 'ð'
0000:0E2F 2A AD 63    ld      hl, (unk_0_63AD)
0000:0E32 77          ld      (hl), a
0000:0E33 3A B3 63    ld      a, (unk_0_63B3)
0000:0E36 FE 01          cp      1
0000:0E38 C2 3F 0E    jpb     nz, loc_0_E3F
0000:0E3B 2D          dec     l
0000:0E3C 36 C0          ld      (hl), 0C0h ; 'L'
0000:0E3E 2C          inc     l
0000:0E3F          loc_0_E3F:                ; CODE XREF: sub_0_DA7+91↑j
0000:0E3F          ld      a, (unk_0_63B0)
0000:0E42 FE 00          cp      0
0000:0E44 CA 4B 0E    jpb     z, loc_0_E4B
0000:0E47 C6 E0          add     a, 0E0h ; 'ô'
0000:0E49 2C          inc     l
0000:0E4A 77          ld      (hl), a
0000:0E4B          loc_0_E4B:                ; CODE XREF: sub_0_DA7+9D↑j
0000:0E4B          inc     de
0000:0E4C C3 A7 0D    jpb     sub_0_DA7
; _____
0000:0E4F          loc_0_E4F:                ; CODE XREF: sub_0_DA7+49↑j
0000:0E4F          ld      a, (unk_0_63B3)
0000:0E52 FE 02          cp      2
0000:0E54 C2 E8 0E    jpb     nz, loc_0_EE8
0000:0E57 3A AF 63    ld      a, (unk_0_63AF)
0000:0E5A C6 F0          add     a, 0F0h ; '-'
0000:0E5C 32 B5 63    ld      (unk_0_63B5), a
0000:0E5F 2A AB 63    ld      hl, (unk_0_63AB)
0000:0E62          loc_0_E62:                ; CODE XREF: sub_0_DA7+E5↑j
                                ; sub_0_DA7+125↑j ...
0000:0E62          ld      a, (unk_0_63B5)
0000:0E65 77          ld      (hl), a
0000:0E66 23          inc     hl
0000:0E67 7D          ld      a, l
0000:0E68 E6 1F          and     1Fh
0000:0E6A CA 78 0E    jpb     z, loc_0_E78
0000:0E6D 3A B5 63    ld      a, (unk_0_63B5)
0000:0E70 FE 00          cp      0F0h ; '-'
0000:0E72 CA 78 0E    jpb     z, loc_0_E78
0000:0E75 D6 10          sub     10h
0000:0E77 77          ld      (hl), a
0000:0E78          loc_0_E78:                ; CODE XREF: sub_0_DA7+C3↑j
                                ; sub_0_DA7+CB↑j
0000:0E78          ld      bc, 1Fh

```

```

0000:0E7B 09      add    hl, bc
0000:0E7C 3A B1 63    ld     a, (unk_0_63B1)
0000:0E7F D6 08      sub    8
0000:0E81 DA CF 0E    jp     c, loc_0_ECF
0000:0E84 32 B1 63    ld     (unk_0_63B1), a
0000:0E87 3A B2 63    ld     a, (unk_0_63B2)
0000:0E8A FE 00    cp     0
0000:0E8C CA 62 0E    jp     z, loc_0_E62
0000:0E8F 3A B5 63    ld     a, (unk_0_63B5)
0000:0E92 77      ld     (hl), a
0000:0E93 23      inc    hl
0000:0E94 7D      ld     a, 1
0000:0E95 E6 1F      and    1Fh
0000:0E97 CA A0 0E    jp     z, loc_0_EA0
0000:0E9A 3A B5 63    ld     a, (unk_0_63B5)
0000:0E9D D6 10      sub    10h
0000:0E9F 77      ld     (hl), a
0000:0EA0
0000:0EA0      loc_0_EA0:                                ; CODE XREF: sub_0_DA7+F0↑j
0000:0EA0 01 1F 00    ld     bc, 1Fh
0000:0EA3 09      add    hl, bc
0000:0EA4 3A B1 63    ld     a, (unk_0_63B1)
0000:0EA7 D6 08      sub    8
0000:0EA9 DA CF 0E    jp     c, loc_0_ECF
0000:0EAC 32 B1 63    ld     (unk_0_63B1), a
0000:0EAF 3A B2 63    ld     a, (unk_0_63B2)
0000:0EB2 CB 7F      bit    7, a
0000:0EB4 C2 D3 0E    jp     nz, loc_0_ED3
0000:0EB7 3A B5 63    ld     a, (unk_0_63B5)
0000:0EBA 3C      inc    a
0000:0EBB 32 B5 63    ld     (unk_0_63B5), a
0000:0EBE FE F8      cp     0F8h ; '0'
0000:0EC0 C2 C9 0E    jp     nz, loc_0_EC9
0000:0EC3 23      inc    hl
0000:0EC4 3E F0      ld     a, 0F0h ; '-'
0000:0EC6 32 B5 63    ld     (unk_0_63B5), a
0000:0EC9
0000:0EC9      loc_0_EC9:                                ; CODE XREF: sub_0_DA7+119↑j
0000:0EC9 7D      ld     a, 1
0000:0ECA E6 1F      and    1Fh
0000:0ECC C2 62 0E    jp     nz, loc_0_E62
0000:0ECF
0000:0ECF      loc_0_ECF:                                ; CODE XREF: sub_0_DA7+DA↑j
0000:0ECF 13      inc    de                                ; sub_0_DA7+102↑j ...
0000:0ED0 C3 A7 0D    jp     sub_0_DA7
0000:0ED3
0000:0ED3      loc_0_ED3:                                ; CODE XREF: sub_0_DA7+10D↑j
0000:0ED3 3A B5 63    ld     a, (unk_0_63B5)
0000:0ED6 3D      dec    a
0000:0ED7 32 B5 63    ld     (unk_0_63B5), a
0000:0EDA FE F0      cp     0F0h ; '-'
0000:0EDC F2 E5 0E    jp     p, loc_0_EE5
0000:0EDF 2B      dec    hl
0000:0EE0 3E F7      ld     a, 0F7h ; ','
0000:0EE2 32 B5 63    ld     (unk_0_63B5), a
0000:0EE5
0000:0EE5      loc_0_EE5:                                ; CODE XREF: sub_0_DA7+135↑j
0000:0EE5 C3 62 0E    jp     loc_0_E62
0000:0EE8
0000:0EE8      loc_0_EE8:                                ; CODE XREF: sub_0_DA7+AD↑j
0000:0EE8 3A B3 63    ld     a, (unk_0_63B3)
0000:0EEB FE 03      cp     3
0000:0EED C2 1B 0F    jp     nz, loc_0_F1B
0000:0EF0 2A AB 63    ld     hl, (unk_0_63AB)
0000:0EF3 3E B3      ld     a, 0B3h ; '|'
0000:0EF5 77      ld     (hl), a
0000:0EF6 01 20 00    ld     bc, 20h ; ' '
0000:0EF9 09      add    hl, bc
0000:0EFA 3A B1 63    ld     a, (unk_0_63B1)
0000:0EFD D6 10      sub    10h
0000:0EFF
0000:0EFF      loc_0_EFF:                                ; CODE XREF: sub_0_DA7+16A↑j
0000:0EFF DA 14 0F    jp     c, loc_0_F14
0000:0F02 32 B1 63    ld     (unk_0_63B1), a
0000:0F05 3E B1      ld     a, 0B1h ; '1'
0000:0F07 77      ld     (hl), a
0000:0F08 01 20 00    ld     bc, 20h ; ' '
0000:0F0B 09      add    hl, bc
0000:0F0C 3A B1 63    ld     a, (unk_0_63B1)
0000:0F0F D6 08      sub    8
0000:0F11 C3 FF 0E    jp     loc_0_EFF
0000:0F14
0000:0F14      loc_0_F14:                                ; CODE XREF: sub_0_DA7+158↑j
0000:0F14 3E B2      ld     a, 0B2h ; '2'
0000:0F16 77      ld     (hl), a
0000:0F17 13      inc    de
0000:0F18 C3 A7 0D    jp     sub_0_DA7
0000:0F1B
0000:0F1B      loc_0_F1B:                                ; CODE XREF: sub_0_DA7+146↑j
0000:0F1B 3A B3 63    ld     a, (unk_0_63B3)
0000:0F1E FE 07      cp     7
0000:0F20 F2 CF 0E    jp     p, loc_0_ECF
0000:0F23 FE 04      cp     4
0000:0F25 CA 4C 0F    jp     z, erase_straight_girders
0000:0F28 FE 05      cp     5
0000:0F2A CA 51 0F    jp     z, loc_0_F51
0000:0F2D 3E FE      ld     a, 0FEh ; '■'
0000:0F2F
0000:0F2F      loc_0_F2F:                                ; CODE XREF: sub_0_DA7+1A7↑j
0000:0F2F 32 B5 63    inc    de                                ; sub_0_DA7+1AC↑j
0000:0F2F      ld     (unk_0_63B5), a
0000:0F32 2A AB 63    ld     hl, (unk_0_63AB)
0000:0F35
0000:0F35      loc_0_F35:                                ; CODE XREF: sub_0_DA7+19E↑j
0000:0F35 3A B5 63    ld     a, (unk_0_63B5)
0000:0F38 77      ld     (hl), a
0000:0F39 01 20 00    ld     bc, 20h ; ' '
0000:0F3C 09      add    hl, bc
0000:0F3D 3A B1 63    ld     a, (unk_0_63B1)
0000:0F40 D6 08      sub    8
0000:0F42 32 B1 63    ld     (unk_0_63B1), a

```



```

0000:0F45 D2 35 0F      jp      nc, loc_0_F35
0000:0F48 13                inc     de
0000:0F49 C3 A7 0D      jp      sub_0_DA7
0000:0F4C                ; -----
0000:0F4C                erase_straight_girders:
0000:0F4C                ld      a, 0E0h ; '6'
0000:0F4C 3E E0      ; CODE XREF: sub_0_DA7+17E|j
0000:0F4E C3 2F 0F      jp      loc_0_F2F
0000:0F51                ; -----
0000:0F51                loc_0_F51:
0000:0F51                ld      a, 0B0h ; '8'
0000:0F51 3E B0      ; CODE XREF: sub_0_DA7+183|j
0000:0F53 C3 2F 0F      jp      loc_0_F2F
0000:0F53                ; End of function sub_0_DA7
0000:0F53                ; -----
0000:0F56                loc_0_F56:
0000:0F56                ld      b, 27h ; '7'
0000:0F56 06 27      ; CODE XREF: 0000:0D5F|p
0000:0F58 21 00 62      ld      hl, is_mario_alive
0000:0F5B AF                xor     a
0000:0F5C                loc_0_F5C:
0000:0F5C                ld      (hl), a
0000:0F5C 77                inc     l
0000:0F5D 2C                djnz   loc_0_F5C
0000:0F5E 10 FC                ld      c, 11h
0000:0F60 0E 11                ld      d, 80h ; 'G'
0000:0F62 16 80                ld      hl, unk_0_6280
0000:0F64 21 80 62      ; CODE XREF: 0000:0F5E|j
0000:0F67                loc_0_F67:
0000:0F67                ld      b, d
0000:0F67 42      ; CODE XREF: 0000:0F6D|j
0000:0F68                loc_0_F68:
0000:0F68                ld      (hl), a
0000:0F68 77                inc     hl
0000:0F69 23                djnz   loc_0_F68
0000:0F6A 10 FC                dec     c
0000:0F6C 0D                jr     nz, loc_0_F67
0000:0F6D 20 F8                ld      hl, level_init_data
0000:0F6F 21 9C 3D                ld      de, unk_0_6280
0000:0F72 11 80 62                ld      bc, 40h ; '@'
0000:0F75 01 40 00                ldir
0000:0F78 ED B0                ld      a, (level)
0000:0F7A 3A 29 62                ld      b, a
0000:0F7D 47                and     a
0000:0F7E A7                rla
0000:0F7F 17                and     a
0000:0F80 A7                rla
0000:0F81 17                and     a
0000:0F82 A7                rla
0000:0F83 17                add     a, b
0000:0F84 80                add     a, b
0000:0F85 80                add     a, 28h ; '('
0000:0F86 C6 28                cp      51h ; 'Q'
0000:0F88 FE 51                jr     c, loc_0_F8E
0000:0F8A 38 02                ld      a, 50h ; 'P'
0000:0F8C 3E 50                ; CODE XREF: 0000:0F8A|j
0000:0F8E                loc_0_F8E:
0000:0F8E                ld      hl, unk_0_62B0
0000:0F8E 21 B0 62                ld      b, 3
0000:0F91 06 03                ; CODE XREF: 0000:0F95|j
0000:0F93                loc_0_F93:
0000:0F93                ld      (hl), a
0000:0F93 77                inc     l
0000:0F94 2C                djnz   loc_0_F93
0000:0F95 10 FC                add     a, a
0000:0F97 87                ld      b, a
0000:0F98 47                ld      a, 0DCh ; '█'
0000:0F99 3E DC                sub     b
0000:0F9B 90                cp      28h ; '('
0000:0F9C FE 28                jr     nc, loc_0_FA2
0000:0F9E 30 02                ld      a, 28h ; '('
0000:0FA0 3E 28                ; CODE XREF: 0000:0F9E|j
0000:0FA2                loc_0_FA2:
0000:0FA2                ld      (hl), a
0000:0FA2 77                inc     l
0000:0FA3 2C                ld      hl, unk_0_6209
0000:0FA4 77                ld      (hl), 4
0000:0FA5 21 09 62                inc     l
0000:0FA8 36 04                ld      (hl), 8
0000:0FAA 2C                ld      a, (level_type)
0000:0FAB 36 08                ld      c, a
0000:0FAD 3A 27 62                bit     2, a
0000:0FB0 4F                jr     nz, loc_0_FCB
0000:0FB1 CB 57                ld      hl, soft_sprite_ram+100h
0000:0FB3 20 16                ld      a, 4Fh ; 'O'
0000:0FB5 21 00 6A                ld      b, 3
0000:0FB8 3E 4F                ; CODE XREF: 0000:0FC9|j
0000:0FBA 06 03                loc_0_FBC:
0000:0FBC                ld      (hl), a
0000:0FBC 77                inc     l
0000:0FBD 2C                ld      (hl), 3Ah ; ':'
0000:0FBE 36 3A                inc     l
0000:0FC0 2C                ld      (hl), 0Fh
0000:0FC1 36 0F                inc     l
0000:0FC3 2C                ld      (hl), 18h
0000:0FC4 36 18                inc     l
0000:0FC6 2C                add     a, 10h
0000:0FC7 C6 10                djnz   loc_0_FBC
0000:0FC9 10 F1                ; CODE XREF: 0000:0FB3|j
0000:0FCB                loc_0_FCB:
0000:0FCB                ld      a, c
0000:0FCB 79                rst     28h
0000:0FCC EF                ; go!
0000:0FCC                ; -----
0000:0FCD 00 00                .dw RESET
0000:0FCD D7 0F                ; Jump table
0000:0FCE 0F                .dw init_l1_girder
0000:0FCE 1F 10                .dw init_l2_cement
0000:0FCE 87 10                .dw init_l3_elevator
0000:0FCE 31 11                .dw init_l4_rivets
0000:0FCE 7F                ; -----
0000:0FCE                init_l1_girder:
0000:0FCE                ld      hl, top_barrel_spr
0000:0FCE 21 DC 3D                ld      de, soft_sprite_ram+0A8h
0000:0FCE 11 A8 69

```

```

0000:0FDD 01 10 00      ld      bc, 10h
0000:0FE0 ED B0        ldir
0000:0FE2 21 EC 3D      ld      hl, fireball_spr
0000:0FE5 11 07 64      ld      de, unk_0_6407
0000:0FE8 0E 1C         ld      c, 1Ch
0000:0FEA 06 05         ld      b, 5
0000:0FEC CD 2A 12      call    sub_0_122A
0000:0FEF 21 F4 3D      ld      hl, girders_extra_spr
0000:0FF2 CD FA 11      call    sub_0_11FA
0000:0FF5 21 00 3E      ld      hl, girder_oil_barrel_spr
0000:0FF8 11 FC 69      ld      de, soft_sprite_ram+0FCh
0000:0FFB 01 04 00      ld      bc, 4
0000:0FFE ED B0        ldir
0000:1000 21 0C 3E      ld      hl, girder_hammer_locs
0000:1003 CD A6 11      call    sub_0_11A6
0000:1006
0000:1006      loc_0_1006:
0000:1006 21 1B 10      ld      hl, cement_unknown_spr
0000:1009 11 07 67      ld      de, unk_0_6707
0000:100C 01 1C 08      ld      bc, 81Ch
0000:100F CD 2A 12      call    sub_0_122A
0000:1012 11 07 68      ld      de, unk_0_6807
0000:1015 06 02         ld      b, 2
0000:1017 CD 2A 12      call    sub_0_122A
0000:101A C9          ret
0000:101A
0000:101B 00 00 02 02      cement_unknown_spr:.db 0, 0, 2, 2      ; DATA XREF: 0000:1006|o
0000:101F
0000:101F      init_l2_cement:      ; DATA XREF: 0000:0FD1|o
0000:101F 21 EC 3D      ld      hl, fireball_spr
0000:1022 11 07 64      ld      de, unk_0_6407
0000:1025 01 1C 05      ld      bc, 51Ch
0000:1028 CD 2A 12      call    sub_0_122A
0000:102B CD 86 11      call    sub_0_1186
0000:102E 21 18 3E      ld      hl, cement_pie_spr
0000:1031 11 A7 65      ld      de, unk_0_65A7
0000:1034 01 0C 06      ld      bc, 60Ch
0000:1037 CD 2A 12      call    sub_0_122A
0000:103A DD 21 A0 65      ld      ix, unk_0_65A0
0000:103E 21 B8 69      ld      hl, soft_sprite_ram+0B8h
0000:1041 11 10 00      ld      de, 10h
0000:1044 06 06         ld      b, 6
0000:1046 CD D3 11      call    set_B_sprites_data
0000:1049 21 FA 3D      ld      hl, cement_extra_spr
0000:104C CD FA 11      call    sub_0_11FA
0000:104F 21 04 3E      ld      hl, cement_oil_barrel_spr
0000:1052 11 FC 69      ld      de, soft_sprite_ram+0FCh
0000:1055 01 04 00      ld      bc, 4
0000:1058 ED B0        ldir
0000:105A 21 1C 3E      ld      hl, cement_ladder_spr
0000:105D 11 44 69      ld      de, soft_sprite_ram+44h
0000:1060 01 08 00      ld      bc, 8
0000:1063 ED B0        ldir
0000:1065 21 24 3E      ld      hl, cement_conveyer_spr
0000:1068 11 E4 69      ld      de, soft_sprite_ram+0E4h
0000:106B 01 18 00      ld      bc, 18h
0000:106E ED B0        ldir
0000:1070 21 10 3E      ld      hl, cement_hammer_locs
0000:1073 CD A6 11      call    sub_0_11A6
0000:1076 21 3C 3E      ld      hl, cement_obj_spr
0000:1079 11 0C 6A      ld      de, soft_sprite_ram+10Ch
0000:107C 01 0C 00      ld      bc, 0Ch
0000:107F ED B0        ldir
0000:1081 3E 01         ld      a, 1
0000:1083 32 B9 62      ld      (unk_0_62B9), a
0000:1086 C9          ret
0000:1087
0000:1087
0000:1087      init_l3_elevator:      ; DATA XREF: 0000:0FD3|o
0000:1087 21 EC 3D      ld      hl, fireball_spr
0000:108A 11 07 64      ld      de, unk_0_6407
0000:108D 01 1C 05      ld      bc, 51Ch
0000:1090 CD 2A 12      call    sub_0_122A
0000:1093 CD 86 11      call    sub_0_1186
0000:1096 21 00 66      ld      hl, unk_0_6600
0000:1099 11 10 00      ld      de, 10h
0000:109C 3E 01         ld      a, 1
0000:109E 06 06         ld      b, 6
0000:10A0
0000:10A0      loc_0_10A0:      ; CODE XREF: 0000:10A2|j
0000:10A0 77          (hl), a
0000:10A1 19          add     hl, de
0000:10A2 10 FC      djnz    loc_0_10A0
0000:10A4 0E 02      ld      c, 2
0000:10A6 3E 08      ld      a, 8
0000:10A8
0000:10A8      loc_0_10A8:      ; CODE XREF: 0000:10B4|j
0000:10A8 06 03      ld      b, 3
0000:10AA 21 0D 66      ld      hl, unk_0_660D
0000:10AD
0000:10AD      loc_0_10AD:      ; CODE XREF: 0000:10AF|j
0000:10AD 77          (hl), a
0000:10AE 19          add     hl, de
0000:10AF 10 FC      djnz    loc_0_10AD
0000:10B1 3E 08      ld      a, 8
0000:10B3 0D          dec     c
0000:10B4 C2 A8 10      jp      nz, loc_0_10A8
0000:10B7 21 64 3E      ld      hl, elevator_spr_xy
0000:10BA 11 03 66      ld      de, unk_0_6603
0000:10BD 01 0E 06      ld      bc, 60Eh
0000:10C0 CD EC 11      call    sub_0_11EC
0000:10C3 21 60 3E      ld      hl, elevator_spr
0000:10C6 11 07 66      ld      de, unk_0_6607
0000:10C9 01 0C 06      ld      bc, 60Ch
0000:10CC CD 2A 12      call    sub_0_122A
0000:10CF DD 21 00 66      ld      ix, unk_0_6600
0000:10D3 21 58 69      ld      hl, soft_sprite_ram+58h
0000:10D6 06 06         ld      b, 6
0000:10D8 11 10 00      ld      de, 10h
0000:10DB CD D3 11      call    set_B_sprites_data
0000:10DE 21 48 3E      ld      hl, elevator_obj_spr
0000:10E1 11 0C 6A      ld      de, soft_sprite_ram+10Ch
0000:10E4 01 0C 00      ld      bc, 0Ch
0000:10E7 ED B0        ldir
0000:10E9 DD 21 00 64      ld      ix, unk_0_6400      ; fireball character data

```

```

0000:10ED DD 36 00 01      ld      (ix+0), 1
0000:10F1 DD 36 03 58      ld      (ix+3), 58h ; 'X'
0000:10F5 DD 36 0E 58      ld      (ix+0Eh), 58h ; 'X'
0000:10F9 DD 36 05 80      ld      (ix+5), 80h ; 'Ç'
0000:10FD DD 36 0F 80      ld      (ix+0Fh), 80h ; 'Ç'
0000:1101 DD 36 20 01      ld      (ix+20h), 1
0000:1105 DD 36 23 EB      ld      (ix+23h), 0EBh ; 'Û'
0000:1109 DD 36 2E EB      ld      (ix+2Eh), 0EBh ; 'Û'
0000:110D DD 36 25 60      ld      (ix+25h), 60h ; ' '
0000:1111 DD 36 2F 60      ld      (ix+2Fh), 60h ; ' '
0000:1115 11 70 69      de, soft_sprite_ram+70h
0000:1118 21 21 11      ld      hl, elevator_cap_spr
0000:111B 01 10 00      ld      bc, 10h
0000:111E ED B0      ldir
0000:1120 C9      ret
0000:1120 ;
0000:1121 37 45 0F 60+elevator_cap_spr:.db 37h, 45h, 0Fh, 60h, 37h, 45h, 8Fh, 0F7h, 77h, 45h
0000:1121 37 45 8F F7+ ; DATA XREF: 0000:1118[o
0000:1121 77 45 0F 60+ .db 0Fh, 60h, 77h, 45h, 8Fh, 0F7h
0000:1131 ;
0000:1131 init_l4_rivets: ; DATA XREF: 0000:0FD5[o
0000:1131 21 F0 3D      ld      hl, fireball_rivet_spr
0000:1134 11 07 64      ld      de, unk_0_6407
0000:1137 01 1C 05      ld      bc, 51Ch
0000:113A CD 2A 12      call   sub_0_122A
0000:113D 21 14 3E      ld      hl, rivet_hammer_locs
0000:1140 CD A6 11      call   sub_0_11A6
0000:1143 21 54 3E      ld      hl, rivit_obj_spr
0000:1146 11 0C 6A      ld      de, soft_sprite_ram+10Ch
0000:1149 01 0C 00      ld      bc, 0Ch
0000:114C ED B0      ldir
0000:114E 21 82 11      ld      hl, rivet_unknown_spr2
0000:1151 11 A3 64      ld      de, unk_0_64A3
0000:1154 01 1E 02      ld      bc, 21Eh
0000:1157 CD EC 11      call   sub_0_11EC
0000:115A 21 7E 11      ld      hl, rivet_unknown_spr1
0000:115D 11 A7 64      ld      de, unk_0_64A7
0000:1160 01 1C 02      ld      bc, 21Ch
0000:1163 CD 2A 12      call   sub_0_122A
0000:1166 DD 21 A0 64      ld      ix, unk_0_64A0
0000:116A DD 36 00 01      ld      (ix+0), 1
0000:116E DD 36 20 01      ld      (ix+20h), 1
0000:1172 21 50 69      ld      hl, soft_sprite_ram+50h
0000:1175 06 02      ld      b, 2
0000:1177 11 20 00      ld      de, 20h ; ' '
0000:117A CD D3 11      call   set_B_sprites_data
0000:117D C9      ret
0000:117D ;
0000:117E 3F 0C 08 08 rivet_unknown_spr1:.db 3Fh, 0Ch, 8, 8 ; DATA XREF: 0000:115A[o
0000:117E ; Rivets level? Unknown sprites?
0000:1182 73 50 8D 50 rivet_unknown_spr2:.db 73h, 50h, 8Dh, 50h ; DATA XREF: 0000:114E[o
0000:1186 ; SUBROUTINE
0000:1186 ;
0000:1186 sub_0_1186: ; CODE XREF: 0000:102B[p
0000:1186 ; 0000:1093[p
0000:1186 21 A2 11      ld      hl, elevator_bouncing_spr
0000:1189 11 07 65      ld      de, unk_0_6507
0000:118C 01 0C 0A      ld      bc, 0A0Ch
0000:118F CD 2A 12      call   sub_0_122A
0000:1192 DD 21 00 65      ld      ix, unk_0_6500
0000:1196 21 80 69      ld      hl, soft_sprite_ram+80h
0000:1199 06 0A      ld      b, 0Ah
0000:119B 11 10 00      ld      de, 10h
0000:119E CD D3 11      call   set_B_sprites_data
0000:11A1 C9      ret
0000:11A1 ; End of function sub_0_1186
0000:11A1 ;
0000:11A2 3B 00 02 02 elevator_bouncing_spr:.db 3Bh, 0, 2, 2 ; DATA XREF: sub_0_1186[o
0000:11A6 ; SUBROUTINE
0000:11A6 ;
0000:11A6 sub_0_11A6: ; CODE XREF: 0000:1003[p
0000:11A6 ; 0000:1073[p ...
0000:11A6 11 83 66      ld      de, unk_0_6683
0000:11A9 01 0E 02      ld      bc, 20Eh
0000:11AC CD EC 11      call   sub_0_11EC
0000:11AF 21 08 3E      ld      hl, hammer_pickup_spr
0000:11B2 11 87 66      ld      de, unk_0_6687
0000:11B5 01 0C 02      ld      bc, 20Ch
0000:11B8 CD 2A 12      call   sub_0_122A
0000:11BB DD 21 80 66      ld      ix, unk_0_6680
0000:11BF DD 36 00 01      ld      (ix+0), 1
0000:11C3 DD 36 10 01      ld      (ix+10h), 1
0000:11C7 21 18 6A      ld      hl, soft_sprite_ram+118h ; location of hammers in sprite ram
0000:11CA 06 02      ld      b, 2
0000:11CC 11 10 00      ld      de, 10h
0000:11CF CD D3 11      call   set_B_sprites_data
0000:11D2 C9      ret
0000:11D2 ; End of function sub_0_11A6
0000:11D3 ; SUBROUTINE
0000:11D3 ;
0000:11D3 set_B_sprites_data: ; CODE XREF: 0000:1046[p
0000:11D3 ; 0000:10DB[p ...
0000:11D3 DD 7E 03      ld      a, (ix+3)
0000:11D6 77      ld      (hl), a ; set sprite X
0000:11D7 2C      inc     l
0000:11D8 DD 7E 07      ld      a, (ix+7)
0000:11DB 77      ld      (hl), a ; set sprite tile
0000:11DC 2C      inc     l
0000:11DD DD 7E 08      ld      a, (ix+8)
0000:11E0 77      ld      (hl), a ; set sprite vflip/palette
0000:11E1 2C      inc     l
0000:11E2 DD 7E 05      ld      a, (ix+5)
0000:11E5 77      ld      (hl), a ; set sprite Y
0000:11E6 2C      inc     l
0000:11E7 DD 19      add     ix, de ; next sprite data address
0000:11E9 10 E8      djnz   set_B_sprites_data
0000:11EB C9      ret

```

```

0000:11EB ; End of function set_B_sprites_data
0000:11EB
0000:11EC ; SUBROUTINE
0000:11EC
0000:11EC sub_0_11EC: ; CODE XREF: 0000:10C0[p
0000:11EC ; 0000:1157[p ...
0000:11EC 7E ld a, (hl)
0000:11EC 12 ld (de), a
0000:11EE 23 inc hl
0000:11EF 1C inc e
0000:11F0 1C inc e
0000:11F1 7E ld a, (hl)
0000:11F2 12 ld (de), a
0000:11F3 23 inc hl
0000:11F4 7B ld a, e
0000:11F5 81 add a, c
0000:11F6 5F ld e, a
0000:11F7 10 F3 djnz sub_0_11EC
0000:11F9 C9 ret
0000:11F9 ; End of function sub_0_11EC
0000:11F9
0000:11FA ; SUBROUTINE
0000:11FA
0000:11FA sub_0_11FA: ; CODE XREF: 0000:0FF2[p
0000:11FA ; 0000:104C[p
0000:11FA DD 21 A0 66 ld ix, unk_0_66A0
0000:11FA 11 28 6A ld de, soft_sprite_ram+128h
0000:1201 DD 36 00 01 ld (ix+0), 1
0000:1205 7E ld a, (hl)
0000:1206 DD 77 03 ld (ix+3), a
0000:1209 12 ld (de), a
0000:120A 1C inc e
0000:120B 23 inc hl
0000:120C 7E ld a, (hl)
0000:120D DD 77 07 ld (ix+7), a
0000:1210 12 ld (de), a
0000:1211 1C inc e
0000:1212 23 inc hl
0000:1213 7E ld a, (hl)
0000:1214 DD 77 08 ld (ix+8), a
0000:1217 12 ld (de), a
0000:1218 1C inc e
0000:1219 23 inc hl
0000:121A 7E ld a, (hl)
0000:121B DD 77 05 ld (ix+5), a
0000:121E 12 ld (de), a
0000:121F 23 inc hl
0000:1220 7E ld a, (hl)
0000:1221 DD 77 09 ld (ix+9), a
0000:1224 23 inc hl
0000:1225 7E ld a, (hl)
0000:1226 DD 77 0A ld (ix+0Ah), a
0000:1229 C9 ret
0000:1229 ; End of function sub_0_11FA
0000:1229
0000:122A ; SUBROUTINE
0000:122A
0000:122A sub_0_122A: ; CODE XREF: 0000:0FEC[p
0000:122A ; 0000:100F[p ...
0000:122A E5 push hl
0000:122A C5 push bc
0000:122C 06 04 ld b, 4
0000:122E loc_0_122E: ; CODE XREF: sub_0_122A+8[j
0000:122E 7E ld a, (hl)
0000:122F 12 ld (de), a
0000:1230 23 inc hl
0000:1231 1C inc e
0000:1232 10 FA djnz loc_0_122E
0000:1234 C1 pop bc
0000:1235 E1 pop hl
0000:1236 7B ld a, e
0000:1237 81 add a, c
0000:1238 5F ld e, a
0000:1239 10 EF djnz sub_0_122A
0000:123B C9 ret
0000:123B ; End of function sub_0_122A
0000:123B
0000:123C ;
0000:123C
0000:123C start_gameplay: ; DATA XREF: 0000:0718[o
0000:123C DF ; 0000:074C[o
0000:123C ; wait for 8-bit countdown
0000:123D 3A 27 62 rst 18h
0000:1240 FE 03 cp 3 ; elevators?
0000:1242 01 16 E0 ld bc, 0E016h
0000:1245 CA 4B 12 jp z, loc_0_124B ; yes, skip
0000:1248 01 3F F0 ld bc, 0F03Fh
0000:124B loc_0_124B: ; CODE XREF: 0000:1245[j
0000:124B DD 21 00 62 ld ix, is_mario_alive
0000:124F 21 4C 69 ld hl, soft_sprite_ram+4Ch
0000:1252 DD 36 00 01 ld (ix+0), 1 ; flag mario is alive
0000:1256 DD 71 03 ld (ix+3), c ; mario sprite X
0000:1259 71 ld (hl), c
0000:125A 2C inc l
0000:125B DD 36 07 80 ld (ix+7), 80h ; 'Ç' ; sprite tile (invalid)
0000:125F 36 80 ld (hl), 80h ; 'Ç'
0000:1261 2C inc l
0000:1262 DD 36 08 02 ld (ix+8), 2 ; sprite hflip & palette
0000:1266 36 02 ld (hl), 2
0000:1268 2C inc l
0000:1269 DD 70 05 ld (ix+5), b ; sprite Y
0000:126C 70 ld (hl), b
0000:126D DD 36 0F 01 ld (ix+0Fh), 1
0000:1271 21 0A 60 ld hl, main_sequencer
0000:1274 34 inc (hl)
0000:1275 11 01 06 ld de, loc_0_601
0000:1278 CD 9F 30 call sub_0_309F
0000:127B C9 ret

```

```

0000:127C      ; -----
0000:127C
0000:127C      died_in_gameplay:                                ; DATA XREF: 0000:071C|o
0000:127C      CD BD 1D                                         ; 0000:0750|o
0000:127C      call    sub_0_1DBD
0000:127F      ld      a, (unk_0_639D)
0000:1282      EF      rst      28h                                ; go!
0000:1282      ; -----
0000:1283      .dw delay_before_spin                                ; Jump Table
0000:1285      AC 12      .dw mario_death_spin
0000:1287      DE 12      .dw dead_mario_lying_down
0000:1289      00 00      .dw 0
0000:128B      ; -----
0000:128B
0000:128B      delay_before_spin:                                ; DATA XREF: 0000:1283|o
0000:128B      DF      rst      18h                                ; wait for 8-bit countdown
0000:128C      21 4D 69      ld      hl, soft_sprite_ram+4Dh
0000:128F      3E F0      ld      a, 0F0h ; '-'                                ; mario sprite << 1
0000:1291      CB 16      rl      (hl)
0000:1293      1F      rra
0000:1294      77      ld      (hl), a
0000:1295      21 9D 63      ld      hl, unk_0_639D
0000:1298      34      inc      (hl)
0000:1299      3E 0D      ld      a, 0Dh
0000:129B      32 9E 63      ld      (unk_0_639E), a
0000:129E      3E 08      ld      a, 8
0000:12A0      32 09 60      ld      (eight_bit_countdown), a
0000:12A3      CD BD 30      call    sub_0_30BD
0000:12A6      3E 03      ld      a, 3
0000:12A8      32 88 60      ld      (unk_0_6088), a
0000:12AB      C9      ret
0000:12AC      ; -----
0000:12AC
0000:12AC      mario_death_spin:                                ; DATA XREF: 0000:1285|o
0000:12AC      DF      rst      18h                                ; wait for 8-bit countdown
0000:12AD      3E 08      ld      a, 8
0000:12AF      32 09 60      ld      (eight_bit_countdown), a
0000:12B2      21 9E 63      ld      hl, unk_0_639E
0000:12B5      35      dec      (hl)
0000:12B6      CA CB 12      jp      z, loc_0_12CB
0000:12B9      21 4D 69      ld      hl, soft_sprite_ram+4Dh
0000:12BC      7E      ld      a, (hl)
0000:12BD      1F      rra
0000:12BE      3E 02      ld      a, 2
0000:12C0      1F      rra
0000:12C1      47      ld      b, a
0000:12C2      AE      xor      (hl)
0000:12C3      77      ld      (hl), a
0000:12C4      2C      inc      l
0000:12C5      78      ld      a, b
0000:12C6      E6 80      and     80h ; 'Ç'                                ; flip mario upside down?
0000:12C8      AE      xor      (hl)
0000:12C9      77      ld      (hl), a
0000:12CA      C9      ret
0000:12CB      ; -----
0000:12CB
0000:12CB      loc_0_12CB:                                ; CODE XREF: 0000:12B6|j
0000:12CB      21 4D 69      ld      hl, soft_sprite_ram+4Dh
0000:12CE      3E F4      ld      a, 0F4h ; '¶'
0000:12D0      CB 16      rl      (hl)
0000:12D2      1F      rra
0000:12D3      77      ld      (hl), a
0000:12D4      21 9D 63      ld      hl, unk_0_639D
0000:12D7      34      inc      (hl)
0000:12D8      3E 80      ld      a, 80h ; 'Ç'
0000:12DA      32 09 60      ld      (eight_bit_countdown), a
0000:12DD      C9      ret
0000:12DE      ; -----
0000:12DE
0000:12DE      dead_mario_lying_down:                                ; DATA XREF: 0000:1287|o
0000:12DE      DF      rst      18h                                ; wait for 8-bit countdown
0000:12DF      CD DB 30      call    sub_0_30DB
0000:12E2      21 0A 60      ld      hl, main_sequencer
0000:12E5      3A 0E 60      ld      a, (unk_0_600E)
0000:12E8      A7      and     a
0000:12E9      CA ED 12      jp      z, loc_0_12ED
0000:12EC      34      inc      (hl)
0000:12ED      ; -----
0000:12ED
0000:12ED      loc_0_12ED:                                ; CODE XREF: 0000:12E9|j
0000:12ED      34      inc      (hl)
0000:12EE      2B      dec      hl
0000:12EF      36 01      ld      (hl), 1
0000:12F1      C9      ret
0000:12F2      ; -----
0000:12F2
0000:12F2      copy_current_lvl_data_to_P1:                            ; DATA XREF: 0000:071E|o
0000:12F2      CD 1C 01      call    stop_sound
0000:12F5      AF      xor      a
0000:12F6      32 2C 62      ld      (unk_0_622C), a
0000:12F9      21 28 62      ld      hl, life_no
0000:12FC      35      dec      (hl)
0000:12FD      7E      ld      a, (hl)
0000:12FE      11 40 60      ld      de, pl_level_data
0000:1301      01 08 00      ld      bc, 8
0000:1304      ED B0      ldir
0000:1306      A7      and     a
0000:1307      ; -----
0000:1307
0000:1307      loc_0_1307:
0000:1307      C2 34 13      jp      nz, loc_0_1334
0000:130A      3E 01      ld      a, 1
0000:130C      21 B2 60      ld      hl, unk_0_60B2
0000:130F      CD CA 13      call    sub_0_13CA
0000:1312      21 D4 76      ld      hl, VRAM_start+2D4h
0000:1315      3A 0F 60      ld      a, (two_players)
0000:1318      A7      and     a
0000:1319      28 07      jr      z, loc_0_1322
0000:131B      11 02 03      ld      de, 302h
0000:131E      CD 9F 30      call    sub_0_309F
0000:1321      2B      dec      hl
0000:1322      ; -----
0000:1322
0000:1322      loc_0_1322:                                ; CODE XREF: 0000:1319|j
0000:1322      CD 26 18      call    clear_14x5_HL
0000:1325      11 00 03      ld      de, 300h
0000:1328      CD 9F 30      call    sub_0_309F
0000:132B      21 09 60      ld      hl, eight_bit_countdown
0000:132E      36 C0      ld      (hl), 0C0h ; 'L'

```

```

0000:1330 23          inc     hl
0000:1331 36 10         ld      (hl), 10h
0000:1333 C9          ret
0000:1334          ;
0000:1334          loc_0_1334:                                ; CODE XREF: 0000:1307|j
0000:1334 0E 08         ld      c, 8
0000:1336 3A 0F 60     ld      a, (two_players)
0000:1339 A7          and     a
0000:133A CA 3F 13     jp      z, loc_0_133F
0000:133D 0E 17         ld      c, 17h
0000:133F          loc_0_133F:                                ; CODE XREF: 0000:133A|j
0000:133F 79          ld      a, c
0000:1340 32 0A 60     ld      (main_sequencer), a
0000:1343 C9          ret
0000:1344          ;
0000:1344          copy_current_lvl_data_to_P2:                ; DATA XREF: 0000:0720|o
0000:1344 CD 1C 01     call    stop_sound
0000:1347 AF          xor     a
0000:1348 32 2C 62     ld      (unk_0_622C), a
0000:134B 21 28 62     ld      hl, life_no
0000:134E 35         dec     (hl)
0000:134F 7E          ld      a, (hl)
0000:1350 11 48 60     ld      de, p2_level_data
0000:1353 01 08 00     ld      bc, 8
0000:1356 ED B0     ldir
0000:1358 A7          and     a
0000:1359 C2 7F 13     jp      nz, loc_0_137F
0000:135C 3E 03         ld      a, 3
0000:135E 21 B5 60     ld      hl, unk_0_60B5
0000:1361 CD CA 13     call    sub_0_13CA
0000:1364 11 03 03     ld      de, 303h
0000:1367 CD 9F 30     call    sub_0_309F
0000:136A 11 00 03     ld      de, 300h
0000:136D CD 9F 30     call    sub_0_309F
0000:1370 21 D3 76     ld      hl, VRAM_start+2D3h
0000:1373 CD 26 18     call    clear_14x5_HL
0000:1376 21 09 60     ld      hl, eight_bit_countdown
0000:1379 36 C0         ld      (hl), 0C0h ; 'L'
0000:137B 23          inc     hl
0000:137C 36 11         ld      (hl), 11h
0000:137E C9          ret
0000:137F          ;
0000:137F          loc_0_137F:                                ; CODE XREF: 0000:1359|j
0000:137F 0E 17         ld      c, 17h                ; set to switch players?
0000:1381 3A 40 60     ld      a, (p1_level_data)
0000:1384 A7          and     a
0000:1385 C2 8A 13     jp      nz, loc_0_138A
0000:1388 0E 08         ld      c, 8
0000:138A          loc_0_138A:                                ; CODE XREF: 0000:1385|j
0000:138A 79          ld      a, c
0000:138B 32 0A 60     ld      (main_sequencer), a
0000:138E C9          ret
0000:138F          ;
0000:138F          p1_game_over:                                ; DATA XREF: 0000:0722|o
0000:138F DF          rst     18h                ; wait for 8-bit countdown
0000:1390 0E 17         ld      c, 17h
0000:1392 3A 48 60     ld      a, (p2_level_data)
0000:1395          loc_0_1395:                                ; CODE XREF: 0000:13A7|j
0000:1395 34          inc     (hl)
0000:1396 A7          and     a
0000:1397 C2 9C 13     jp      nz, loc_0_139C
0000:139A 0E 14         ld      c, 14h
0000:139C          loc_0_139C:                                ; CODE XREF: 0000:1397|j
0000:139C 79          ld      a, c
0000:139D 32 0A 60     ld      (main_sequencer), a
0000:13A0 C9          ret
0000:13A1          ;
0000:13A1          p2_game_over:                                ; DATA XREF: 0000:0724|o
0000:13A1 DF          rst     18h                ; wait for 8-bit countdown
0000:13A2 0E 17         ld      c, 17h
0000:13A4 3A 40 60     ld      a, (p1_level_data)
0000:13A7 C3 95 13     jp      loc_0_1395
0000:13AA          loc_0_13AA:                                ; DATA XREF: 0000:0726|o
0000:13AA 3A 26 60     ld      a, (upright)
0000:13AD 32 82 7D     ld      (flipscreen), a
0000:13B0 AF          xor     a
0000:13B1 32 0A 60     ld      (main_sequencer), a
0000:13B4 21 01 01     ld      hl, 101h
0000:13B7 22 0D 60     ld      (unk_0_600D), hl
0000:13BA C9          ret
0000:13BB          ;
0000:13BB          loc_0_13BB:                                ; DATA XREF: 0000:0728|o
0000:13BB AF          xor     a
0000:13BC 32 0D 60     ld      (unk_0_600D), a
0000:13BF 32 0E 60     ld      (unk_0_600E), a
0000:13C2 32 0A 60     ld      (main_sequencer), a
0000:13C5 3C          inc     a
0000:13C6 32 82 7D     ld      (flipscreen), a
0000:13C9 C9          ret
0000:13CA          ; SUBROUTINE
0000:13CA          sub_0_13CA:                                ; CODE XREF: 0000:130F|p
0000:13CA 11 C6 61     ld      de, unk_0_61C6
0000:13CA          ; 0000:1361|p
0000:13CA 12         ld      (de), a
0000:13CE CF          rst     8                ; return if attract mode
0000:13CF 13         inc     de
0000:13D0 01 03 00     ld      bc, 3
0000:13D3 ED B0     ldir
0000:13D5 06 03         ld      b, 3
0000:13D7 21 B1 61     ld      hl, unk_0_61B1
0000:13DA

```

```

0000:13DA      loc_0_13DA:      dec     de                ; CODE XREF: sub_0_13CA+1F↑j
0000:13DA 1B      ld      a, (de)
0000:13DB 1A      rrca
0000:13DC 0F      rrca
0000:13DD 0F      rrca
0000:13DE 0F      rrca
0000:13DF 0F      rrca
0000:13E0 E6 0F    and     0Fh
0000:13E2 77      ld      (hl), a
0000:13E3 23      inc     hl
0000:13E4 1A      ld      a, (de)
0000:13E5 E6 0F    and     0Fh
0000:13E7 77      ld      (hl), a
0000:13E8 23      inc     hl
0000:13E9 10 EF    djnz    loc_0_13DA
0000:13EB 06 0E    ld      b, 0Eh
0000:13ED
0000:13ED      loc_0_13ED:      ld      (hl), 10h                ; CODE XREF: sub_0_13CA+26↑j
0000:13EF 23      inc     hl
0000:13F0 10 FB    djnz    loc_0_13ED
0000:13F2 36 3F    ld      (hl), 3Fh ; '?'
0000:13F4 06 05    ld      b, 5
0000:13F6 21 A5 61 ld      hl, high_score_tbl_ram+0A5h
0000:13F9 11 C7 61 ld      de, unk_0_61C7
0000:13FC
0000:13FC      loc_0_13FC:      ld      a, (de)                ; CODE XREF: sub_0_13CA+51↑j
0000:13FC 1A      sub     (hl)
0000:13FD 96      inc     hl
0000:13FE 23      inc     de
0000:13FF 13      ld      a, (de)
0000:1400 1A      sbc     a, (hl)
0000:1401 9E      inc     hl
0000:1402 23      inc     de
0000:1403 13      ld      a, (de)
0000:1404 1A      sbc     a, (hl)
0000:1405 9E      ret     c
0000:1406 D8      push    bc
0000:1407 C5      ld      b, 19h
0000:1408 06 19
0000:140A
0000:140A      loc_0_140A:      ld      c, (hl)                ; CODE XREF: sub_0_13CA+47↑j
0000:140A 4E      ld      a, (de)
0000:140B 1A      ld      (hl), a
0000:140C 77      ld      a, c
0000:140D 79      ld      (de), a
0000:140E 12      dec     hl
0000:140F 2B      dec     de
0000:1410 1B      djnz    loc_0_140A
0000:1411 10 F7    ld      bc, 0FFF5h
0000:1413 01 F5 FF add     hl, bc
0000:1416 09      ex      de, hl
0000:1417 EB      add     hl, bc
0000:1418 09      ex      de, hl
0000:1419 EB      pop     bc
0000:141A C1      djnz    loc_0_13FC
0000:141B 10 DF    ret
0000:141D C9
0000:141D      ; End of function sub_0_13CA
0000:141D
0000:141E
0000:141E
0000:141E      draw_name_registered:      call     display_credits                ; DATA XREF: 0000:072A↑o
0000:141E CD 16 06      rst     18h                ; wait for 8-bit countdown
0000:1421 DF      call     clear_visible_area_and_sprites
0000:1422 CD 74 08      ld      a, 0
0000:1425 3E 00      ld      (unk_0_600E), a
0000:1427 32 0E 60      ld      (unk_0_600D), a
0000:142A 32 0D 60      ld      hl, high_score_tbl_ram+1Ch
0000:142D 21 1C 61      ld      de, 22h ; ''
0000:1430 11 22 00      ld      b, 5
0000:1433 06 05      ld      a, 1
0000:1437
0000:1437      loc_0_1437:      cp      (hl)                ; CODE XREF: 0000:143C↑j
0000:1437 BE      jp      z, loc_0_1459
0000:1438 CA 59 14      add     hl, de
0000:143B 19      djnz    loc_0_1437
0000:143C 10 F9      ld      hl, high_score_tbl_ram+1Ch
0000:143E 21 1C 61      ld      b, 5
0000:1441 06 05      ld      a, 3
0000:1443 3E 03
0000:1445
0000:1445      loc_0_1445:      cp      (hl)                ; CODE XREF: 0000:144A↑j
0000:1445 BE      jp      z, loc_0_144F
0000:1446 CA 4F 14      add     hl, de
0000:1449 19      djnz    loc_0_1445
0000:144A 10 F9      jp      loc_0_1475
0000:144C C3 75 14
0000:144F
0000:144F      loc_0_144F:      ld      a, 1                ; CODE XREF: 0000:1446↑j
0000:144F 3E 01      ld      (unk_0_600E), a
0000:1451 32 0E 60      ld      (unk_0_600D), a
0000:1454 32 0D 60      ld      a, 0
0000:1457 3E 00
0000:1459
0000:1459      loc_0_1459:      ld      hl, upright                ; CODE XREF: 0000:1438↑j
0000:1459 21 26 60      or      (hl)
0000:145C B6      ld      (flipscreen), a
0000:145D 32 82 7D      ld      a, 0
0000:1460 3E 00      ld      (eight_bit_countdown), a
0000:1462 32 09 60      ld      hl, main_sequencer
0000:1465 21 0A 60      inc     (hl)
0000:1468 34      ld      de, 30Dh
0000:1469 11 0D 03      ld      b, 0Ch
0000:146C 06 0C
0000:146E
0000:146E      loc_0_146E:      call     sub_0_309F                ; CODE XREF: 0000:1472↑j
0000:146E CD 9F 30      inc     de
0000:1471 13      djnz    loc_0_146E
0000:1472 10 FA      ret
0000:1474 C9
0000:1475
0000:1475      loc_0_1475:                ; CODE XREF: 0000:144C↑j
0000:1475

```

```

0000:1475 3E 01      ld      a, 1
0000:1477 32 82 7D      ld      (flipscreen), a
0000:147A 32 05 60      ld      (nmi_sequencer), a
0000:147D 32 07 60      ld      (attract_mode_flag), a      ; set attract mode flag
0000:1480 3E 00      ld      a, 0
0000:1482 32 0A 60      ld      (main_sequencer), a
0000:1485 C9          ret
0000:1486          ;
0000:1486          ;
0000:1486          do_initials_entry:      ; DATA XREF: 0000:072C↑o
0000:1486 CD 16 06      call    display_credits
0000:1489 21 09 60      ld      hl, eight_bit_countdown
0000:148C 7E          ld      a, (hl)
0000:148D A7          and     a
0000:148E C2 DC 14      jp      nz, loc_0_14DC
0000:1491 32 86 7D      ld      (palette_bank), a
0000:1494 32 87 7D      ld      (palette_bank+1), a
0000:1497 36 01      ld      (hl), 1
0000:1499 21 30 60      ld      hl, unk_0_6030
0000:149C 36 0A      ld      (hl), 0Ah
0000:149E 23          inc     hl
0000:149F 36 00      ld      (hl), 0
0000:14A1 23          inc     hl
0000:14A2 36 10      ld      (hl), 10h
0000:14A4 23          inc     hl
0000:14A5 36 1E      ld      (hl), 1Eh
0000:14A7 23          inc     hl
0000:14A8 36 3E      ld      (hl), 3Eh ; '>'
0000:14AA 23          inc     hl
0000:14AB 36 00      ld      (hl), 0
0000:14AD 21 E8 75      ld      hl, VRAM_start+1E8h
0000:14B0 22 36 60      ld      (unk_0_6036), hl
0000:14B3 21 1C 61      ld      hl, high_score_tbl_ram+1Ch
0000:14B6 3A 0E 60      ld      a, (unk_0_600E)
0000:14B9 07          rlc     a
0000:14BA 3C          inc     a
0000:14BB 4F          ld      c, a
0000:14BC 11 22 00      ld      de, 22h ; ''
0000:14BF 06 04      ld      b, 4
0000:14C1          loc_0_14C1:      ; CODE XREF: 0000:14C7↑j
0000:14C1 7E          ld      a, (hl)
0000:14C2 B9          cp      c
0000:14C3 CA C9 14      jp      z, loc_0_14C9
0000:14C6 19          add     hl, de
0000:14C7 10 F8      djnz    loc_0_14C1
0000:14C9          loc_0_14C9:      ; CODE XREF: 0000:14C3↑j
0000:14C9          ; point to high score
0000:14C9 22 38 60      ld      (unk_0_6038), hl
0000:14CC 11 F3 FF      ld      de, 0FFF3h
0000:14CF 19          add     hl, de
0000:14D0 22 3A 60      ld      (unk_0_603A), hl
0000:14D3 06 00      ld      b, 0
0000:14D5 3A 35 60      ld      a, (unk_0_6035)
0000:14D8 4F          ld      c, a
0000:14D9 CD FA 15      call    sub_0_15FA      ; high score initial select sprite
0000:14DC          loc_0_14DC:      ; CODE XREF: 0000:148E↑j
0000:14DC 21 34 60      ld      hl, unk_0_6034
0000:14DF 35          dec     (hl)
0000:14E0 C2 FC 14      jp      nz, loc_0_14FC
0000:14E3 36 3E      ld      (hl), 3Eh ; '>'
0000:14E5 2B          dec     hl
0000:14E6 35          dec     (hl)
0000:14E7 CA C6 15      jp      z, loc_0_15C6
0000:14EA 7E          ld      a, (hl)
0000:14EB 06 FF      ld      b, 0FFh
0000:14ED          loc_0_14ED:      ; CODE XREF: 0000:14F0↑j
0000:14ED 04          inc     b
0000:14EE D6 0A      sub     0Ah
0000:14F0 D2 ED 14      jp      nc, loc_0_14ED
0000:14F3 C6 0A      add     a, 0Ah
0000:14F5 32 52 75      ld      (VRAM_start+152h), a
0000:14F8 78          ld      a, b
0000:14F9 32 72 75      ld      (VRAM_start+172h), a
0000:14FC          loc_0_14FC:      ; CODE XREF: 0000:14E0↑j
0000:14FC 21 30 60      ld      hl, unk_0_6030
0000:14FF 46          ld      b, (hl)
0000:1500 36 0A      ld      (hl), 0Ah
0000:1502 3A 10 60      ld      a, (controller_in)
0000:1505 CB 7F      bit     7, a      ; edge-detected inputs
0000:1507 C2 46 15      jp      nz, jump_pressed      ; button pressed?
0000:150A E6 03      and     3      ; yes, skip
0000:150C C2 14 15      jp      nz, left_right_pressed      ; left/right only
0000:150F 3C          inc     a      ; yes, skip
0000:1510 77          ld      (hl), a
0000:1511 C3 8A 15      jp      loc_0_158A
0000:1514          ;
0000:1514          ;
0000:1514          left_right_pressed:      ; CODE XREF: 0000:150C↑j
0000:1514 05          dec     b
0000:1515 CA 1D 15      jp      z, loc_0_151D
0000:1518 78          ld      a, b
0000:1519 77          ld      (hl), a
0000:151A C3 8A 15      jp      loc_0_158A
0000:151D          ;
0000:151D          ;
0000:151D          loc_0_151D:      ; CODE XREF: 0000:1515↑j
0000:151D CB 4F      bit     1, a
0000:151F C2 39 15      jp      nz, loc_0_1539
0000:1522 3A 35 60      ld      a, (unk_0_6035)
0000:1525 3C          inc     a
0000:1526 FE 1E      cp      1Eh
0000:1528 C2 2D 15      jp      nz, loc_0_152D
0000:152B 3E 00      ld      a, 0
0000:152D          loc_0_152D:      ; CODE XREF: 0000:1528↑j
0000:152D          ; 0000:153E↑j ...
0000:152D 32 35 60      ld      (unk_0_6035), a
0000:1530 4F          ld      c, a
0000:1531 06 00      ld      b, 0
0000:1533 CD FA 15      call    sub_0_15FA
0000:1536 C3 8A 15      jp      loc_0_158A
0000:1539          ;

```



```

0000:1539
0000:1539
0000:1539 3A 35 60      loc_0_1539:      ld      a, (unk_0_6035)      ; CODE XREF: 0000:151F↑j
0000:153C D6 01      sub      l
0000:153E F2 2D 15      jp      p, loc_0_152D
0000:1541 3E 1D      ld      a, 1Dh
0000:1543 C3 2D 15      jp      loc_0_152D
0000:1546
0000:1546
0000:1546      jump_pressed:      ; CODE XREF: 0000:1507↑j
0000:1546 3A 35 60      ld      a, (unk_0_6035)
0000:1549 FE 1C      cp      1Ch
0000:154B CA 6D 15      jp      z, loc_0_156D
0000:154E FE 1D      cp      1Dh
0000:1550 CA C6 15      jp      z, loc_0_15C6
0000:1553 2A 36 60      ld      hl, (unk_0_6036)
0000:1556 01 88 75      ld      bc, VRAM_start+188h
0000:1559 A7      and      a
0000:155A ED 42      sbc      hl, bc
0000:155C CA 8A 15      jp      z, loc_0_158A
0000:155F 09      add      hl, bc
0000:1560 C6 11      add      a, 11h
0000:1562 77      ld      (hl), a
0000:1563 01 E0 FF      ld      bc, 0FFE0h
0000:1566 09      add      hl, bc
0000:1567
0000:1567      loc_0_1567:      ; CODE XREF: 0000:1583↑j
0000:1567 22 36 60      ld      (unk_0_6036), hl
0000:156A C3 8A 15      jp      loc_0_158A
0000:156D
0000:156D      loc_0_156D:      ; CODE XREF: 0000:154B↑j
0000:156D 2A 36 60      ld      hl, (unk_0_6036)
0000:1570 01 20 00      ld      bc, 20h ; ' '
0000:1573 09      add      hl, bc
0000:1574 A7      and      a
0000:1575 01 08 76      ld      bc, VRAM_start+208h
0000:1578 ED 42      sbc      hl, bc
0000:157A C2 86 15      jp      nz, loc_0_1586
0000:157D 21 E8 75      ld      hl, VRAM_start+1E8h
0000:1580
0000:1580      loc_0_1580:      ; CODE XREF: 0000:1587↑j
0000:1580 3E 10      ld      a, 10h
0000:1582 77      ld      (hl), a
0000:1583 C3 67 15      jp      loc_0_1567
0000:1586
0000:1586      loc_0_1586:      ; CODE XREF: 0000:157A↑j
0000:1586 09      add      hl, bc
0000:1587 C3 80 15      jp      loc_0_1580
0000:158A
0000:158A      loc_0_158A:      ; CODE XREF: 0000:1511↑j
0000:158A 21 32 60      ; 0000:151A↑j ...
0000:158A      ld      hl, unk_0_6032
0000:158D 35      dec      (hl)
0000:158E C2 F9 15      jp      nz, locret_0_15F9
0000:1591 3A 31 60      ld      a, (unk_0_6031)
0000:1594 A7      and      a
0000:1595 C2 B8 15      jp      nz, loc_0_15B8
0000:1598 3E 01      ld      a, 1
0000:159A 32 31 60      ld      (unk_0_6031), a
0000:159D 11 BF 01      ld      de, byte_0_1BA+5      ; empty/dummy score
0000:15A0
0000:15A0      loc_0_15A0:      ; CODE XREF: 0000:15C3↑j
0000:15A0 FD 2A 38 60      ld      iy, (unk_0_6038)      ; ptr high score
0000:15A4 FD 6E 04      ld      l, (iy+4)
0000:15A7 FD 66 05      ld      h, (iy+5)
0000:15AA E5      push     hl
0000:15AB DD E1      pop      ix
0000:15AD CD 7C 05      call     display_score_HL
0000:15B0 3E 10      ld      a, 10h
0000:15B2 32 32 60      ld      (unk_0_6032), a
0000:15B5 C3 F9 15      jp      locret_0_15F9
0000:15B8
0000:15B8      loc_0_15B8:      ; CODE XREF: 0000:1595↑j
0000:15B8 AF      xor      a
0000:15B9 32 31 60      ld      (unk_0_6031), a
0000:15BC ED 5B 38 60      ld      de, (unk_0_6038)      ; point to high score
0000:15C0 13      inc      de
0000:15C1 13      inc      de
0000:15C2 13      inc      de
0000:15C3 C3 A0 15      jp      loc_0_15A0
0000:15C6
0000:15C6      loc_0_15C6:      ; CODE XREF: 0000:14E7↑j
0000:15C6 ED 5B 38 60      ; 0000:1550↑j
0000:15C6      ld      de, (unk_0_6038)      ; point to high score
0000:15CA AF      xor      a
0000:15CB 12      ld      (de), a
0000:15CC 21 09 60      ld      hl, eight_bit_countdown
0000:15CF 36 80      ld      (hl), 80h ; 'C'
0000:15D1 23      inc      hl
0000:15D2 35      dec      (hl)
0000:15D3 06 0C      ld      b, 0Ch
0000:15D5 21 E8 75      ld      hl, VRAM_start+1E8h
0000:15D8 FD 2A 3A 60      ld      iy, (unk_0_603A)
0000:15DC 11 E0 FF      ld      de, 0FFE0h
0000:15DF
0000:15DF      loc_0_15DF:      ; CODE XREF: 0000:15E6↑j
0000:15DF 7E      ld      a, (hl)
0000:15E0 FD 77 00      ld      (iy+0), a
0000:15E3 FD 23      inc      iy
0000:15E5 19      add      hl, de
0000:15E6 10 F7      djnz     loc_0_15DF
0000:15E8 06 05      ld      b, 5
0000:15EA 11 14 03      ld      de, 314h
0000:15ED
0000:15ED      loc_0_15ED:      ; CODE XREF: 0000:15F1↑j
0000:15ED CD 9F 30      call     sub_0_309F
0000:15F0 13      inc      de
0000:15F1 10 FA      djnz     loc_0_15ED
0000:15F3 11 1A 03      ld      de, 31Ah
0000:15F6 CD 9F 30      call     sub_0_309F
0000:15F9

```

```

0000:15F9          locret_0_15F9:                                ; CODE XREF: 0000:158E|j
0000:15F9 C9          ret                                          ; 0000:15B5|j
0000:15FA          ; [REDACTED] SUBROUTINE [REDACTED]
0000:15FA          ;
0000:15FA          sub_0_15FA:                                ; CODE XREF: 0000:14D9|p
0000:15FA D5          ; 0000:1533|p
0000:15FA          push    de
0000:15FB E5          push    hl
0000:15FC CB 21      sla     c
0000:15FE 21 0F 36 ld      hl, letter_coords
0000:1601 09          add     hl, bc
0000:1602 EB          ex      de, hl
0000:1603 21 74 69 ld      hl, soft_sprite_ram+74h ; sprite for initials entry
0000:1606 1A          ld      a, (de)
0000:1607 13          inc     de
0000:1608 77          ld      (hl), a ; X coordinate
0000:1609 23          inc     hl
0000:160A 36 72      ld      (hl), 72h ; 'r' ; tile
0000:160C 23          inc     hl
0000:160D 36 0C      ld      (hl), 0Ch ; palette
0000:160F 23          inc     hl
0000:1610 1A          ld      a, (de)
0000:1611 77          ld      (hl), a ; Y coordinate
0000:1612 E1          pop     hl
0000:1613 D1          pop     de
0000:1614 C9          ret
0000:1614          ; End of function sub_0_15FA
0000:1614          ;
0000:1615          ;
0000:1615          mario_pauline_reunion: ; DATA XREF: 0000:072E|o
0000:1615 CD BD 30      call    sub_0_30BD
0000:1618 3A 27 62      ld      a, (level_type)
0000:161B 0F          rrca
0000:161C D2 2F 16      jp      nc, loc_0_162F
0000:161F 3A 88 63      ld      a, (unk_0_6388)
0000:1622 EF          rst     28h ; go!
0000:1622          ;
0000:1623 54 16          .dw loc_0_1654 ; Jump table
0000:1625 70 16          .dw loc_0_1670
0000:1627 8A 16          .dw loc_0_168A
0000:1629 32 17          .dw loc_0_1732
0000:162B 57 17          .dw loc_0_1757
0000:162D 8E 17          .dw loc_0_178E
0000:162F          ;
0000:162F          loc_0_162F: ; CODE XREF: 0000:161C|j
0000:162F 0F          rrca
0000:1630 D2 41 16      jp      nc, loc_0_1641
0000:1633 3A 88 63      ld      a, (unk_0_6388)
0000:1636 EF          rst     28h ; go!
0000:1636          ;
0000:1637 A3 16          .dw loc_0_16A3 ; Jump table
0000:1639 BB 16          .dw loc_0_16BB
0000:163B 32 17          .dw loc_0_1732
0000:163D 57 17          .dw loc_0_1757
0000:163F 8E 17          .dw loc_0_178E
0000:1641          ;
0000:1641          loc_0_1641: ; CODE XREF: 0000:1630|j
0000:1641 CD BD 1D      call    sub_0_1DBD
0000:1644 3A 88 63      ld      a, (unk_0_6388)
0000:1647 EF          rst     28h ; go!
0000:1647          ;
0000:1648 B6 17          .dw unk_0_17B6 ; Jump table
0000:164A 69 30          .dw loc_0_3069
0000:164C 39 18          .dw loc_0_1839
0000:164E 6F 18          .dw loc_0_186F
0000:1650 80 18          .dw loc_0_1880
0000:1652 C6 18          .dw loc_0_18C6
0000:1654          ;
0000:1654          loc_0_1654: ; DATA XREF: 0000:1623|o
0000:1654 CD 08 17      call    sub_0_1708
0000:1657 21 5C 38      ld      hl, kong_normal_spr
0000:165A CD 4E 00      call    copy_sprites_2_11_data
0000:165D 3E 20          ld      a, 20h ; ' '
0000:165F 32 09 60      ld      (eight_bit_countdown), a
0000:1662          ;
0000:1662          loc_0_1662: ; CODE XREF: 0000:16A0|j
0000:1662 21 88 63      ld      hl, unk_0_6388
0000:1665 34          inc     (hl)
0000:1666 3E 01          ld      a, 1
0000:1668 F7          rst     30h ; return if level bit not set
0000:1669 21 0B 69      ld      hl, soft_sprite_ram+0Bh ; sprite #2, x coord
0000:166C 0E FC          ld      c, 0FCh ; '3' ; -4
0000:166E FF          rst     38h ; subtract 4 from x coord for 10 sprites
0000:166F C9          ret
0000:1670          ;
0000:1670          loc_0_1670: ; DATA XREF: 0000:1625|o
0000:1670 DF          rst     18h ; wait for 8-bit countdown
0000:1671 21 32 39      ld      hl, dk_throw_barrel_spr
0000:1674 CD 4E 00      call    copy_sprites_2_11_data
0000:1677 3E 20          ld      a, 20h ; ' '
0000:1679 32 09 60      ld      (eight_bit_countdown), a
0000:167C 21 88 63      ld      hl, unk_0_6388
0000:167F 34          inc     (hl)
0000:1680 3E 04          ld      a, 4
0000:1682 F7          rst     30h ; return if level bit not set
0000:1683 21 0B 69      ld      hl, soft_sprite_ram+0Bh ; sprite #2, x coord
0000:1686 0E 04          ld      c, 4 ; +4
0000:1688 FF          rst     38h ; add 4 to x coord for 10 sprites
0000:1689 C9          ret
0000:168A          ;
0000:168A          loc_0_168A: ; DATA XREF: 0000:1627|o
0000:168A DF          rst     18h ; wait for 8-bit countdown
0000:168B 21 8C 38      ld      hl, kong_climbing_spr
0000:168E CD 4E 00      call    copy_sprites_2_11_data
0000:1691 3E 66          ld      a, 66h ; 'f'
0000:1693 32 0C 69      ld      (soft_sprite_ram+0Ch), a ; sprite #3, y coord
0000:1696 AF          xor     a

```



```

0000:1757      loc_0_1757:                                     ; DATA XREF: 0000:162B|o
0000:1757      CD 6F 30                                         ; 0000:163D|o
0000:1757      call sub_0_306F
0000:175A      CD 6C 17      call sub_0_176C
0000:175D      23      inc hl
0000:175E      13      inc de
0000:175F      CD 83 17      call sub_0_1783
0000:1762      3E 40      ld a, 40h ; '@'
0000:1764      32 09 60      ld (eight_bit_countdown), a
0000:1767      21 88 63      ld hl, unk_0_6388
0000:176A      34      inc (hl)
0000:176B      C9      ret
0000:176C      ; ██████████ SUBROUTINE ██████████
0000:176C      sub_0_176C:                                     ; CODE XREF: 0000:175A|p
0000:176C      11 03 00      ld de, 3
0000:176F      21 2F 69      ld hl, soft_sprite_ram+2Fh
0000:1772      06 0A      ld b, 0Ah
0000:1774      loc_0_1774:                                     ; CODE XREF: sub_0_176C+14|j
0000:1774      A7      and a
0000:1775      7E      ld a, (hl)
0000:1776      ED 52      sbc hl, de
0000:1778      FE 19      cp 19h
0000:177A      D2 7F 17      jp nc, loc_0_177F
0000:177D      36 00      ld (hl), 0
0000:177F      loc_0_177F:                                     ; CODE XREF: sub_0_176C+E|j
0000:177F      2B      dec hl
0000:1780      10 F2      djnz loc_0_1774
0000:1782      C9      ret
0000:1782      ; End of function sub_0_176C
0000:1783      ; ██████████ SUBROUTINE ██████████
0000:1783      sub_0_1783:                                     ; CODE XREF: 0000:175F|p
0000:1783      06 0A      ld b, 0Ah
0000:1785      loc_0_1785:                                     ; CODE XREF: sub_0_1783+8|j
0000:1785      7E      ld a, (hl)
0000:1786      A7      and a
0000:1787      C2 26 00      jp nz, pop_hl_ret
0000:178A      19      add hl, de
0000:178B      10 F8      djnz loc_0_1785
0000:178D      C9      ret
0000:178D      ; End of function sub_0_1783
0000:178E      ;
0000:178E      loc_0_178E:                                     ; DATA XREF: 0000:162D|o
0000:178E      DF      rst 18h                                     ; 0000:163F|o
0000:178E      2A 2A 62      ld hl, (seq_data)
0000:1792      23      inc hl
0000:1793      7E      ld a, (hl)
0000:1794      FE 7F      cp 7Fh ; ' '
0000:1796      C2 9D 17      jp nz, loc_0_179D
0000:1799      21 73 3A      ld hl, level_seq_2
0000:179C      7E      ld a, (hl)
0000:179D      loc_0_179D:                                     ; CODE XREF: 0000:1796|j
0000:179D      22 2A 62      ld (seq_data), hl
0000:17A0      32 27 62      ld (level_type), a
0000:17A3      11 00 05      ld de, 500h
0000:17A6      CD 9F 30      call sub_0_309F
0000:17A9      AF      xor a
0000:17AA      32 88 63      ld (unk_0_6388), a
0000:17AD      21 09 60      ld hl, eight_bit_countdown
0000:17B0      36 30      ld (hl), 30h ; '0'
0000:17B2      23      inc hl
0000:17B3      36 08      ld (hl), 8
0000:17B5      C9      ret
0000:17B5      ;
0000:17B6      00      unk_0_17B6: .db 0 ;
0000:17B7      ;
0000:17B7      CD 1C 01      call stop_sound
0000:17BA      21 8A 60      ld hl, unk_0_608A
0000:17BD      36 0E      ld (hl), 0Eh
0000:17BF      23      inc hl
0000:17C0      36 03      ld (hl), 3
0000:17C2      3E 10      ld a, 10h
0000:17C4      11 20 00      ld de, 20h ; ' '
0000:17C7      21 23 76      ld hl, VRAM_start+223h
0000:17CA      CD 14 05      call display_3_tiles_HL
0000:17CD      21 83 75      ld hl, VRAM_start+183h
0000:17D0      CD 14 05      call display_3_tiles_HL
0000:17D3      21 DA 76      ld hl, VRAM_start+2DAh
0000:17D6      CD 26 18      call clear_14x5_HL
0000:17D9      11 47 3A      ld de, draw_data_rivet_end1
0000:17DC      CD A7 0D      call sub_0_DA7
0000:17DF      21 D5 76      ld hl, VRAM_start+2D5h
0000:17E2      CD 26 18      call clear_14x5_HL
0000:17E5      11 4D 3A      ld de, draw_data_rivet_end2
0000:17E8      CD A7 0D      call sub_0_DA7
0000:17EB      21 D0 76      ld hl, VRAM_start+2D0h
0000:17EE      CD 26 18      call clear_14x5_HL
0000:17F1      11 53 3A      ld de, draw_data_rivet_end3
0000:17F4      CD A7 0D      call sub_0_DA7
0000:17F7      21 CB 76      ld hl, VRAM_start+2CBh
0000:17FA      CD 26 18      call clear_14x5_HL
0000:17FD      11 59 3A      ld de, draw_data_rivet_end4
0000:1800      CD A7 0D      call sub_0_DA7
0000:1803      21 5C 38      ld hl, kong_normal_spr
0000:1806      CD 4E 00      call copy_sprites_2_11_data
0000:1809      21 08 69      ld hl, soft_sprite_ram+8
0000:180C      0E 44      ld c, 68
0000:180E      FF      rst 38h
0000:180F      21 05 69      ld hl, soft_sprite_ram+5
0000:1812      36 13      ld (hl), 13h
0000:1814      3E 20      ld a, 20h ; ' '
0000:1816      32 09 60      ld (eight_bit_countdown), a
0000:1819      3E 80      ld a, 80h ; 'C'

```

```

0000:181B 32 90 63      ld      (kong_thrash_tmr), a
0000:181E 21 88 63      ld      hl, unk_0_6388
0000:1821 34          inc      (hl)
0000:1822 22 C0 63      ld      (unk_0_63C0), hl
0000:1825 C9          ret
0000:1826
0000:1826          ; ██████████ SUBROUTINE ██████████
0000:1826
0000:1826 clear_14x5_HL:      ; CODE XREF: 0000:1322|p
0000:1826 11 DB FF      ; 0000:1373|p ...
0000:1826          ld      de, 0FFDBh
0000:1829 0E 0E      ld      c, 0Eh
0000:182B 3E 10      ld      a, 10h
0000:182D          ; <space>
0000:182D loc_0_182D:      ld      b, 5
0000:182D 06 05      ; CODE XREF: clear_14x5_HL+F|j
0000:182F          loc_0_182F:      ; CODE XREF: clear_14x5_HL+B|j
0000:182F 77          ld      (hl), a
0000:1830 23          inc      hl
0000:1831 10 FC      djnz    loc_0_182F
0000:1833 19          add      hl, de
0000:1834 0D          dec      c
0000:1835 C2 2D 18      jp      nz, loc_0_182D
0000:1838 C9          ret
0000:1838          ; End of function clear_14x5_HL
0000:1838
0000:1839          ;
0000:1839
0000:1839 loc_0_1839:      ; DATA XREF: 0000:164C|o
0000:1839 21 90 63      ld      hl, kong_thrash_tmr
0000:183C 34          inc      (hl)
0000:183D CA 59 18      jp      z, loc_0_1859
0000:1840 7E          ld      a, (hl)
0000:1841 E6 07      and     7
0000:1843 C0          ret      nz
0000:1844 11 CF 39      ld      de, 39CFh
0000:1847 CB 5E      bit     3, (hl)
0000:1849 20 03      jr      nz, loc_0_184E
0000:184B 11 F7 39      ld      de, 39F7h
0000:184E          loc_0_184E:      ; CODE XREF: 0000:1849|j
0000:184E EB          ex      de, hl
0000:184F CD 4E 00      call    copy_sprites_2_11_data
0000:1852 21 08 69      ld      hl, soft_sprite_ram+8
0000:1855 0E 44      ld      c, 68
0000:1857 FF          rst     38h
0000:1858 C9          ; add 68 to y coord for 10 sprites
0000:1859          ;
0000:1859
0000:1859 loc_0_1859:      ; CODE XREF: 0000:183D|j
0000:1859 21 5C 38      ld      hl, kong_normal_spr
0000:185C CD 4E 00      call    copy_sprites_2_11_data
0000:185F 21 08 69      ld      hl, soft_sprite_ram+8
0000:1862 0E 44      ld      c, 68
0000:1864 FF          rst     38h
0000:1865 3E 20      ld      a, 20h ; ' '
0000:1867 32 09 60      ld      (eight_bit_countdown), a
0000:186A 21 88 63      ld      hl, unk_0_6388
0000:186D 34          inc      (hl)
0000:186E C9          ret
0000:186F          ;
0000:186F
0000:186F loc_0_186F:      ; DATA XREF: 0000:164E|o
0000:186F DF          rst     18h
0000:1870 21 1F 3A      ld      hl, fk_falling_spr
0000:1873 CD 4E 00      call    copy_sprites_2_11_data
0000:1876 3E 03      ld      a, 3
0000:1878 32 84 60      ld      (digital_snd_tmrs+4), a
0000:187B 21 88 63      ld      hl, unk_0_6388
0000:187E 34          inc      (hl)
0000:187F C9          ret
0000:1880          ;
0000:1880
0000:1880 loc_0_1880:      ; DATA XREF: 0000:1650|o
0000:1880 21 0B 69      ld      hl, soft_sprite_ram+0Bh
0000:1883 0E 01      ld      c, 1
0000:1885 FF          rst     38h
0000:1886 3A 1B 69      ld      a, (soft_sprite_ram+1Bh)
0000:1889 FE D0      cp      0D0h ; 'ð'
0000:188B C0          ret      nz
0000:188C 3E 20      ld      a, 20h ; ' '
0000:188E 32 19 69      ld      (soft_sprite_ram+19h), a
0000:1891 21 24 6A      ld      hl, soft_sprite_ram+124h
0000:1894 36 7F      ld      (hl), 7Fh ; ' '
0000:1896 2C          inc      l
0000:1897 36 39      ld      (hl), 39h ; '9'
0000:1899 2C          inc      l
0000:189A 36 01      ld      (hl), 1
0000:189C 2C          inc      l
0000:189D 36 D8      ld      (hl), 0D8h ; 'İ'
0000:189F 21 C6 76      ld      hl, VRAM_start+2C6h
0000:18A2 CD 26 18      call    clear_14x5_HL
0000:18A5 11 5F 3A      ld      de, draw_data_rivet_end5
0000:18A8 CD A7 0D      call    sub_0_DA7
0000:18AB 11 04 00      ld      de, 4
0000:18AE 01 28 02      ld      bc, 228h
0000:18B1 21 03 69      ld      hl, soft_sprite_ram+3
0000:18B4 CD 3D 00      call    loc_0_3D
0000:18B7 3E 00      ld      a, 0
0000:18B9 32 AF 62      ld      (unk_0_62AF), a
0000:18BC 3E 03      ld      a, 3
0000:18BE 32 82 60      ld      (digital_snd_tmrs+2), a
0000:18C1 21 88 63      ld      hl, unk_0_6388
0000:18C4 34          inc      (hl)
0000:18C5 C9          ret
0000:18C6          ;
0000:18C6
0000:18C6 loc_0_18C6:      ; DATA XREF: 0000:1652|o
0000:18C6 21 AF 62      ld      hl, unk_0_62AF
0000:18C9 35          dec      (hl)
0000:18CA CA 3D 19      jp      z, loc_0_193D
0000:18CD 7E          ld      a, (hl)
0000:18CE E6 07      and     7
0000:18D0 C0          ret      nz

```

```

0000:18D1 21 25 6A      ld      hl, soft_sprite_ram+125h
0000:18D4 7E              ld      a, (hl)
0000:18D5 EE 80          xor      80h ; 'Ç'
0000:18D7 77              ld      (hl), a
0000:18D8 21 19 69      ld      hl, soft_sprite_ram+19h
0000:18DB 46              ld      b, (hl)
0000:18DC CB A8          res      5, b
0000:18DE AF              xor      a
0000:18DF CD 09 30      call    sub_0_3009
0000:18E2 F6 20          or       20h ; ' '
0000:18E4 77              ld      (hl), a
0000:18E5 21 AF 62      ld      hl, unk_0_62AF
0000:18E8 7E              ld      a, (hl)
0000:18E9 FE E0          cp       0E0h ; 'Ó'
0000:18EB C2 10 19      jp      nz, loc_0_1910
0000:18EE 3E 50          ld      a, 50h ; 'P'
0000:18F0 32 4F 69      ld      (soft_sprite_ram+4Fh), a
0000:18F3 3E 00          ld      a, 0
0000:18F5 32 4D 69      ld      (soft_sprite_ram+4Dh), a
0000:18F8 3E 9F          ld      a, 9Fh ; 'f'
0000:18FA 32 4C 69      ld      (soft_sprite_ram+4Ch), a
0000:18FD 3A 03 62      ld      a, (mario_x)
0000:1900 FE 80          cp       80h ; 'Ç'
0000:1902 D2 0F 19      jp      nc, loc_0_190F
0000:1905 3E 80          ld      a, 80h ; 'Ç'
0000:1907 32 4D 69      ld      (soft_sprite_ram+4Dh), a
0000:190A 3E 5F          ld      a, 5Fh ; '_'
0000:190C 32 4C 69      ld      (soft_sprite_ram+4Ch), a
0000:190F
0000:190F      loc_0_190F:                                ; CODE XREF: 0000:1902↑j
0000:190F 7E              ld      a, (hl)
0000:1910
0000:1910      loc_0_1910:                                ; CODE XREF: 0000:18EB↑j
0000:1910 FE C0          cp       0C0h ; 'L'
0000:1912 C0              ret      nz
0000:1913 21 8A 60      ld      hl, unk_0_608A
0000:1916 36 0C          ld      (hl), 0Ch
0000:1918 3A 29 62      ld      a, (level)
0000:191B 0F          rrca
0000:191C 38 02          jr      c, loc_0_1920
0000:191E 36 05          ld      (hl), 5
0000:1920
0000:1920      loc_0_1920:                                ; CODE XREF: 0000:191C↑j
0000:1920 23              inc      hl
0000:1921 36 03          ld      (hl), 3
0000:1923 21 23 6A      ld      hl, soft_sprite_ram+123h
0000:1926 36 40          ld      (hl), 40h ; '@'
0000:1928 2B          dec      hl
0000:1929 36 09          ld      (hl), 9
0000:192B 2B          dec      hl
0000:192C 36 76          ld      (hl), 76h ; 'v'
0000:192E 2B          dec      hl
0000:192F 36 8F          ld      (hl), 8Fh ; 'À'
0000:1931 3A 03 62      ld      a, (mario_x)
0000:1934 FE 80          cp       80h ; 'Ç'
0000:1936 D0              ret      nc
0000:1937 3E 6F          ld      a, 6Fh ; 'o'
0000:1939 32 20 6A      ld      (soft_sprite_ram+120h), a
0000:193C C9              ret
0000:193D
0000:193D      loc_0_193D:                                ; CODE XREF: 0000:18CA↑j
0000:193D 2A 2A 62      ld      hl, (seq_data)
0000:1940 23              inc      hl
0000:1941 7E              ld      a, (hl)
0000:1942 FE 7F          cp       7Fh ; ' '
0000:1944 C2 4B 19      jp      nz, loc_0_194B
0000:1947 21 73 3A      ld      hl, level_seq_2
0000:194A 7E              ld      a, (hl)
0000:194B
0000:194B      loc_0_194B:                                ; CODE XREF: 0000:1944↑j
0000:194B 22 2A 62      ld      (seq_data), hl
0000:194E 32 27 62      ld      (level_type), a
0000:1951 21 29 62      ld      hl, level
0000:1954 34              inc      (hl)
0000:1955 11 00 05          ld      de, 500h
0000:1958 CD 9F 30      call    sub_0_309F
0000:195B AF              xor      a
0000:195C 32 2E 62      ld      (unk_0_622E), a
0000:195F 32 88 63      ld      (unk_0_6388), a
0000:1962 21 09 60      ld      hl, eight_bit_countdown
0000:1965 36 E0          ld      (hl), 0E0h ; 'Ó'
0000:1967 23              inc      hl
0000:1968 36 08          ld      (hl), 8
0000:196A C9              ret
0000:196B
0000:196B      loc_0_196B:                                ; DATA XREF: 0000:0730↓o
0000:196B CD 52 08          call    clear_tiles_and_sprites
0000:196E 3A 0E 60      ld      a, (unk_0_600E)
0000:1971 C6 12          add      a, 12h
0000:1973 32 0A 60      ld      (main_sequencer), a
0000:1976 C9              ret
0000:1977
0000:1977      attract_mode_gameplay:                    ; DATA XREF: 0000:074E↓o
0000:1977 CD EE 21          call    next_attract_action
0000:197A
0000:197A      gameplay:                                ; DATA XREF: 0000:071A↓o
0000:197A CD BD 1D          call    sub_0_1DBD
0000:197D CD 8C 1E          call    sub_0_1E8C
0000:1980 CD C3 1A          call    sub_0_1AC3
0000:1983 CD 72 1F          call    sub_0_1F72
0000:1986 CD 8F 2C          call    sub_0_2C8F
0000:1989 CD 03 2C          call    sub_0_2C03
0000:198C CD ED 30          call    sub_0_30ED
0000:198F CD 04 2E          call    sub_0_2E04
0000:1992 CD EA 24          call    sub_0_24EA
0000:1995 CD DB 2D          call    sub_0_2DDB
0000:1998 CD D4 2E          call    sub_0_2ED4
0000:199B CD 07 22          call    sub_0_2207
0000:199E CD 33 1A          call    sub_0_1A33
0000:19A1 CD 85 2A          call    sub_0_2A85
0000:19A4 CD 46 1F          call    sub_0_1F46
0000:19A7 CD FA 26          call    sub_0_26FA
0000:19AA CD F2 25          call    sub_0_25F2

```

```

0000:19AD CD DA 19      call    sub_0_19DA
0000:19B0 CD FB 03      call    animate_kong_and_pauline
0000:19B3 CD 08 28      call    sub_0_2808
0000:19B6 CD 1D 28      call    sub_0_281D
0000:19B9 CD 57 1E      call    sub_0_1E57
0000:19BC CD 07 1A      call    sub_0_1A07
0000:19BF CD CB 2F      call    sub_0_2FCB
0000:19C2 00          nop
0000:19C3 00          nop
0000:19C4 00          nop
0000:19C5 3A 00 62      ld      a, (is_mario_alive)
0000:19C8 A7          and     a
0000:19C9 C0          ret     nz
0000:19CA CD 1C 01      call    stop_sound
0000:19CD 21 82 60      ld      hl, digital_snd_tmrs+2
0000:19D0 36 03      ld      (hl), 3
0000:19D2
0000:19D2 21 0A 60      loc_0_19D2: ld      hl, main_sequencer ; CODE XREF: 0000:1A30+j
0000:19D5 34          inc     (hl)
0000:19D6 2B          dec     hl
0000:19D7 36 40      ld      (hl), 40h ; '@'
0000:19D9 C9          ret
0000:19DA
0000:19DA ; ██████████ S U B R O U T I N E ██████████
0000:19DA
0000:19DA sub_0_19DA: ; CODE XREF: 0000:19AD+p
0000:19DA 3A 03 62      ld      a, (mario_x)
0000:19DD 06 03      ld      b, 3
0000:19DF 21 0C 6A      ld      hl, soft_sprite_ram+10Ch
0000:19E2
0000:19E2 loc_0_19E2: ; CODE XREF: sub_0_19DA+10+j
0000:19E2 BE          cp      (hl)
0000:19E3 CA ED 19      jp      z, loc_0_19ED
0000:19E6 2C          inc     l
0000:19E7 2C          inc     l
0000:19E8 2C          inc     l
0000:19E9 2C          inc     l
0000:19EA 10 F6      djnz    loc_0_19E2
0000:19EC C9          ret
0000:19ED
0000:19ED loc_0_19ED: ; CODE XREF: sub_0_19DA+9+j
0000:19ED 3A 05 62      ld      a, (mario_y)
0000:19F0 2C          inc     l
0000:19F1 2C          inc     l
0000:19F2 2C          inc     l
0000:19F3 BE          cp      (hl)
0000:19F4 C0          ret     nz
0000:19F5 2D          dec     l
0000:19F6 2D          dec     l
0000:19F7 CB 5E      bit     3, (hl)
0000:19F9 C0          ret     nz
0000:19FA 2D          dec     l
0000:19FB 22 43 63      ld      (unk_0_6343), hl
0000:19FE AF          xor     a
0000:19FF 32 42 63      ld      (unk_0_6342), a
0000:1A02 3C          inc     a
0000:1A03 32 40 63      ld      (unk_0_6340), a
0000:1A06 C9          ret
0000:1A06 ; End of function sub_0_19DA
0000:1A06
0000:1A07
0000:1A07 ; ██████████ S U B R O U T I N E ██████████
0000:1A07
0000:1A07 sub_0_1A07: ; CODE XREF: 0000:19BC+p
0000:1A07 3A 86 63      ld      a, (unk_0_6386)
0000:1A0A EF          rst     28h ; go!
0000:1A0A
0000:1A0B 1E 1A      .dw locret_0_1A1E ; Jump table
0000:1A0D 15 1A      .dw loc_0_1A15
0000:1A0F 1F 1A      .dw loc_0_1A1F
0000:1A11 2A 1A      .dw loc_0_1A2A
0000:1A13 00 00      .dw 0
0000:1A15
0000:1A15 loc_0_1A15: ; DATA XREF: sub_0_1A07+6+o
0000:1A15 AF          xor     a
0000:1A16 32 87 63      ld      (unk_0_6387), a
0000:1A19 3E 02      ld      a, 2
0000:1A1B 32 86 63      ld      (unk_0_6386), a
0000:1A1E
0000:1A1E locret_0_1A1E: ; DATA XREF: sub_0_1A07+4+o
0000:1A1E C9          ret
0000:1A1E ; End of function sub_0_1A07
0000:1A1E
0000:1A1F
0000:1A1F loc_0_1A1F: ; DATA XREF: sub_0_1A07+8+o
0000:1A1F 21 87 63      ld      hl, 6387h
0000:1A22 35          dec     (hl)
0000:1A23 C0          ret     nz
0000:1A24 3E 03      ld      a, 3
0000:1A26 32 86 63      ld      (unk_0_6386), a
0000:1A29 C9          ret
0000:1A2A
0000:1A2A loc_0_1A2A: ; DATA XREF: sub_0_1A07+A+o
0000:1A2A 3A 16 62      ld      a, (mario_jumping)
0000:1A2D A7          and     a
0000:1A2E C0          ret     nz
0000:1A2F E1          pop     hl
0000:1A30 C3 D2 19      jp      loc_0_19D2
0000:1A33
0000:1A33 ; ██████████ S U B R O U T I N E ██████████
0000:1A33
0000:1A33 sub_0_1A33: ; CODE XREF: 0000:199E+p
0000:1A33 3E 08      ld      a, 8
0000:1A35 F7          rst     30h ; return if level bit not set
0000:1A36 3A 03 62      ld      a, (mario_x)
0000:1A39 FE 4B      cp      4Bh ; 'K'
0000:1A3B CA 4B 1A      jp      z, loc_0_1A4B
0000:1A3E FE B3      cp      0B3h ; '|'

```

```

0000:1A40 CA 4B 1A      jp      z, loc_0_1A4B
0000:1A43 3A 91 62      ld      a, (unk_0_6291)
0000:1A46 3D          dec      a
0000:1A47 CA 51 1A      jp      z, loc_0_1A51
0000:1A4A C9          ret
;
0000:1A4B
0000:1A4B
0000:1A4B      loc_0_1A4B:                                ; CODE XREF: sub_0_1A33+8[j]
0000:1A4B 3E 01          ld      a, 1
0000:1A4B                                ; sub_0_1A33+D[j]
0000:1A4D 32 91 62      ld      (unk_0_6291), a
0000:1A50 C9          ret
;
0000:1A51
0000:1A51      loc_0_1A51:                                ; CODE XREF: sub_0_1A33+14[j]
0000:1A51 32 91 62      ld      (unk_0_6291), a
0000:1A54 47          ld      b, a
0000:1A55 3A 05 62      ld      a, (mario_y)
0000:1A58 3D          dec      a
0000:1A59 FE D0      cp      0D0h ; 'ð'
0000:1A5B D0          ret      nc
0000:1A5C 07          rlca
0000:1A5D D2 62 1A      jp      nc, loc_0_1A62
0000:1A60 CB D0          set      2, b
0000:1A62
0000:1A62      loc_0_1A62:                                ; CODE XREF: sub_0_1A33+2A[j]
0000:1A62 07          rlca
0000:1A63 07          rlca
0000:1A64 D2 69 1A      jp      nc, loc_0_1A69
0000:1A67 CB C8          set      1, b
0000:1A69
0000:1A69      loc_0_1A69:                                ; CODE XREF: sub_0_1A33+31[j]
0000:1A69 E6 07          and      7
0000:1A6B FE 06      cp      6
0000:1A6D C2 72 1A      jp      nz, loc_0_1A72
0000:1A70 CB C8          set      1, b
0000:1A72
0000:1A72      loc_0_1A72:                                ; CODE XREF: sub_0_1A33+3A[j]
0000:1A72 3A 03 62      ld      a, (mario_x)
0000:1A75 07          rlca
0000:1A76 D2 7B 1A      jp      nc, loc_0_1A7B
0000:1A79 CB C0          set      0, b
0000:1A7B
0000:1A7B      loc_0_1A7B:                                ; CODE XREF: sub_0_1A33+43[j]
0000:1A7B 21 92 62      ld      hl, unk_0_6292
0000:1A7E 78          ld      a, b
0000:1A7F 85          add      a, 1
0000:1A80 6F          ld      l, a
0000:1A81 7E          ld      a, (hl)
0000:1A82 A7          and      a
0000:1A83 C8          ret      z
0000:1A84 36 00      ld      (hl), 0
0000:1A86 21 90 62      ld      hl, unk_0_6290
0000:1A89 35          dec      (hl)
0000:1A8A 78          ld      a, b
0000:1A8B 01 05 00      ld      bc, 5
0000:1A8E 1F          rra
0000:1A8F DA BD 1A      jp      c, loc_0_1ABD
0000:1A92 21 CB 02      ld      hl, 2CBh
0000:1A95
0000:1A95      loc_0_1A95:                                ; CODE XREF: sub_0_1A33+8D[j]
0000:1A95 A7          and      a
0000:1A96 CA 9E 1A      jp      z, loc_0_1A9E
0000:1A99
0000:1A99      loc_0_1A99:                                ; CODE XREF: sub_0_1A33+68[j]
0000:1A99 09          add      hl, bc
0000:1A9A 3D          dec      a
0000:1A9B C2 99 1A      jp      nz, loc_0_1A99
0000:1A9E
0000:1A9E      loc_0_1A9E:                                ; CODE XREF: sub_0_1A33+63[j]
0000:1A9E 01 00 74      ld      bc, VRAM_start
0000:1AA1 09          add      hl, bc
0000:1AA2 3E 10      ld      a, 10h
0000:1AA4 77          ld      (hl), a
0000:1AA5 2D          dec      l
0000:1AA6 77          ld      (hl), a
0000:1AA7 2C          inc      l
0000:1AA8 2C          inc      l
0000:1AA9 77          ld      (hl), a
0000:1AAA 3E 01      ld      a, 1
0000:1AAC 32 40 63      ld      (unk_0_6340), a
0000:1AAF 32 42 63      ld      (unk_0_6342), a
0000:1AB2 32 25 62      ld      (unk_0_6225), a
0000:1AB5 3A 16 62      ld      a, (mario_jumping)
0000:1AB8 A7          and      a
0000:1AB9 CC 95 1D      call     z, sub_0_1D95
0000:1ABC C9          ret
;
0000:1ABD
0000:1ABD      loc_0_1ABD:                                ; CODE XREF: sub_0_1A33+5C[j]
0000:1ABD 21 2B 01      ld      hl, 12Bh
0000:1AC0 C3 95 1A      jp      loc_0_1A95
; End of function sub_0_1A33
0000:1AC0
0000:1AC3
0000:1AC3      ; SUBROUTINE
0000:1AC3
0000:1AC3      sub_0_1AC3:                                ; CODE XREF: 0000:1980[p]
0000:1AC3 3A 16 62      ld      a, (mario_jumping)
0000:1AC6 3D          dec      a
0000:1AC7 CA B2 1B      jp      z, loc_0_1BB2
0000:1ACA 3A 1E 62      ld      a, (unk_0_621E)
0000:1ACD A7          and      a
0000:1ACE C2 55 1B      jp      nz, loc_0_1B55
0000:1AD1 3A 17 62      ld      a, (unk_0_6217)
0000:1AD4 3D          dec      a
0000:1AD5 CA E6 1A      jp      z, loc_0_1AE6
0000:1AD8 3A 15 62      ld      a, (mario_climbing)
0000:1ADB 3D          dec      a
0000:1ADC CA 38 1B      jp      z, loc_0_1B38
0000:1ADF 3A 10 60      ld      a, (controller_in)
0000:1AE2 17          rla
0000:1AE3 DA E6 1B      jp      c, loc_0_1B6E
; jump pressed?
; yes, skip
0000:1AE6
0000:1AE6      loc_0_1AE6:                                ; CODE XREF: sub_0_1AC3+12[j]

```



```

0000:1AE6 CD 1F 24      call    sub_0_241F
0000:1AE9 3A 10 60      ld      a, (controller_in)
0000:1AEC 1D              dec      e
0000:1AED CA F5 1A      jp      z, loc_0_1AF5
0000:1AF0 CB 47          bit      0, a
0000:1AF2 C2 8F 1C      jp      nz, loc_0_1C8F
0000:1AF5
0000:1AF5              loc_0_1AF5:
0000:1AF5 15              dec      d
0000:1AF6 CA FE 1A      jp      z, loc_0_1AFE
0000:1AF9 CB 4F          bit      1, a
0000:1AFB C2 AB 1C      jp      nz, loc_0_1CAB
0000:1AFE
0000:1AFE              loc_0_1AFE:
0000:1AFE 3A 17 62      ld      a, (unk_0_6217)
0000:1B01 3D              dec      a
0000:1B02 C8              ret      z
0000:1B03 3A 05 62      ld      a, (mario_y)
0000:1B06 C6 08      add     a, 8
0000:1B08 57              ld      d, a
0000:1B09 3A 03 62      ld      a, (mario_x)
0000:1B0C F6 03          or      3
0000:1B0E CB 97          res     2, a
0000:1B10 01 15 00      ld      bc, 15h
0000:1B13 CD 6E 23      call    sub_0_236E
0000:1B16 F5              push    af
0000:1B17 21 07 62      ld      hl, mario_sprite_tile
0000:1B1A 7E              ld      a, (hl)
0000:1B1B E6 80          and     80h ; 'Ç'
0000:1B1D F6 06          or      6
0000:1B1F 77              ld      (hl), a
0000:1B20 21 1A 62      ld      hl, unk_0_621A
0000:1B23 3E 04          ld      a, 4
0000:1B25 B9              cp      c
0000:1B26 36 01          ld      (hl), 1
0000:1B28 D2 2C 1B      jp      nc, loc_0_1B2C
0000:1B2B 35              dec     (hl)
0000:1B2C
0000:1B2C              loc_0_1B2C:
0000:1B2C F1              pop      af
0000:1B2D A7              and     a
0000:1B2E CA 4E 1B      jp      z, loc_0_1B4E
0000:1B31 7E              ld      a, (hl)
0000:1B32 A7              and     a
0000:1B33 C0              ret      nz
0000:1B34 2C              inc     l
0000:1B35 72              ld      (hl), d
0000:1B36 2C              inc     l
0000:1B37 70              ld      (hl), b
0000:1B38
0000:1B38              loc_0_1B38:
0000:1B38 3A 10 60      ld      a, (controller_in)
0000:1B3B CB 5F          bit      3, a
0000:1B3D C2 F2 1C      jp      nz, loc_0_1CF2
0000:1B40 3A 15 62      ld      a, (mario_climbing)
0000:1B43 A7              and     a
0000:1B44 C8              ret      z
0000:1B45
0000:1B45              loc_0_1B45:
0000:1B45 3A 10 60      ld      a, (controller_in)
0000:1B48 CB 57          bit      2, a
0000:1B4A C2 03 1D      jp      nz, loc_0_1D03
0000:1B4D C9              ret
;
0000:1B4E
0000:1B4E
0000:1B4E              loc_0_1B4E:
0000:1B4E 2C              inc     l
0000:1B4F 70              ld      (hl), b
0000:1B50 2C              inc     l
0000:1B51 72              ld      (hl), d
0000:1B52 C3 45 1B      jp      loc_0_1B45
;
0000:1B55
0000:1B55              loc_0_1B55:
0000:1B55 21 1E 62      ld      hl, unk_0_621E
0000:1B58 35              dec     (hl)
0000:1B59 C0              ret      nz
0000:1B5A 3A 18 62      ld      a, (unk_0_6218)
0000:1B5D 32 17 62      ld      (unk_0_6217), a
0000:1B60 21 07 62      ld      hl, mario_sprite_tile
0000:1B63 7E              ld      a, (hl)
0000:1B64 E6 80          and     80h ; 'Ç'
0000:1B66 77              ld      (hl), a
0000:1B67 AF          xor     a
0000:1B68 32 02 62      ld      (unk_0_6202), a
0000:1B6B C3 A6 1D      jp      loc_0_1DA6
;
0000:1B6E
0000:1B6E              loc_0_1B6E:
0000:1B6E 3E 01          ld      a, 1
0000:1B70 32 16 62      ld      (mario_jumping), a
0000:1B73 21 10 62      ld      hl, unk_0_6210
0000:1B76 3A 10 60      ld      a, (controller_in)
0000:1B79 01 80 00      ld      bc, 80h ; 'Ç'
0000:1B7C 1F          rra
0000:1B7D DA 8A 1B      jp      c, loc_0_1B8A
0000:1B80 01 80 FF      ld      bc, 0FF80h
0000:1B83 1F          rra
0000:1B84 DA 8A 1B      jp      c, loc_0_1B8A
0000:1B87 01 00 00      ld      bc, 0
0000:1B8A
0000:1B8A              loc_0_1B8A:
0000:1B8A AF          xor     a
0000:1B8A              ; CODE XREF: sub_0_1AC3+BA↑j
0000:1B8A              ; sub_0_1AC3+C1↑j
0000:1B8B 70          xor     a
0000:1B8B 70          ld      (hl), b
0000:1B8C 2C          inc     l
0000:1B8D 71          ld      (hl), c
0000:1B8E 2C          inc     l
0000:1B8F 36 01          ld      (hl), 1
0000:1B91 2C          inc     l
0000:1B92 36 48          ld      (hl), 48h ; 'H'
0000:1B94 2C          inc     l
0000:1B95 77          ld      (hl), a
0000:1B96 32 04 62      ld      (unk_0_6204), a
0000:1B99 32 06 62      ld      (unk_0_6206), a
0000:1B9C 3A 07 62      ld      a, (mario_sprite_tile)

```

```

0000:1B9F E6 80      and      80h ; 'Ç'
0000:1BA1 F6 0E      or       0Eh ; mario jumping character
0000:1BA3 32 07 62   ld       (mario_sprite_tile), a
0000:1BA6 3A 05 62   ld       a, (mario_y)
0000:1BA9 32 0E 62   ld       (unk_0_620E), a
0000:1BAC 21 81 60   ld       hl, digital_snd_tmrs+1
0000:1BAF 36 03     ld       (hl), 3
0000:1BB1 C9           ret
;
0000:1BB2
0000:1BB2      loc_0_1BB2: ; CODE XREF: sub_0_1AC3+4↑j
0000:1BB2 DD 21 00 62   ld       ix, is_mario_alive
0000:1BB6 3A 03 62   ld       a, (mario_x)
0000:1BB9 DD 77 0B     ld       (ix+0Bh), a ; store X position before a jump
0000:1BBC 3A 05 62   ld       a, (mario_y)
0000:1BBF DD 77 0C     ld       (ix+0Ch), a ; store Y position before a jump
0000:1BC2 CD 9C 23   call    sub_0_239C
0000:1BC5 CD 1F 24   call    sub_0_241F
0000:1BC8 15       dec     d
0000:1BC9 C2 F2 1B     jp      nz, loc_0_1BF2
0000:1BCC DD 36 10 00   ld       (ix+10h), 0
0000:1BD0 DD 36 11 80   ld       (ix+11h), 80h ; 'Ç'
0000:1BD4 DD CB 07 FE     set     7, (ix+7) ; h-flip sprite
0000:1BD8
0000:1BD8      loc_0_1BD8: ; CODE XREF: sub_0_1AC3+13F↑j
0000:1BD8 3A 20 62   ld       a, (unk_0_6220)
0000:1BDB 3D       dec     a
0000:1BDC CA EC 1B     jp      z, loc_0_1BEC
0000:1BDF CD 07 24   call    sub_0_2407
0000:1BE2 DD 74 12     ld       (ix+12h), h
0000:1BE5 DD 75 13     ld       (ix+13h), l
0000:1BE8 DD 36 14 00   ld       (ix+14h), 0
0000:1BEC
0000:1BEC      loc_0_1BEC: ; CODE XREF: sub_0_1AC3+119↑j
0000:1BEC CD 9C 23     call    sub_0_239C
0000:1BEF C3 05 1C     jp      loc_0_1C05
;
0000:1BF2
0000:1BF2      loc_0_1BF2: ; CODE XREF: sub_0_1AC3+106↑j
0000:1BF2 1D       dec     e
0000:1BF3 C2 05 1C     jp      nz, loc_0_1C05
0000:1BF6 DD 36 10 FF     ld       (ix+10h), 0FFh
0000:1BFA DD 36 11 80     ld       (ix+11h), 80h ; 'Ç'
0000:1BFE DD CB 07 BE     res     7, (ix+7) ; un-hflip sprite
0000:1C02 C3 D8 1B     jp      loc_0_1BD8
;
0000:1C05
0000:1C05      loc_0_1C05: ; CODE XREF: sub_0_1AC3+12C↑j
0000:1C05 CD 1C 2B     ; sub_0_1AC3+130↑j
0000:1C05      call    sub_0_2B1C
0000:1C08 3D       dec     a ; are we jumping?
0000:1C09 CA 3A 1C     jp      z, loc_0_1C3A
0000:1C0C 3A 1F 62   ld       a, (unk_0_621F)
0000:1C0F 3D       dec     a
0000:1C10 CA 76 1C     jp      z, loc_0_1C76
0000:1C13 3A 14 62   ld       a, (unk_0_6214)
0000:1C16 D6 14       sub     14h
0000:1C18 C2 33 1C     jp      nz, loc_0_1C33
0000:1C1B 3E 01     ld       a, 1 ; peak of the jump
0000:1C1D 32 1F 62   ld       (unk_0_621F), a
0000:1C20 CD 53 28   call    sub_0_2853 ; check for bonus points?
0000:1C23 A7       and     a ; any bonus points?
0000:1C24 CA A6 1D     jp      z, loc_0_1DA6 ; no, exit
0000:1C27 32 42 63   ld       (unk_0_6342), a
0000:1C2A 3E 01     ld       a, 1 ; register bonus
0000:1C2C 32 40 63   ld       (unk_0_6340), a
0000:1C2F 32 25 62   ld       (unk_0_6225), a
0000:1C32 00       nop
0000:1C33
0000:1C33      loc_0_1C33: ; CODE XREF: sub_0_1AC3+155↑j
0000:1C33 3C       inc     a
0000:1C34 CC 54 29     call    z, sub_0_2954
0000:1C37 C3 A6 1D     jp      loc_0_1DA6
;
0000:1C3A
0000:1C3A      loc_0_1C3A: ; CODE XREF: sub_0_1AC3+146↑j
0000:1C3A 05       dec     b
0000:1C3B CA 4F 1C     jp      z, loc_0_1C4F
0000:1C3E 3C       inc     a
0000:1C3F 32 1F 62   ld       (unk_0_621F), a
0000:1C42 AF       xor     a
0000:1C43 21 10 62   ld       hl, 6210h
0000:1C46 06 05     ld       b, 5
0000:1C48
0000:1C48      loc_0_1C48: ; CODE XREF: sub_0_1AC3+187↑j
0000:1C48 77       ld       (hl), a
0000:1C49 2C       inc     l
0000:1C4A 10 FC     djnz   loc_0_1C48
0000:1C4C C3 A6 1D     jp      loc_0_1DA6
;
0000:1C4F
0000:1C4F      loc_0_1C4F: ; CODE XREF: sub_0_1AC3+178↑j
0000:1C4F 32 16 62   ld       (mario_jumping), a
0000:1C52 3A 20 62   ld       a, (unk_0_6220)
0000:1C55 EE 01       xor     l
0000:1C57 32 00 62   ld       (is_mario_alive), a ; set whether mario survives a jump
0000:1C5A 21 07 62   ld       hl, mario_sprite_tile
0000:1C5D 7E       ld       a, (hl)
0000:1C5E E6 80      and     80h ; 'Ç'
0000:1C60 F6 0F      or      0Fh ; mario landing character
0000:1C62 77       ld       (hl), a
0000:1C63 3E 04     ld       a, 4
0000:1C65 32 1E 62   ld       (unk_0_621E), a
0000:1C68 AF       xor     a
0000:1C69 32 1F 62   ld       (unk_0_621F), a
0000:1C6C 3A 25 62   ld       a, (unk_0_6225)
0000:1C6F 3D       dec     a
0000:1C70 CC 95 1D     call    z, sub_0_1D95
0000:1C73 C3 A6 1D     jp      loc_0_1DA6
;
0000:1C76
0000:1C76      loc_0_1C76: ; CODE XREF: sub_0_1AC3+14D↑j
0000:1C76 3A 05 62   ld       a, (mario_y)
0000:1C79 21 0E 62   ld       hl, unk_0_620E
0000:1C7C D6 0F      sub     0Fh
0000:1C7E BE       cp      (hl)

```

```

0000:1C7F DA A6 1D      jp      c, loc_0_1DA6
0000:1C82 3E 01      ld      a, 1
0000:1C84 32 20 62      ld      (unk_0_6220), a
0000:1C87 21 84 60      ld      hl, 6084h
0000:1C8A 36 03      ld      (hl), 3
0000:1C8C C3 A6 1D      jp      loc_0_1DA6
0000:1C8F
0000:1C8F      ;
0000:1C8F      loc_0_1C8F:                                ; CODE XREF: sub_0_1AC3+2F1j
0000:1C8F 06 01      ld      b, 1
0000:1C91 3A 0F 62      ld      a, (unk_0_620F)
0000:1C94 A7      and     a
0000:1C95 C2 D2 1C      jp      nz, loc_0_1CD2
0000:1C98 3A 02 62      ld      a, (unk_0_6202)
0000:1C9B 47      ld      b, a
0000:1C9C 3E 05      ld      a, 5
0000:1C9E CD 09 30      call    sub_0_3009
0000:1CA1 32 02 62      ld      (unk_0_6202), a
0000:1CA4 E6 03      and     3
0000:1CA6 F6 80      or      80h ; 'Ç'
0000:1CA8 C3 C2 1C      jp      loc_0_1CC2
0000:1CAB
0000:1CAB      ;
0000:1CAB      loc_0_1CAB:                                ; CODE XREF: sub_0_1AC3+381j
0000:1CAB 06 FF      ld      b, 0FFh
0000:1CAD 3A 0F 62      ld      a, (unk_0_620F)
0000:1CB0 A7      and     a
0000:1CB1 C2 D2 1C      jp      nz, loc_0_1CD2
0000:1CB4 3A 02 62      ld      a, (unk_0_6202)
0000:1CB7 47      ld      b, a
0000:1CB8 3E 01      ld      a, 1
0000:1CBA CD 09 30      call    sub_0_3009
0000:1CBD 32 02 62      ld      (unk_0_6202), a
0000:1CC0 E6 03      and     3
0000:1CC2                                ; animate mario running
0000:1CC2      loc_0_1CC2:                                ; CODE XREF: sub_0_1AC3+1E51j
0000:1CC2 21 07 62      ld      hl, mario_sprite_tile
0000:1CC5 77      ld      (hl), a
0000:1CC6 1F      rra
0000:1CC7 DC 8F 1D      call    c, sub_0_1D8F
0000:1CCA 3E 02      ld      a, 2
0000:1CCC 32 0F 62      ld      (unk_0_620F), a
0000:1CCF C3 A6 1D      jp      loc_0_1DA6
0000:1CD2
0000:1CD2      ;
0000:1CD2      loc_0_1CD2:                                ; CODE XREF: sub_0_1AC3+1D21j
0000:1CD2 21 03 62                                ; sub_0_1AC3+1EE1j
0000:1CD2      ld      hl, mario_x
0000:1CD5 7E      ld      a, (hl)
0000:1CD6 80      add     a, b
0000:1CD7 77      ld      (hl), a
0000:1CD8 3A 27 62      ld      a, (level_type)
0000:1CDB 3D      dec     a
0000:1CDC C2 EB 1C      jp      nz, loc_0_1CEB
0000:1CDF 66      ld      h, (hl)
0000:1CE0 3A 05 62      ld      a, (mario_y)
0000:1CE3 6F      ld      l, a
0000:1CE4 CD 33 23      call    sub_0_2333
0000:1CE7 7D      ld      a, 1
0000:1CE8 32 05 62      ld      (mario_y), a
0000:1CEB
0000:1CEB      loc_0_1CEB:                                ; CODE XREF: sub_0_1AC3+2191j
0000:1CEB 21 0F 62      ld      hl, unk_0_620F
0000:1CEE 35      dec     (hl)
0000:1CEF C3 A6 1D      jp      loc_0_1DA6
0000:1CF2
0000:1CF2      ;
0000:1CF2      loc_0_1CF2:                                ; CODE XREF: sub_0_1AC3+7A1j
0000:1CF2 3A 0F 62                                ; check timer
0000:1CF5 A7      and     a                                ; expired?
0000:1CF6 C2 8A 1D      jp      nz, loc_0_1D8A                                ; no, skip
0000:1CF9 3E 03      ld      a, 3
0000:1CFB 32 0F 62      ld      (unk_0_620F), a                                ; reset timer
0000:1CFE 3E 02      ld      a, 2
0000:1D00 C3 11 1D      jp      loc_0_1D11
0000:1D03
0000:1D03      ;
0000:1D03      loc_0_1D03:                                ; CODE XREF: sub_0_1AC3+871j
0000:1D03 3A 0F 62                                ; check timer
0000:1D06 A7      and     a                                ; expired?
0000:1D07 C2 76 1D      jp      nz, loc_0_1D76                                ; no, skip
0000:1D0A 3E 04      ld      a, 4
0000:1D0C 32 0F 62      ld      (unk_0_620F), a                                ; reset timer
0000:1D0F 3E FE      ld      a, 0FEh ; '■'
0000:1D11
0000:1D11      loc_0_1D11:                                ; CODE XREF: sub_0_1AC3+23D1j
0000:1D11 21 05 62      ld      hl, mario_y
0000:1D14 86      add     a, (hl)
0000:1D15 77      ld      (hl), a
0000:1D16 47      ld      b, a
0000:1D17 3A 22 62      ld      a, (unk_0_6222)
0000:1D1A EE 01      xor     1
0000:1D1C 32 22 62      ld      (unk_0_6222), a
0000:1D1F C2 51 1D      jp      nz, loc_0_1D51
0000:1D22 78      ld      a, b
0000:1D23 C6 08      add     a, 8
0000:1D25 21 1C 62      ld      hl, unk_0_621C
0000:1D28 BE      cp      (hl)
0000:1D29 CA 67 1D      jp      z, loc_0_1D67                                ; bottom y coordinate of ladder
0000:1D2C 2D      dec     1                                ; stop from climbing
0000:1D2D 96      sub     (hl)
0000:1D2E CA 67 1D      jp      z, loc_0_1D67                                ; top y coordinate of ladder
0000:1D31 06 05      ld      b, 5                                ; stop from climbing
0000:1D33 D6 08      sub     8
0000:1D35 CA 3F 1D      jp      z, loc_0_1D3F
0000:1D38 05      dec     b
0000:1D39 D6 04      sub     4
0000:1D3B CA 3F 1D      jp      z, loc_0_1D3F
0000:1D3E 05      dec     b
0000:1D3F
0000:1D3F      loc_0_1D3F:                                ; CODE XREF: sub_0_1AC3+2721j
0000:1D3F 3E 80                                ; sub_0_1AC3+2781j
0000:1D3F      ld      a, 80h ; 'Ç'
0000:1D41 21 07 62      ld      hl, mario_sprite_tile
0000:1D44 A6      and     (hl)
0000:1D45 EE 80      xor     80h ; 'Ç'                                ; hflip mario

```

```

0000:1D47 B0          or      b
0000:1D48 77          ld      (hl), a
0000:1D49
0000:1D49          loc_0_1D49:          ; CODE XREF: sub_0_1AC3+2A1|j
0000:1D49 3E 01          ld      a, 1          ; flag mario climbing a ladder
0000:1D4B 32 15 62        ld      (mario_climbing), a
0000:1D4E C3 A6 1D        jp      loc_0_1DA6
0000:1D51
0000:1D51          loc_0_1D51:          ; CODE XREF: sub_0_1AC3+25C|j
0000:1D51 2D          dec      1
0000:1D52 2D          dec      1
0000:1D53 7E          ld      a, (hl)
0000:1D54 F6 03          or      3
0000:1D56 CB 97          res     2, a
0000:1D58 77          ld      (hl), a
0000:1D59 3A 24 62        ld      a, (unk_0_6224)
0000:1D5C EE 01          xor     1
0000:1D5E 32 24 62        ld      (unk_0_6224), a
0000:1D61 CC 8F 1D        call   z, sub_0_1D8F
0000:1D64 C3 49 1D        jp      loc_0_1D49
0000:1D67
0000:1D67          loc_0_1D67:          ; CODE XREF: sub_0_1AC3+266|j
0000:1D67 3E 06          ld      a, 6          ; sub_0_1AC3+26B|j
0000:1D69          ld      (mario_sprite_tile), a          ; mario climbing character
0000:1D6C AF          xor     a
0000:1D6D 32 19 62        ld      (unk_0_6219), a
0000:1D70 32 15 62        ld      (mario_climbing), a          ; flaf not climbing a ladder
0000:1D73 C3 A6 1D        jp      loc_0_1DA6
0000:1D76
0000:1D76          loc_0_1D76:          ; CODE XREF: sub_0_1AC3+244|j
0000:1D76 3A 1A 62        ld      a, (unk_0_621A)
0000:1D79 A7          and     a
0000:1D7A CA 8A 1D        jp      z, loc_0_1D8A
0000:1D7D 32 19 62        ld      (unk_0_6219), a
0000:1D80 3A 1C 62        ld      a, (unk_0_621C)
0000:1D83 D6 13          sub     13h
0000:1D85 21 05 62        ld      hl, mario_y
0000:1D88 BE          cp      (hl)
0000:1D89 D0          ret     nc
0000:1D8A
0000:1D8A          loc_0_1D8A:          ; CODE XREF: sub_0_1AC3+233|j
0000:1D8A 21 0F 62        ld      hl, unk_0_620F          ; sub_0_1AC3+2B7|j
0000:1D8D 35          dec     (hl)
0000:1D8E C9          ret
0000:1D8E          ; End of function sub_0_1AC3
0000:1D8E
0000:1D8F          ; SUBROUTINE
0000:1D8F
0000:1D8F          sub_0_1D8F:          ; CODE XREF: sub_0_1AC3+204|p
0000:1D8F 3E 03          ld      a, 3          ; sub_0_1AC3+29E|p
0000:1D8F          ld      (digital_snd_tmrs), a
0000:1D91 32 80 60        ret
0000:1D94 C9          ret
0000:1D94          ; End of function sub_0_1D8F
0000:1D95
0000:1D95          ; SUBROUTINE
0000:1D95
0000:1D95          sub_0_1D95:          ; CODE XREF: sub_0_1A33+86|p
0000:1D95          ; sub_0_1AC3+1AD|p
0000:1D95          ld      (unk_0_6225), a
0000:1D98 3A 27 62        ld      a, (level_type)
0000:1D9B 3D          dec     a
0000:1D9C C8          ret     z
0000:1D9D 21 8A 60        ld      hl, unk_0_608A
0000:1DA0 36 0D          ld      (hl), 0Dh
0000:1DA2 2C          inc     1
0000:1DA3 36 03          ld      (hl), 3
0000:1DA5 C9          ret
0000:1DA5          ; End of function sub_0_1D95
0000:1DA6
0000:1DA6          loc_0_1DA6:          ; CODE XREF: sub_0_1AC3+A8|j
0000:1DA6          ; sub_0_1AC3+161|j ...
0000:1DA6          ld      hl, soft_sprite_ram+4Ch
0000:1DA9 3A 03 62        ld      a, (mario_x)
0000:1DAC 77          ld      (hl), a
0000:1DAD 3A 07 62        ld      a, (mario_sprite_tile)
0000:1DB0 2C          inc     1
0000:1DB1 77          ld      (hl), a
0000:1DB2 3A 08 62        ld      a, (mario_hflip_pal)
0000:1DB5 2C          inc     1
0000:1DB6 77          ld      (hl), a
0000:1DB7 3A 05 62        ld      a, (mario_y)
0000:1DBA 2C          inc     1
0000:1DBB 77          ld      (hl), a
0000:1DBC C9          ret
0000:1DBD
0000:1DBD          ; SUBROUTINE
0000:1DBD
0000:1DBD          sub_0_1DBD:          ; CODE XREF: 0000:127C|p
0000:1DBD          ; 0000:1641|p ...
0000:1DBD          ld      a, (unk_0_6340)
0000:1DC0 EF          rst     28h          ; go!
0000:1DC1 49          ld      c, c
0000:1DC2 1E C9        ld      e, 0C9h ; 'P'
0000:1DC4 1D          dec     e
0000:1DC5 4A          ld      c, d
0000:1DC6 1E 00        ld      e, 0
0000:1DC8 00          nop
0000:1DC9 3E 40          ld      a, 40h ; '@'
0000:1DCB 32 41 63        ld      (unk_0_6341), a
0000:1DCE 3E 02          ld      a, 2
0000:1DD0 32 40 63        ld      (unk_0_6340), a
0000:1DD3 3A 42 63        ld      a, (unk_0_6342)
0000:1DD6 1F          rra

```

```

0000:1DD7 DA 70 3E      jp      c, loc_0_3E70
0000:1DDA 1F              rra
0000:1DDB DA 00 1E      jp      c, loc_0_1E00
0000:1DDE 1F              rra
0000:1DDF DA F5 1D      jp      c, loc_0_1DF5
0000:1DE2 21 85 60      ld      hl, digital_snd_tmrs+5
0000:1DE5 36 03          ld      (hl), 3
0000:1DE7 3A 29 62      ld      a, (level)
0000:1DEA 3D            dec      a
0000:1DEB CA 00 1E      jp      z, loc_0_1E00
0000:1DEE 3D            dec      a
0000:1DEF CA 08 1E      jp      z, award_500_pts
0000:1DF2 C3 10 1E      jp      award_800_pts
0000:1DF5              ;
0000:1DF5              loc_0_1DF5:
0000:1DF5 3A 18 60      ld      a, (random_no) ; CODE XREF: sub_0_1DBD+22|j
0000:1DF8 1F              rra ; 50% chance for 500 pts
0000:1DF9 DA 08 1E      jp      c, award_500_pts ; award 500 pts
0000:1DFC 1F              rra ; 25% chance for 800 pts
0000:1DFD DA 10 1E      jp      c, award_800_pts ; award 800 pts
0000:1E00              loc_0_1E00:
0000:1E00 06 7D              ; CODE XREF: sub_0_1DBD+1E|j
0000:1E00              ; sub_0_1DBD+2E|j
0000:1E02 11 03 00      ld      b, 7Dh ; '}'
0000:1E05 C3 15 1E      ld      de, 3 ; '300' sprite tile
0000:1E08              jp      award_points ; award 3 (300) points
0000:1E08              ;
0000:1E08              award_500_pts:
0000:1E08 06 7E              ; CODE XREF: sub_0_1DBD+32|j
0000:1E08              ; sub_0_1DBD+3C|j
0000:1E0A 11 05 00      ld      b, 7Eh ; '~'
0000:1E0D C3 15 1E      ld      de, 5 ; '500' sprite tile
0000:1E10              jp      award_points ; award 5 (500) points
0000:1E10              ;
0000:1E10              award_800_pts:
0000:1E10 06 7F              ; CODE XREF: sub_0_1DBD+35|j
0000:1E10              ; sub_0_1DBD+40|j
0000:1E12 11 08 00      ld      b, 7Fh ; ' '
0000:1E15              ld      de, 8 ; '800' sprite tile
0000:1E15              ; award 8 (800) points
0000:1E15              award_points:
0000:1E15 CD 9F 30              ; CODE XREF: sub_0_1DBD+48|j
0000:1E15              ; sub_0_1DBD+50|j
0000:1E18 2A 43 63      call    sub_0_309F ; schedule award points
0000:1E1B 7E              ld      hl, (unk_0_6343) ; ptr x position
0000:1E1C 36 00          ld      a, (hl) ; prize x position
0000:1E1E 2C            inc      l ; erase prize
0000:1E1F 2C            inc      l ; go to y position
0000:1E20 2C            inc      l
0000:1E21 4E              ld      c, (hl) ; get y position
0000:1E22 C3 36 1E      jp      loc_0_1E36 ; program award sprite
0000:1E25              ;
0000:1E25 11 01 00      ld      de, 1 ; award 1 (100) pts
0000:1E28              loc_0_1E28:
0000:1E28 CD 9F 30              ; CODE XREF: 0000:3E76|j
0000:1E28              ; 0000:3E7E|j ...
0000:1E28              ; schedule award points
0000:1E2B 3A 05 62      call    sub_0_309F
0000:1E2E C6 14          ld      a, (mario_y)
0000:1E30 4F              add      a, 14h
0000:1E31 3A 03 62      ld      c, a
0000:1E34 00              ld      a, (mario_x)
0000:1E35 00              nop
0000:1E36              loc_0_1E36:
0000:1E36 21 30 6A      ld      hl, soft_sprite_ram+130h ; CODE XREF: sub_0_1DBD+65|j
0000:1E39 77              ld      (hl), a ; add bonus points sprite to display
0000:1E3A 2C            inc      l
0000:1E3B 70              ld      (hl), b
0000:1E3C 2C            inc      l
0000:1E3D 36 07          ld      (hl), 7
0000:1E3F 2C            inc      l
0000:1E40 71              ld      (hl), c
0000:1E41 3E 05          ld      a, 5
0000:1E43 F7              rst      30h ; return if level bit not set
0000:1E44 21 85 60      ld      hl, digital_snd_tmrs+5
0000:1E47 36 03          ld      (hl), 3
0000:1E49 C9              ret
0000:1E49              ; End of function sub_0_1DBD
0000:1E49              ;
0000:1E4A              ;
0000:1E4A 21 41 63      ld      hl, unk_0_6341
0000:1E4D 35            dec      (hl)
0000:1E4E C0              ret      nz
0000:1E4F AF              xor      a
0000:1E50 32 30 6A      ld      (soft_sprite_ram+130h), a
0000:1E53 32 40 63      ld      (unk_0_6340), a
0000:1E56 C9              ret
0000:1E57              ;
0000:1E57              ; SUBROUTINE
0000:1E57              ;
0000:1E57              sub_0_1E57:
0000:1E57              ; CODE XREF: 0000:19B9|p
0000:1E57 3A 27 62      ld      a, (level_type)
0000:1E5A CB 57            bit      2, a
0000:1E5C C2 80 1E      jp      nz, loc_0_1E80
0000:1E5F 1F              rra
0000:1E60 3A 05 62      ld      a, (mario_y)
0000:1E63 DA 7A 1E      jp      c, loc_0_1E7A
0000:1E66 FE 51          cp      51h ; 'Q'
0000:1E68 D0              ret      nc
0000:1E69 3A 03 62      ld      a, (mario_x)
0000:1E6C 17              rla
0000:1E6D              loc_0_1E6D:
0000:1E6D 3E 00              ; CODE XREF: sub_0_1E57+26|j
0000:1E6F DA 74 1E      ld      a, 0
0000:1E72 3E 80          jp      c, loc_0_1E74
0000:1E74              ld      a, 80h ; 'C'
0000:1E74              loc_0_1E74:
0000:1E74 32 4D 69      ld      (soft_sprite_ram+4Dh), a ; CODE XREF: sub_0_1E57+18|j
0000:1E77 C3 85 1E      jp      loc_0_1E85
0000:1E7A              ;
0000:1E7A              loc_0_1E7A:
0000:1E7A              ; CODE XREF: sub_0_1E57+C|j

```

```

0000:1E7A FE 31      cp      31h ; '1'
0000:1E7C D0          ret      nc
0000:1E7D C3 6D 1E      ret      loc_0_1E6D
0000:1E80          ;
0000:1E80          loc_0_1E80:
0000:1E80          ld      a, (unk_0_6290) ; CODE XREF: sub_0_1E57+51j
0000:1E83 A7          and      a
0000:1E84 C0          ret      nz
0000:1E85          loc_0_1E85:
0000:1E85          ld      a, 16h ; CODE XREF: sub_0_1E57+201j
0000:1E87 32 0A 60      ld      (main_sequencer), a
0000:1E8A E1          pop      hl
0000:1E8B C9          ret
0000:1E8B          ; End of function sub_0_1E57
0000:1E8B          ;
0000:1E8C          ; SUBROUTINE
0000:1E8C          sub_0_1E8C:
0000:1E8C          ld      a, (unk_0_6350) ; CODE XREF: 0000:197D1p
0000:1E8C 3A 50 63      ld      a, (unk_0_6350)
0000:1E8F A7          and      a
0000:1E90 C8          ret      z
0000:1E91 CD 96 1E      call    sub_0_1E96
0000:1E94 E1          pop      hl
0000:1E95 C9          ret
0000:1E95          ; End of function sub_0_1E8C
0000:1E95          ;
0000:1E96          ; SUBROUTINE
0000:1E96          sub_0_1E96:
0000:1E96          ld      a, (unk_0_6345) ; CODE XREF: sub_0_1E8C+51p
0000:1E96 3A 45 63      ld      a, (unk_0_6345)
0000:1E99 EF          rst      28h ; go!
0000:1E99          ;
0000:1E9A A0 1E          .dw loc_0_1EA0
0000:1E9C 09 1F          .dw loc_0_1F09
0000:1E9E 23 1F          .dw loc_0_1F23 ; Jump table
0000:1EA0          ;
0000:1EA0          loc_0_1EA0:
0000:1EA0          ld      a, (unk_0_6352) ; DATA XREF: sub_0_1E96+41o
0000:1EA0 3A 52 63      ld      a, (unk_0_6352) ; hammer just hit something
0000:1EA3 FE 65      cp      65h ; 'e'
0000:1EA5 21 B8 69      ld      hl, soft_sprite_ram+0B8h ; process hammer hit effect (start)
0000:1EA8 CA B4 1E      jp      z, loc_0_1EB4
0000:1EAB 21 D0 69      ld      hl, soft_sprite_ram+0D0h ; fireball area in sprite ram
0000:1EAE DA B4 1E      jp      c, loc_0_1EB4
0000:1EB1 21 80 69      ld      hl, soft_sprite_ram+80h
0000:1EB4          loc_0_1EB4:
0000:1EB4          ld      ix, (unk_0_6351) ; CODE XREF: sub_0_1E96+121j
0000:1EB4 DD 2A 51 63      ld      ix, (unk_0_6351) ; sub_0_1E96+181j
0000:1EB8 16 00          ld      d, 0
0000:1EBA 3A 53 63      ld      a, (unk_0_6353)
0000:1EBD 5F          ld      e, a
0000:1EBE 01 04 00      ld      bc, 4
0000:1EC1 3A 54 63      ld      a, (unk_0_6354)
0000:1EC4 A7          and      a
0000:1EC5 CA CF 1E      jp      z, loc_0_1ECF
0000:1EC8          loc_0_1EC8:
0000:1EC8          add      hl, bc ; CODE XREF: sub_0_1E96+361j
0000:1EC9 DD 19          add      ix, de
0000:1ECB 3D          dec      a
0000:1ECC C2 C8 1E      jp      nz, loc_0_1EC8
0000:1ECF          loc_0_1ECF:
0000:1ECF          ld      (ix+0), 0 ; CODE XREF: sub_0_1E96+2F1j
0000:1ED3 DD 7E 15      ld      a, (ix+15h)
0000:1ED6 A7          and      a
0000:1ED7 3E 02          ld      a, 2
0000:1ED9 CA DE 1E      jp      z, loc_0_1EDE
0000:1EDC 3E 04          ld      a, 4
0000:1EDE          loc_0_1EDE:
0000:1EDE          ld      (unk_0_6342), a ; CODE XREF: sub_0_1E96+431j
0000:1EE1 01 2C 6A      ld      bc, soft_sprite_ram+12Ch
0000:1EE4 7E          ld      a, (hl)
0000:1EE5 36 00          ld      (hl), 0
0000:1EE7 02          ld      (bc), a ; flash sprite x coord
0000:1EE8 0C          inc      c
0000:1EE9 2C          inc      l
0000:1EEA 3E 60          ld      a, 60h ; ''
0000:1EEC 02          ld      (bc), a ; initial hit sprite character
0000:1EED 0C          inc      c ; flash sprite character
0000:1EEE 2C          inc      l
0000:1EEF 3E 0C          ld      a, 0Ch
0000:1EF1 02          ld      (bc), a
0000:1EF2 0C          inc      c
0000:1EF3 2C          inc      l
0000:1EF4 7E          ld      a, (hl)
0000:1EF5 02          ld      (bc), a ; flash sprite y coord
0000:1EF6 21 45 63      ld      hl, unk_0_6345
0000:1EF9 34          inc      (hl)
0000:1EFA 2C          inc      l
0000:1EFB 36 06          ld      (hl), 6
0000:1EFD 2C          inc      l
0000:1EFE 36 05          ld      (hl), 5
0000:1F00 21 8A 60      ld      hl, unk_0_608A
0000:1F03 36 06          ld      (hl), 6
0000:1F05 2C          inc      l
0000:1F06 36 03          ld      (hl), 3
0000:1F08 C9          ret
0000:1F08          ; End of function sub_0_1E96
0000:1F08          ;
0000:1F09          loc_0_1F09:
0000:1F09          ld      hl, unk_0_6346 ; DATA XREF: sub_0_1E96+61o
0000:1F09 21 46 63      ld      hl, unk_0_6346 ; process hammer hit effect (middle)
0000:1F0C 35          dec      (hl)
0000:1F0D C0          ret      nz
0000:1F0E 36 06          ld      (hl), 6
0000:1F10 2C          inc      l

```

```

0000:1F11 35          dec      (hl)
0000:1F12 CA 1D 1F      jp       z, loc_0_1F1D
0000:1F15 21 2D 6A      ld       hl, 6A2Dh
0000:1F18 7E          ld       a, (hl)
0000:1F19 EE 01          xor      1
0000:1F1B 77          ld       (hl), a
0000:1F1C C9          ret
;
0000:1F1D
0000:1F1D          loc_0_1F1D:
0000:1F1D 36 04          ld       (hl), 4
0000:1F1F 2D          dec      1
0000:1F20 2D          dec      1
0000:1F21 34          inc      (hl)
0000:1F22 C9          ret
;
0000:1F23
0000:1F23          loc_0_1F23:
0000:1F23 21 46 63      ld       hl, unk_0_6346
0000:1F26 35          dec      (hl)
0000:1F27 C0          ret      nz
0000:1F28 36 0C      ld       (hl), 0Ch
0000:1F2A 2C          inc      1
0000:1F2B 35          dec      (hl)
0000:1F2C CA 34 1F      jp       z, loc_0_1F34
0000:1F2F 21 2D 6A      ld       hl, soft_sprite_ram+12Dh
0000:1F32 34          inc      (hl)
0000:1F33 C9          ret
;
0000:1F34
0000:1F34          loc_0_1F34:
0000:1F34 2D          dec      1
0000:1F35 2D          dec      1
0000:1F36 AF          xor      a
0000:1F37 77          ld       (hl), a
0000:1F38 32 50 63      ld       (unk_0_6350), a
0000:1F3B 3C          inc      a
0000:1F3C 32 40 63      ld       (unk_0_6340), a
0000:1F3F 21 2C 6A      ld       hl, soft_sprite_ram+12Ch
0000:1F42 22 43 63      ld       (unk_0_6343), hl
0000:1F45 C9          ret
;
0000:1F46          ; SUBROUTINE
0000:1F46
0000:1F46          sub_0_1F46:
0000:1F46 3A 21 62      ld       a, (unk_0_6221)
0000:1F49 A7          and      a
0000:1F4A C8          ret      z
0000:1F4B AF          xor      a
0000:1F4C 32 04 62      ld       (unk_0_6204), a
0000:1F4F 32 06 62      ld       (unk_0_6206), a
0000:1F52 32 21 62      ld       (unk_0_6221), a
0000:1F55 32 10 62      ld       (unk_0_6210), a
0000:1F58 32 11 62      ld       (unk_0_6211), a
0000:1F5B 32 12 62      ld       (unk_0_6212), a
0000:1F5E 32 13 62      ld       (unk_0_6213), a
0000:1F61 32 14 62      ld       (unk_0_6214), a
0000:1F64 3C          inc      a
0000:1F65 32 16 62      ld       (mario_jumping), a
0000:1F68 32 1F 62      ld       (unk_0_621F), a
0000:1F6B 3A 05 62      ld       a, (mario_y)
0000:1F6E 32 0E 62      ld       (unk_0_620E), a
0000:1F71 C9          ret
; End of function sub_0_1F46
0000:1F71
0000:1F71          ; SUBROUTINE
0000:1F71
0000:1F71          sub_0_1F72:
0000:1F72          ; CODE XREF: 0000:1983|p
0000:1F72 3A 27 62      ld       a, (level_type)
0000:1F75 3D          dec      a
0000:1F76 C0          ret      nz
0000:1F77 DD 21 00 67      ld       ix, unk_0_6700
0000:1F7B 21 80 69      ld       hl, soft_sprite_ram+80h
0000:1F7E 11 20 00      ld       de, 20h
0000:1F81 06 0A          ld       b, 0Ah
0000:1F83
0000:1F83          loc_0_1F83:
0000:1F83 DD 7E 00      ld       a, (ix+0)
0000:1F86 3D          dec      a
0000:1F87 CA 93 1F      jp       z, loc_0_1F93
0000:1F8A 2C          inc      1
0000:1F8B 2C          inc      1
0000:1F8C 2C          inc      1
0000:1F8D
0000:1F8D          loc_0_1F8D:
0000:1F8D 2C          inc      1
0000:1F8E DD 19          add      ix, de
0000:1F90 10 F1      djnz    loc_0_1F83
0000:1F92 C9          ret
;
0000:1F93
0000:1F93          loc_0_1F93:
0000:1F93 DD 7E 01      ld       a, (ix+1)
0000:1F96 3D          dec      a
0000:1F97 CA EC 20      jp       z, loc_0_20EC
0000:1F9A DD 7E 02      ld       a, (ix+2)
0000:1F9D 1F          rra
0000:1F9E DA AC 1F      jp       c, loc_0_1FAC
0000:1FA1 1F          rra
0000:1FA2 DA E5 1F      jp       c, loc_0_1FE5
0000:1FA5 1F          rra
0000:1FA6 DA EF 1F      jp       c, loc_0_1FEF
0000:1FA9 C3 53 20      jp       loc_0_2053
;
0000:1FAC
0000:1FAC          loc_0_1FAC:
0000:1FAC          ; CODE XREF: sub_0_1F72+2C|j
0000:1FAC D9          exx
0000:1FAD DD 34 05      inc      (ix+5)
0000:1FB0 DD 7E 17      ld       a, (ix+17h)
0000:1FB3 DD BE 05      cp       (ix+5)
0000:1FB6 C2 CE 1F      jp       nz, loc_0_1FCE
0000:1FB9 DD 7E 15      ld       a, (ix+15h)
0000:1FBC 07          rlca

```

```

0000:1FBD 07          rlca
0000:1FBE C6 15      add      a, 15h
0000:1FC0 DD 77 07      ld      (ix+7), a
0000:1FC3 DD 7E 02      ld      a, (ix+2)
0000:1FC6 EE 07        xor      7
0000:1FC8 DD 77 02      ld      (ix+2), a
0000:1FCB C3 BA 21      jp      loc_0_21BA
0000:1FCE
0000:1FCE
0000:1FCE DD 7E 0F      loc_0_1FCE:
0000:1FCE          ld      a, (ix+0Fh)
0000:1FD1 3D          dec      a
0000:1FD2 C2 DF 1F      jp      nz, loc_0_1FDF
0000:1FD5 DD 7E 07      ld      a, (ix+7)
0000:1FD8 EE 01        xor      1
0000:1FDA DD 77 07      ld      (ix+7), a
0000:1FDD 3E 04        ld      a, 4
0000:1FDF
0000:1FDF DD 77 0F      loc_0_1FDF:
0000:1FDF          ld      (ix+0Fh), a
0000:1FE2 C3 BA 21      jp      loc_0_21BA
0000:1FE5
0000:1FE5 DD 7E 0F      loc_0_1FE5:
0000:1FE5          exx
0000:1FE5 D9          ld      bc, 100h
0000:1FE6 01 00 01      inc      (ix+3)
0000:1FE9 DD 34 03      inc      (ix+3)
0000:1FEC C3 F6 1F      jp      loc_0_1FF6
0000:1FEF
0000:1FEF DD 7E 0F      loc_0_1FEF:
0000:1FEF          exx
0000:1FEF D9          ld      bc, 0FF04h
0000:1FF0 01 04 FF      dec      (ix+3)
0000:1FF3 DD 35 03      dec      (ix+3)
0000:1FF6
0000:1FF6 DD 66 03      loc_0_1FF6:
0000:1FF6          ld      h, (ix+3)
0000:1FF9 DD 6E 05      ld      l, (ix+5)
0000:1FFC 7C          ld      a, h
0000:1FFD E6 07        and      7
0000:1FFF FE 03        cp      3
0000:2001 CA 5F 21      jp      z, loc_0_215F
0000:2004 2D          dec      l
0000:2005 2D          dec      l
0000:2006 2D          dec      l
0000:2007 CD 33 23      call     sub_0_2333
0000:200A 2C          inc      l
0000:200B 2C          inc      l
0000:200C 2C          inc      l
0000:200D 7D          ld      a, l
0000:200E DD 77 05      ld      (ix+5), a
0000:2011 CD DE 23      call     sub_0_23DE
0000:2014 CD B4 24      call     sub_0_24B4
0000:2017 DD 7E 03      ld      a, (ix+3)
0000:201A FE 1C          cp      1Ch
0000:201C DA 2F 20      jp      c, loc_0_202F
0000:201F FE E4          cp      0E4h ; 'ô'
0000:2021 DA BA 21      jp      c, loc_0_21BA
0000:2024 AF          xor      a
0000:2025 DD 77 10      ld      (ix+10h), a
0000:2028 DD 36 11 60      ld      (ix+11h), 60h ; ``
0000:202C C3 38 20      jp      loc_0_2038
0000:202F
0000:202F DD 7E 0F      loc_0_202F:
0000:202F          xor      a
0000:2030 DD 36 10 FF      ld      (ix+10h), 0FFh
0000:2034 DD 36 11 A0      ld      (ix+11h), 0A0h ; 'á'
0000:2038
0000:2038 DD 36 12 FF      loc_0_2038:
0000:2038          ld      (ix+12h), 0FFh
0000:203C DD 36 13 F0      ld      (ix+13h), 0F0h ; '-'
0000:2040 DD 77 14      ld      (ix+14h), a
0000:2043 DD 77 0E      ld      (ix+0Eh), a
0000:2046 DD 77 04      ld      (ix+4), a
0000:2049 DD 77 06      ld      (ix+6), a
0000:204C DD 36 02 08      ld      (ix+2), 8
0000:2050 C3 BA 21      jp      loc_0_21BA
0000:2053
0000:2053 DD 7E 0F      loc_0_2053:
0000:2053          exx
0000:2053 D9          call     sub_0_239C
0000:2054 CD 9C 23      call     sub_0_2A2F
0000:2057 CD 2F 2A      and      a
0000:205A A7          jp      nz, loc_0_2083
0000:205B C2 83 20      ld      a, (ix+3)
0000:205E DD 7E 03      add      a, 8
0000:2061 C6 08      cp      10h
0000:2063 FE 10      jp      c, loc_0_2079
0000:2065 DA 79 20      call     sub_0_24B4
0000:2068 CD B4 24      ld      a, (ix+10h)
0000:206B DD 7E 10      and      1
0000:206E E6 01      rlca
0000:2070 07          rlca
0000:2071 07          ld      c, a
0000:2072 4F          call     sub_0_23DE
0000:2073 CD DE 23      jp      loc_0_21BA
0000:2076 C3 BA 21
0000:2079
0000:2079 DD 7E 0F      loc_0_2079:
0000:2079          xor      a
0000:207A DD 77 00      ld      (ix+0), a
0000:207D DD 77 03      ld      (ix+3), a
0000:2080 C3 BA 21      jp      loc_0_21BA
0000:2083
0000:2083 DD 34 0E      loc_0_2083:
0000:2083          inc      (ix+0Eh)
0000:2086 DD 7E 0E      ld      a, (ix+0Eh)
0000:2089 3D          dec      a
0000:208A CA A2 20      jp      z, loc_0_20A2
0000:208D 3D          dec      a
0000:208E CA C3 20      jp      z, loc_0_20C3
0000:2091 DD 7E 10      ld      a, (ix+10h)

```



```

0000:2094 3D          dec     a
0000:2095 3E 04        ld      a, 4
0000:2097 C2 9C 20    jp      nz, loc_0_209C
0000:209A 3E 02        ld      a, 2
0000:209C
0000:209C          loc_0_209C:                                ; CODE XREF: sub_0_1F72+125 j
0000:209C DD 77 02      ld      (ix+2), a
0000:209F C3 BA 21      jp      loc_0_21BA
0000:20A2
0000:20A2          loc_0_20A2:                                ; CODE XREF: sub_0_1F72+118 j
0000:20A2 DD 7E 15      ld      a, (ix+15h)
0000:20A5 A7          and     a
0000:20A6 C2 B5 20      jp      nz, loc_0_20B5
0000:20A9 21 05 62      ld      hl, mario_y
0000:20AC DD 7E 05      ld      a, (ix+5)
0000:20AF D6 16      sub     16h                                ; check har far mario has fallen when jumping
0000:20B1 BE          cp      (hl)
0000:20B2 D2 C3 20      jp      nc, loc_0_20C3
0000:20B5
0000:20B5          loc_0_20B5:                                ; CODE XREF: sub_0_1F72+134 j
0000:20B5 DD 7E 10      ld      a, (ix+10h)
0000:20B8 A7          and     a
0000:20B9 C2 E1 20      jp      nz, loc_0_20E1
0000:20BC DD 77 11      ld      (ix+11h), a
0000:20BF DD 36 10 FF      ld      (ix+10h), 0FFh
0000:20C3
0000:20C3          loc_0_20C3:                                ; CODE XREF: sub_0_1F72+11C j
0000:20C3 CD 07 24                                ; sub_0_1F72+140 j ...
0000:20C3          call    sub_0_2407
0000:20C6 CB 3C          srl     h
0000:20C8 CB 1D          rr      l
0000:20CA CB 3C          srl     h
0000:20CC CB 1D          rr      l
0000:20CE DD 74 12      ld      (ix+12h), h
0000:20D1 DD 75 13      ld      (ix+13h), l
0000:20D4 AF          xor     a
0000:20D5 DD 77 14      ld      (ix+14h), a
0000:20D8 DD 77 04      ld      (ix+4), a
0000:20DB DD 77 06      ld      (ix+6), a
0000:20DE C3 BA 21      jp      loc_0_21BA
0000:20E1
0000:20E1          loc_0_20E1:                                ; CODE XREF: sub_0_1F72+147 j
0000:20E1 DD 36 10 01      ld      (ix+10h), 1
0000:20E5 DD 36 11 00      ld      (ix+11h), 0
0000:20E9 C3 C3 20      jp      loc_0_20C3
0000:20EC
0000:20EC          loc_0_20EC:                                ; CODE XREF: sub_0_1F72+25 j
0000:20EC D9          exx
0000:20ED CD 9C 23      call    sub_0_239C
0000:20F0 7C          ld      a, h
0000:20F1 D6 1A          sub     1Ah
0000:20F3 DD 46 19      ld      b, (ix+19h)
0000:20F6 B8          cp      b
0000:20F7 DA 04 21      jp      c, loc_0_2104
0000:20FA CD 2F 2A          call    sub_0_2A2F
0000:20FD A7          and     a
0000:20FE C2 18 21      jp      nz, loc_0_2118
0000:2101 CD B4 24          call    sub_0_24B4
0000:2104
0000:2104          loc_0_2104:                                ; CODE XREF: sub_0_1F72+185 j
0000:2104 DD 7E 03      ld      a, (ix+3)
0000:2107 C6 08          add     a, 8
0000:2109 FE 10          cp      10h
0000:210B D2 CE 1F      jp      nc, loc_0_1FCE
0000:210E AF          xor     a
0000:210F DD 77 00      ld      (ix+0), a
0000:2112 DD 77 03      ld      (ix+3), a
0000:2115 C3 BA 21      jp      loc_0_21BA
0000:2118
0000:2118          loc_0_2118:                                ; CODE XREF: sub_0_1F72+18C j
0000:2118 DD 7E 05      ld      a, (ix+5)
0000:211B FE E0          cp      0E0h ; '6'
0000:211D DA 46 21      jp      c, loc_0_2146
0000:2120 DD 7E 07      ld      a, (ix+7)
0000:2123 E6 FC          and     0FCh ; '3'
0000:2125 F6 01          or      1
0000:2127 DD 77 07      ld      (ix+7), a
0000:212A AF          xor     a
0000:212B DD 77 01      ld      (ix+1), a
0000:212E DD 77 02      ld      (ix+2), a
0000:2131 DD 36 10 FF      ld      (ix+10h), 0FFh
0000:2135 DD 77 11      ld      (ix+11h), a
0000:2138 DD 77 12      ld      (ix+12h), a
0000:213B DD 36 13 B0      ld      (ix+13h), 0B0h ; '0'
0000:213F DD 36 0E 01      ld      (ix+0Eh), 1
0000:2143 C3 53 21      jp      loc_0_2153
0000:2146
0000:2146          loc_0_2146:                                ; CODE XREF: sub_0_1F72+1AB j
0000:2146 CD 07 24          call    sub_0_2407
0000:2149 CD CB 22          call    sub_0_22CB
0000:214C DD 7E 05      ld      a, (ix+5)
0000:214F DD 77 19      ld      (ix+19h), a
0000:2152 AF          xor     a
0000:2153
0000:2153          loc_0_2153:                                ; CODE XREF: sub_0_1F72+1D1 j
0000:2153 DD 77 14      ld      (ix+14h), a
0000:2156 DD 77 04      ld      (ix+4), a
0000:2159 DD 77 06      ld      (ix+6), a
0000:215C C3 BA 21      jp      loc_0_21BA
0000:215F
0000:215F          loc_0_215F:                                ; CODE XREF: sub_0_1F72+8F j
0000:215F 7D          ld      a, 1
0000:2160 C6 05      add     a, 5
0000:2162 57          ld      d, a
0000:2163 7C          ld      a, h
0000:2164 01 15 00      ld      bc, 15h
0000:2167 CD 6D 21      call    sub_0_216D
0000:216A C3 BA 21      jp      loc_0_21BA
0000:216A
0000:216A          ; End of function sub_0_1F72

```

```

0000:216D ; SUBROUTINE
0000:216D
0000:216D
0000:216D
0000:216D sub_0_216D: ; CODE XREF: sub_0_1F72+1F5|p
0000:216D CD 6E 23 call sub_0_236E
0000:2170 3D dec a
0000:2171 C0 ret nz
0000:2172 78 ld a, b
0000:2173 D6 05 sub 5
0000:2175 DD 77 17 ld (ix+17h), a
0000:2178 3A 48 63 ld a, (unk_0_6348)
0000:217B A7 and a
0000:217C CA B2 21 jp z, loc_0_21B2
0000:217F 3A 05 62 ld a, (mario_y)
0000:2182 D6 04 sub 4
0000:2184 BA cp d
0000:2185 D8 ret c
0000:2186 3A 80 63 ld a, (unk_0_6380)
0000:2189 1F rra
0000:218A 3C inc a
0000:218B 47 ld b, a
0000:218C 3A 18 60 ld a, (random_no)
0000:218F 4F ld c, a
0000:2190 E6 03 and 3
0000:2192 B8 cp b
0000:2193 D0 ret nc
0000:2194 21 10 60 ld hl, controller_in
0000:2197 3A 03 62 ld a, (mario_x)
0000:219A BB cp e
0000:219B CA B2 21 jp z, loc_0_21B2
0000:219E D2 A9 21 jp nc, loc_0_21A9
0000:21A1 CB 46 bit 0, (hl) ; right?
0000:21A3 CA AE 21 jp z, loc_0_21AE ; no, skip
0000:21A6 C3 B2 21 jp loc_0_21B2
0000:21A9 ;
0000:21A9
0000:21A9 loc_0_21A9: ; CODE XREF: sub_0_216D+31|j
0000:21A9 CB 4E bit 1, (hl) ; left?
0000:21AB C2 B2 21 jp nz, loc_0_21B2 ; yes, skip
0000:21AE
0000:21AE loc_0_21AE: ; CODE XREF: sub_0_216D+36|j
0000:21AE 79 ld a, c
0000:21AF E6 18 and 18h
0000:21B1 C0 ret nz
0000:21B2
0000:21B2 loc_0_21B2: ; CODE XREF: sub_0_216D+F|j
0000:21B2 DD 34 07 ; sub_0_216D+2E|j ...
0000:21B2 inc (ix+7) ; sprite tile #
0000:21B5 DD CB 02 C6 set 0, (ix+2) ; switch rolling barrel to going-down-ladder barrel
0000:21B9 C9 ret
0000:21B9 ; End of function sub_0_216D
0000:21B9 ;
0000:21BA
0000:21BA loc_0_21BA: ; CODE XREF: sub_0_1F72+59|j
0000:21BA D9 ; sub_0_1F72+70|j ...
0000:21BA
0000:21BB DD 7E 03 exx
0000:21BE 77 ld a, (ix+3) ; set sprite X
0000:21BF 2C ld (hl), a
0000:21C0 DD 7E 07 inc l
0000:21C3 77 ld a, (ix+7) ; set sprite tile #
0000:21C4 2C ld (hl), a
0000:21C5 DD 7E 08 inc l
0000:21C8 77 ld a, (ix+8) ; set sprite vflip & palette
0000:21C9 2C ld (hl), a
0000:21CA DD 7E 05 inc l
0000:21CD 77 ld a, (ix+5) ; set sprite Y
0000:21CE C3 8D 1F ld (hl), a
0000:21CE jp loc_0_1F8D
0000:21D1 80 FE attract_mario_inputs: .dw 0FE80h ; DATA XREF: next_attract_action|o
0000:21D1 ; 1st byte is input, 2nd is timer
0000:21D3 01 C0 .dw 0C001h
0000:21D5 04 50 .dw 5004h
0000:21D7 02 10 .dw 1002h
0000:21D9 82 60 .dw 6082h
0000:21DB 02 10 .dw 1002h
0000:21DD 82 CA .dw 0CA82h
0000:21DF 01 10 .dw 1001h
0000:21E1 81 FF .dw 0FF81h
0000:21E3 02 38 .dw 3802h
0000:21E5 01 80 .dw 8001h
0000:21E7 02 FF .dw 0FF02h
0000:21E9 04 80 .dw 8004h
0000:21EB 04 60 .dw 6004h
0000:21ED 80 .db 80h
0000:21EE ; SUBROUTINE
0000:21EE
0000:21EE
0000:21EE
0000:21EE next_attract_action: ; CODE XREF: 0000:1977|p
0000:21EE 11 D1 21 ld de, attract_mario_inputs
0000:21F1 21 CC 63 ld hl, attract_movement_entry
0000:21F4 7E ld a, (hl) ; get entry
0000:21F5 07 rlca ; convert to word
0000:21F6 83 add a, e ; add to base
0000:21F7 5F ld e, a ; ptr to entry
0000:21F8 1A ld a, (de) ; 1st byte of entry
0000:21F9 32 10 60 ld (controller_in), a ; store simulated inputs
0000:21FC 2C inc l
0000:21FD 7E ld a, (hl) ; get movement timer
0000:21FE 35 dec (hl) ; done?
0000:21FF A7 and a
0000:2200 C0 ret nz ; no, return
0000:2201 1C inc e ; ptr 2nd byte of entry
0000:2202 1A ld a, (de) ; get 2nd byte
0000:2203 77 ld (hl), a ; store as timer
0000:2204 2D dec l ; back to entry
0000:2205 34 inc (hl) ; next entry
0000:2206 C9 ret
0000:2206 ; End of function next_attract_action
0000:2206
0000:2207 ; SUBROUTINE
0000:2207
0000:2207

```

```

0000:2207
0000:2207 sub_0_2207: ; CODE XREF: 0000:199B|p
0000:2207 3E 02 ld a, 2
0000:2209 F7 rst 30h ; return if level bit not set
0000:220A 3A 1A 60 ld a, (gen_purpose_timer)
0000:220D 1F rra
0000:220E 21 80 62 ld hl, unk_0_6280
0000:2211 7E ld a, (hl)
0000:2212 DA 19 22 jp c, loc_0_2219
0000:2215 21 88 62 ld hl, unk_0_6288
0000:2218 7E ld a, (hl)
0000:2219
0000:2219 loc_0_2219: ; CODE XREF: sub_0_2207+B|j
0000:2219 E5 push hl
0000:221A EF rst 28h ; go!
0000:221B 27 daa
0000:221C 22 59 22 ld (loc_0_2259), hl
0000:221F 99 sbc a, c
0000:2220 22 A2 22 ld (loc_0_22A2), hl
0000:2223 00 nop
0000:2224 00 nop
0000:2225 00 nop
0000:2226 00 nop
0000:2227 E1 pop hl
0000:2228 2C inc l
0000:2229 35 dec (hl)
0000:222A C2 3A 22 jp nz, loc_0_223A
0000:222D 2D l
0000:222E 34 inc (hl)
0000:222F 2C inc l
0000:2230 2C inc l
0000:2231 CD 43 22 call sub_0_2243
0000:2234 3E 01 ld a, 1
0000:2236 32 1A 62 ld (unk_0_621A), a
0000:2239 C9 ret
0000:223A
0000:223A
0000:223A loc_0_223A: ; CODE XREF: sub_0_2207+23|j
0000:223A 2C inc l
0000:223B CD 43 22 call sub_0_2243
0000:223E AF xor a
0000:223F 32 1A 62 ld (unk_0_621A), a
0000:2242 C9 ret
0000:2242 ; End of function sub_0_2207
0000:2242
0000:2243 ; SUBROUTINE
0000:2243
0000:2243
0000:2243 sub_0_2243: ; CODE XREF: sub_0_2207+2A|p
0000:2243 3A 05 62 ; sub_0_2207+34|p ...
0000:2243 ld a, (mario_y)
0000:2246 FE 7A cp 7Ah ; 'z'
0000:2248 D2 57 22 jp nc, loc_0_2257
0000:224B 3A 16 62 ld a, (mario_jumping)
0000:224E A7 and a
0000:224F C2 57 22 jp nz, loc_0_2257
0000:2252 3A 03 62 ld a, (mario_x)
0000:2255 BE (hl)
0000:2256 C8 cp
0000:2257 ret z
0000:2257
0000:2257 loc_0_2257: ; CODE XREF: sub_0_2243+5|j
0000:2257 E1 ; sub_0_2243+C|j
0000:2257 pop hl
0000:2258 C9 ret
0000:2258 ; End of function sub_0_2243
0000:2258
0000:2258*
0000:2259*
0000:2259* loc_0_2259: ; DATA XREF: sub_0_2207+15|w
0000:2259* E1 pop hl
0000:225A 2C inc l
0000:225B 2C inc l
0000:225C 2C inc l
0000:225D 2C inc l
0000:225E 35 dec (hl)
0000:225F C0 ret nz
0000:2260 3E 04 ld a, 4
0000:2262 77 ld (hl), a
0000:2263 2D dec l
0000:2264 34 inc (hl)
0000:2265 CD BD 22 call sub_0_22BD
0000:2268 3E 78 ld a, 78h ; 'x'
0000:226A BE (hl)
0000:226B C2 75 22 jp nz, loc_0_2275
0000:226E 2D dec l
0000:226F 2D dec l
0000:2270 2D dec l
0000:2271 34 inc (hl)
0000:2272 2C inc l
0000:2273 2C inc l
0000:2274 2C inc l
0000:2275
0000:2275 loc_0_2275: ; CODE XREF: 0000:226B|j
0000:2275 2D dec l
0000:2276 CD 43 22 call sub_0_2243
0000:2279 3A 05 62 ld a, (mario_y)
0000:227C FE 68 cp 68h ; 'h'
0000:227E D2 8A 22 jp nc, loc_0_228A
0000:2281
0000:2281 loc_0_2281: ; CODE XREF: 0000:228B|j
0000:2281 21 05 62 ld hl, mario_y
0000:2284 34 inc (hl)
0000:2285 CD C0 3F call sub_0_3FC0
0000:2288 34 inc (hl)
0000:2289 C9 ret
0000:228A
0000:228A
0000:228A loc_0_228A: ; CODE XREF: 0000:227E|j
0000:228A 1F rra
0000:228B DA 81 22 jp c, loc_0_2281
0000:228E 1F rra
0000:228F 3E 01 ld a, 1
0000:2291 DA 95 22 jp c, loc_0_2295
0000:2294 AF xor a
0000:2295

```

```

0000:2295      loc_0_2295:                                ; CODE XREF: 0000:2291↑j
0000:2295 32 22 62      ld      (unk_0_6222), a
0000:2298 C9              ret
0000:2299      ;
0000:2299 E1              pop      hl
0000:229A 3A 18 60      ld      a, (random_no)
0000:229D E6 3C          and     3Ch ; '<'
0000:229F C0              ret      nz
0000:22A0 34          inc     (hl)
0000:22A1 C9              ret
0000:22A2*      ;
0000:22A2*      loc_0_22A2:                                ; DATA XREF: sub_0_2207+19↑w
0000:22A2*E1      pop      hl
0000:22A3 2C          inc     l
0000:22A4 2C          inc     l
0000:22A5 2C          inc     l
0000:22A6 2C          inc     l
0000:22A7 35          dec     (hl)
0000:22A8 C0              ret      nz
0000:22A9 36 02      ld      (hl), 2
0000:22AB 2D          dec     l
0000:22AC 35          dec     (hl)
0000:22AD CD BD 22      call    sub_0_22BD
0000:22B0 3E 68      ld      a, 68h ; 'h'
0000:22B2 BE          cp      (hl)
0000:22B3 C0              ret      nz
0000:22B4 AF          xor     a
0000:22B5 06 80      ld      b, 80h ; 'G'
0000:22B7 2D          dec     l
0000:22B8 2D          dec     l
0000:22B9 70      ld      (hl), b
0000:22BA 2D          dec     l
0000:22BB 77      ld      (hl), a
0000:22BC C9              ret
0000:22BD      ; ██████████ SUBROUTINE ██████████
0000:22BD      sub_0_22BD:                                ; CODE XREF: 0000:2265↑p
0000:22BD 7E                                ; 0000:22AD↑p
0000:22BD      ld      a, (hl)
0000:22BE      bit     3, l
0000:22C0 11 4B 69      ld      de, soft_sprite_ram+4Bh
0000:22C3 C2 C9 22      jp      nz, loc_0_22C9
0000:22C6 11 47 69      ld      de, soft_sprite_ram+47h
0000:22C9      loc_0_22C9:                                ; CODE XREF: sub_0_22BD+6↑j
0000:22C9 12      ld      (de), a
0000:22CA C9              ret
0000:22CA      ; End of function sub_0_22BD
0000:22CB      ; ██████████ SUBROUTINE ██████████
0000:22CB      sub_0_22CB:                                ; CODE XREF: sub_0_1F72+1D7↑p
0000:22CB      ld      a, (unk_0_6348)
0000:22CE A7          and     a
0000:22CF CA E1 22      jp      z, loc_0_22E1
0000:22D2 3A 80 63      ld      a, (unk_0_6380)
0000:22D5 3D          dec     a
0000:22D6 EF          rst     28h ; go!
0000:22D6      ;
0000:22D7 F6 22      .dw     loc_0_22F6
0000:22D9 F6 22      .dw     loc_0_22F6
0000:22DB 03 23      .dw     loc_0_2303
0000:22DD 03 23      .dw     loc_0_2303
0000:22DF 1A 23      .dw     loc_0_231A
0000:22E1      ;
0000:22E1      loc_0_22E1:                                ; CODE XREF: sub_0_22CB+4↑j
0000:22E1      ld      a, (level)
0000:22E4 47      ld      b, a
0000:22E5 05          dec     b
0000:22E6 3E 01      ld      a, 1
0000:22E8 CA F9 22      jp      z, loc_0_22F9
0000:22EB 05          dec     b
0000:22EC 3E B1      ld      a, 0B1h ; '1'
0000:22EE CA F9 22      jp      z, loc_0_22F9
0000:22F1 3E E9      ld      a, 0E9h ; 'U'
0000:22F3 C3 F9 22      jp      loc_0_22F9
0000:22F6      ;
0000:22F6      loc_0_22F6:                                ; DATA XREF: sub_0_22CB+C↑o
0000:22F6 3A 18 60      ld      a, (random_no)
0000:22F6      ; sub_0_22CB+E↑o
0000:22F9      loc_0_22F9:                                ; CODE XREF: sub_0_22CB+1D↑j
0000:22F9 DD 77 11      ; sub_0_22CB+23↑j ...
0000:22F9      ld      (ix+11h), a
0000:22FC E6 01      and     1
0000:22FE 3D          dec     a
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      loc_0_2303:                                ; DATA XREF: sub_0_22CB+10↑o
0000:2303 3A 18 60      ; sub_0_22CB+12↑o
0000:2303      ld      a, (random_no)
0000:2306 DD 77 11      ld      (ix+11h), a
0000:2309 3A 03 62      ld      a, (mario_x)
0000:230C DD BE 03      cp      (ix+3)
0000:230F 3E 01      ld      a, 1
0000:2311 D2 16 23      jp      nc, loc_0_2316
0000:2314 3D          dec     a
0000:2315 3D          dec     a
0000:2316      loc_0_2316:                                ; CODE XREF: 0000:2311↑j
0000:2316 DD 77 10      ld      (ix+10h), a
0000:2319 C9              ret
0000:231A      ;
0000:231A      loc_0_231A:                                ; DATA XREF: sub_0_22CB+14↑o

```

```

0000:231A 3A 03 62      ld      a, (mario_x)
0000:231D DD 96 03      sub     (ix+3)
0000:2320 0E FF      ld      c, 0FFh
0000:2322 DA 26 23      jp      c, loc_0_2326
0000:2325 0C      inc     c
0000:2326      loc_0_2326:                                ; CODE XREF: 0000:2322|j
0000:2326 07      rlca
0000:2327 CB 11      rl      c
0000:2329 07      rlca
0000:232A CB 11      rl      c
0000:232C DD 71 10      ld      (ix+10h), c
0000:232F DD 77 11      ld      (ix+11h), a
0000:2332 C9      ret
0000:2333      ; ██████████ SUBROUTINE ██████████
0000:2333      sub_0_2333:                                ; CODE XREF: sub_0_1AC3+221|p
0000:2333      ; sub_0_1F72+95|p ...
0000:2333      ld      a, 0Fh
0000:2335 A4      and     h
0000:2336 05      dec     b
0000:2337 CA 42 23      jp      z, loc_0_2342
0000:233A FE 0F      cp      0Fh
0000:233C D8      ret     c
0000:233D 06 FF      ld      b, 0FFh
0000:233F C3 47 23      jp      loc_0_2347
0000:2342      ;
0000:2342      loc_0_2342:                                ; CODE XREF: sub_0_2333+4|j
0000:2342 FE 01      cp      1
0000:2344 D0      ret     nc
0000:2345 06 01      ld      b, 1
0000:2347      loc_0_2347:                                ; CODE XREF: sub_0_2333+C|j
0000:2347 3E F0      ld      a, 0F0h ; '-'
0000:2349 BD      cp      l
0000:234A CA 60 23      jp      z, loc_0_2360
0000:234D 3E 4C      ld      a, 4Ch ; 'L'
0000:234F BD      cp      l
0000:2350 CA 66 23      jp      z, loc_0_2366
0000:2353 7D      ld      a, 1
0000:2354 CB 6F      bit     5, a
0000:2356 CA 5C 23      jp      z, loc_0_235C
0000:2359      loc_0_2359:                                ; CODE XREF: sub_0_2333+2F|j
0000:2359 90      sub     b
0000:235A      loc_0_235A:                                ; CODE XREF: sub_0_2333+2A|j
0000:235A 6F      ld      l, a
0000:235B C9      ret
0000:235C      ;
0000:235C      loc_0_235C:                                ; CODE XREF: sub_0_2333+23|j
0000:235C 80      add     a, b
0000:235D C3 5A 23      jp      loc_0_235A
0000:2360      ;
0000:2360      loc_0_2360:                                ; CODE XREF: sub_0_2333+17|j
0000:2360 CB 7C      bit     7, h
0000:2362 C2 59 23      jp      nz, loc_0_2359
0000:2365 C9      ret
0000:2366      ;
0000:2366      loc_0_2366:                                ; CODE XREF: sub_0_2333+1D|j
0000:2366 7C      ld      a, h
0000:2367 FE 98      cp      98h ; 'ÿ'
0000:2369 D8      ret     c
0000:236A 7D      ld      a, 1
0000:236B C3 5C 23      jp      loc_0_235C
0000:236B      ; End of function sub_0_2333
0000:236B      ;
0000:236E      ; ██████████ SUBROUTINE ██████████
0000:236E      sub_0_236E:                                ; CODE XREF: sub_0_1AC3+50|p
0000:236E      ; sub_0_216D|p ...
0000:236E 21 00 63      ld      hl, unk_0_6300
0000:2371      loc_0_2371:                                ; CODE XREF: sub_0_236E+1E|j
0000:2371 ED B1      cpir
0000:2373 C2 9A 23      jp      nz, loc_0_239A
0000:2376 E5      push    hl
0000:2377 C5      push    bc
0000:2378 01 14 00      ld      bc, 14h
0000:237B 09      add     hl, bc
0000:237C 0C      inc     c
0000:237D 5F      ld      e, a
0000:237E 7A      ld      a, d
0000:237F BE      cp      (hl)
0000:2380 CA 8F 23      jp      z, loc_0_238F
0000:2383 09      add     hl, bc
0000:2384 BE      cp      (hl)
0000:2385 CA 95 23      jp      z, loc_0_2395
0000:2388 57      ld      d, a
0000:2389 7B      ld      a, e
0000:238A C1      pop     bc
0000:238B E1      pop     hl
0000:238C C3 71 23      jp      loc_0_2371
0000:238F      ;
0000:238F      loc_0_238F:                                ; CODE XREF: sub_0_236E+12|j
0000:238F 09      add     hl, bc
0000:2390 3E 01      ld      a, 1
0000:2392 C3 98 23      jp      loc_0_2398
0000:2395      ;
0000:2395      loc_0_2395:                                ; CODE XREF: sub_0_236E+17|j
0000:2395 AF      xor     a
0000:2396 ED 42      sbc     hl, bc
0000:2398      loc_0_2398:                                ; CODE XREF: sub_0_236E+24|j
0000:2398 C1      pop     bc

```

```

0000:2399 46          ld      b, (hl)
0000:239A          loc_0_239A:                                ; CODE XREF: sub_0_236E+5↑j
0000:239A          pop      hl
0000:239B C9          ret
0000:239B          ; End of function sub_0_236E
0000:239B
0000:239C          ; ██████████ SUBROUTINE ██████████
0000:239C
0000:239C          sub_0_239C:                                ; CODE XREF: sub_0_1AC3+FF↑p
0000:239C          DD 7E 04                                ; sub_0_1AC3+129↑p ...
0000:239C          ld      a, (ix+4)
0000:239F          add     a, (ix+11h)
0000:23A2          DD 77 04          ld      (ix+4), a
0000:23A5          DD 7E 03          ld      a, (ix+3)
0000:23A8          DD 8E 10          adc     a, (ix+10h)
0000:23AB          DD 77 03          ld      (ix+3), a
0000:23AE          DD 7E 06          ld      a, (ix+6)
0000:23B1          DD 96 13          sub     (ix+13h)
0000:23B4          6F          ld      l, a
0000:23B5          DD 7E 05          ld      a, (ix+5)
0000:23B8          DD 9E 12          sbc     a, (ix+12h)
0000:23BB          67          ld      h, a
0000:23BC          DD 7E 14          ld      a, (ix+14h)
0000:23BF          A7          and     a
0000:23C0          17          rla
0000:23C1          3C          inc     a
0000:23C2          06 00          ld      b, 0
0000:23C4          CB 10          rl      b
0000:23C6          CB 27          sla     a
0000:23C8          CB 10          rl      b
0000:23CA          CB 27          sla     a
0000:23CC          CB 10          rl      b
0000:23CE          CB 27          sla     a
0000:23D0          CB 10          rl      b
0000:23D2          4F          ld      c, a
0000:23D3          09          add     hl, bc
0000:23D4          DD 74 05          ld      (ix+5), h
0000:23D7          DD 75 06          ld      (ix+6), l
0000:23DA          DD 34 14          inc     (ix+14h)
0000:23DD          C9          ret
0000:23DD          ; End of function sub_0_239C
0000:23DD
0000:23DE          ; ██████████ SUBROUTINE ██████████
0000:23DE
0000:23DE          sub_0_23DE:                                ; CODE XREF: sub_0_1F72+9F↑p
0000:23DE          DD 7E 0F                                ; sub_0_1F72+101↑p
0000:23DE          ld      a, (ix+0Fh)
0000:23E1          3D          dec     a
0000:23E2          C2 03 24      jp      nz, loc_0_2403
0000:23E5          AF          xor     a
0000:23E6          DD CB 07 26      sla     (ix+7)
0000:23EA          17          rla
0000:23EB          DD CB 08 26      sla     (ix+8)
0000:23EF          17          rla
0000:23F0          47          ld      b, a
0000:23F1          3E 03          ld      a, 3
0000:23F3          B1          or      c
0000:23F4          CD 09 30      call    sub_0_3009
0000:23F7          1F          rra
0000:23F8          DD CB 08 1E      rr      (ix+8)
0000:23FC          1F          rra
0000:23FD          DD CB 07 1E      rr      (ix+7)
0000:2401          3E 04          ld      a, 4
0000:2403          loc_0_2403:                                ; CODE XREF: sub_0_23DE+4↑j
0000:2403          DD 77 0F          ld      (ix+0Fh), a
0000:2406          C9          ret
0000:2406          ; End of function sub_0_23DE
0000:2406
0000:2407          ; ██████████ SUBROUTINE ██████████
0000:2407
0000:2407          sub_0_2407:                                ; CODE XREF: sub_0_1AC3+11C↑p
0000:2407          DD 7E 14                                ; sub_0_1F72+151↑p ...
0000:2407          ld      a, (ix+14h)
0000:240A          07          rlca
0000:240B          07          rlca
0000:240C          07          rlca
0000:240D          07          rlca
0000:240E          4F          ld      c, a
0000:240F          E6 0F          and     0Fh
0000:2411          67          ld      h, a
0000:2412          79          ld      a, c
0000:2413          E6 F0          and     0F0h ; '-'
0000:2415          6F          ld      l, a
0000:2416          DD 4E 13          ld      c, (ix+13h)
0000:2419          DD 46 12          ld      b, (ix+12h)
0000:241C          ED 42          sbc     hl, bc
0000:241E          C9          ret
0000:241E          ; End of function sub_0_2407
0000:241E
0000:241F          ; ██████████ SUBROUTINE ██████████
0000:241F
0000:241F          sub_0_241F:                                ; CODE XREF: sub_0_1AC3+23↑p
0000:241F          11 00 01                                ; sub_0_1AC3+102↑p ...
0000:241F          ld      de, 100h
0000:2422          3A 03 62          ld      a, (mario_x)
0000:2425          FE 16          cp      16h
0000:2427          D8          ret     c
0000:2428          15          dec     d
0000:2429          1C          inc     e
0000:242A          FE EA          cp      0EAh ; 'û'
0000:242C          D0          ret     nc
0000:242D          1D          dec     e
0000:242E          3A 27 62          ld      a, (level_type)
0000:2431          0F          rrca
0000:2432          D0          ret     nc
0000:2433          3A 05 62          ld      a, (mario_y)

```

```

0000:2436 FE 58      cp      58h ; 'X'
0000:2438 D0          ret      nc
0000:2439 3A 03 62      ld      a, (mario_x)
0000:243C FE 6C      cp      6Ch ; 'l'
0000:243E D0          ret      nc
0000:243F 14          inc      d
0000:2440 C9          ret
0000:2440      ; End of function sub_0_241F
0000:2440
0000:2441
0000:2441      ; ██████████ SUBROUTINE ██████████
0000:2441
0000:2441      sub_0_2441:
0000:2441 21 0C 3F      ld      hl, byte_0_3F09+3      ; CODE XREF: 0000:0D62|p
0000:2444 3E 5E      ld      a, 5Eh ; '^'      ; anti-tamper check?
0000:2446 06 06      ld      b, 6
0000:2448
0000:2448      loc_0_2448:
0000:2448      ; CODE XREF: sub_0_2441+9|j
0000:2448 86          add      a, (hl)
0000:2449 23          inc      hl
0000:244A 10 FC      djnz    loc_0_2448
0000:244C FD 21 10 63  ld      iy, unk_0_6310
0000:2450 A7          and      a
0000:2451 CA 56 24      jp      z, loc_0_2456
0000:2454 FD 23          inc      iy
0000:2456
0000:2456      loc_0_2456:
0000:2456      ; CODE XREF: sub_0_2441+10|j
0000:2456 3A 27 62      ld      a, (level_type)
0000:2459 3D          dec      a
0000:245A 21 E4 3A      ld      hl, draw_data_girder
0000:245D CA 71 24      jp      z, loc_0_2471
0000:2460 3D          dec      a
0000:2461 21 5D 3B      ld      hl, draw_data_cement
0000:2464 CA 71 24      jp      z, loc_0_2471
0000:2467 3D          dec      a
0000:2468 21 E5 3B      ld      hl, draw_data_elevator
0000:246B CA 71 24      jp      z, loc_0_2471
0000:246E 21 8B 3C      ld      hl, draw_data_rivets
0000:2471
0000:2471      loc_0_2471:
0000:2471      ; CODE XREF: sub_0_2441+1C|j
0000:2471 DD 21 00 63  ld      ix, unk_0_6300      ; sub_0_2441+23|j ...
0000:2475 11 05 00      ld      de, 5
0000:2478
0000:2478      loc_0_2478:
0000:2478      ; CODE XREF: sub_0_2441+44|j
0000:2478 7E          ; sub_0_2441+5A|j ...
0000:2478      ld      a, (hl)
0000:2479 A7          and      a
0000:247A CA 88 24      jp      z, loc_0_2488
0000:247D 3D          dec      a
0000:247E CA 9E 24      jp      z, loc_0_249E
0000:2481 FE A9      cp      0A9h ; '@'
0000:2483 C8          ret      z
0000:2484 19          add      hl, de
0000:2485 C3 78 24      jp      loc_0_2478
0000:2488
0000:2488      ;
0000:2488
0000:2488      loc_0_2488:
0000:2488      ; CODE XREF: sub_0_2441+39|j
0000:2488 23          inc      hl
0000:2489 7E          ld      a, (hl)
0000:248A DD 77 00      ld      (ix+0), a
0000:248D 23          inc      hl
0000:248E 7E          ld      a, (hl)
0000:248F DD 77 15      ld      (ix+15h), a
0000:2492 23          inc      hl
0000:2493 23          inc      hl
0000:2494 7E          ld      a, (hl)
0000:2495 DD 77 2A      ld      (ix+2Ah), a
0000:2498 DD 23          inc      ix
0000:249A 23          inc      hl
0000:249B C3 78 24      jp      loc_0_2478
0000:249E
0000:249E      ;
0000:249E
0000:249E      loc_0_249E:
0000:249E      ; CODE XREF: sub_0_2441+3D|j
0000:249E 23          inc      hl
0000:249F 7E          ld      a, (hl)
0000:24A0 FD 77 00      ld      (iy+0), a
0000:24A3 23          inc      hl
0000:24A4 7E          ld      a, (hl)
0000:24A5 FD 77 15      ld      (iy+15h), a
0000:24A8 23          inc      hl
0000:24A9 23          inc      hl
0000:24AA 7E          ld      a, (hl)
0000:24AB FD 77 2A      ld      (iy+2Ah), a
0000:24AE FD 23          inc      iy
0000:24B0 23          inc      hl
0000:24B1 C3 78 24      jp      loc_0_2478
0000:24B1      ; End of function sub_0_2441
0000:24B1
0000:24B1      ;
0000:24B1
0000:24B4
0000:24B4      ; ██████████ SUBROUTINE ██████████
0000:24B4
0000:24B4      sub_0_24B4:
0000:24B4      ; CODE XREF: sub_0_1F72+A2|p
0000:24B4 DD 7E 05      ; sub_0_1F72+F6|p ...
0000:24B4      ld      a, (ix+5)
0000:24B7 FE E8      cp      0E8h ; 'b'
0000:24B9 D8          ret      c
0000:24BA DD 7E 03      ld      a, (ix+3)
0000:24BD FE 2A      cp      2Ah ; '*'
0000:24BF D0          ret      nc
0000:24C0 FE 20      cp      20h ; ' '
0000:24C2 D8          ret      c
0000:24C3 DD 7E 15      ld      a, (ix+15h)
0000:24C6 A7          and      a
0000:24C7 CA D0 24      jp      z, loc_0_24D0
0000:24CA 3E 03      ld      a, 3
0000:24CC 32 B9 62      ld      (unk_0_62B9), a
0000:24CF AF          xor      a
0000:24D0
0000:24D0      loc_0_24D0:
0000:24D0      ; CODE XREF: sub_0_24B4+13|j
0000:24D0 DD 77 00      ld      (ix+0), a
0000:24D3 DD 77 03      ld      (ix+3), a
0000:24D6 21 82 60      ld      hl, digital_snd_tmrs+2
0000:24D9 36 03      ld      (hl), 3

```

```

0000:24DB E1          pop     hl
0000:24DC 3A 48 63      ld      a, (unk_0_6348)
0000:24DF A7          and     a
0000:24E0 C2 BA 21      jp      nz, loc_0_21BA
0000:24E3 3C          inc     a
0000:24E4 32 48 63      ld      (unk_0_6348), a
0000:24E7 C3 BA 21      jp      loc_0_21BA
0000:24E7          ; End of function sub_0_24B4
0000:24E7
0000:24EA          ; ██████████ SUBROUTINE ██████████
0000:24EA
0000:24EA          sub_0_24EA:
0000:24EA 3E 02          ld      a, 2
0000:24EC F7          rst     30h
0000:24ED CD 23 25      call    sub_0_2523
0000:24F0 CD 91 25      call    sub_0_2591
0000:24F3 DD 21 A0 65    ld      ix, unk_0_65A0
0000:24F7 06 06          ld      b, 6
0000:24F9 21 B8 69      ld      hl, soft_sprite_ram+0B8h
0000:24FC          ; CODE XREF: sub_0_24EA+2F↑j
0000:24FC          loc_0_24FC:
0000:24FC DD 7E 00          ld      a, (ix+0)
0000:24FF A7          and     a
0000:2500 CA 1C 25      jp      z, loc_0_251C
0000:2503 DD 7E 03          ld      a, (ix+3)
0000:2506 77          ld      (hl), a
0000:2507 2C          inc     l
0000:2508 DD 7E 07          ld      a, (ix+7)
0000:250B 77          ld      (hl), a
0000:250C 2C          inc     l
0000:250D DD 7E 08          ld      a, (ix+8)
0000:2510 77          ld      (hl), a
0000:2511 2C          inc     l
0000:2512 DD 7E 05          ld      a, (ix+5)
0000:2515 77          ld      (hl), a
0000:2516 2C          inc     l
0000:2517          ; CODE XREF: sub_0_24EA+36↑j
0000:2517          loc_0_2517:
0000:2517 DD 19          add     ix, de
0000:2519 10 E1      djnz    loc_0_24FC
0000:251B C9          ret
0000:251C          ;
0000:251C          loc_0_251C:
0000:251C          ; CODE XREF: sub_0_24EA+16↑j
0000:251C 7D          ld      a, 1
0000:251D C6 04          add     a, 4
0000:251F 6F          ld      l, a
0000:2520 C3 17 25      jp      loc_0_2517
0000:2520          ; End of function sub_0_24EA
0000:2520
0000:2523          ; ██████████ SUBROUTINE ██████████
0000:2523
0000:2523          sub_0_2523:
0000:2523          ; CODE XREF: sub_0_24EA+3↑p
0000:2523 21 9B 63      ld      hl, unk_0_639B
0000:2526 7E          ld      a, (hl)
0000:2527 A7          and     a
0000:2528 C2 8F 25      jp      nz, loc_0_258F
0000:252B 3A 9A 63      ld      a, (unk_0_639A)
0000:252E A7          and     a
0000:252F C8          ret     z
0000:2530 06 06          ld      b, 6
0000:2532 11 10 00      ld      de, 10h
0000:2535 DD 21 A0 65      ld      ix, unk_0_65A0
0000:2539          ; CODE XREF: sub_0_2523+1F↑j
0000:2539          loc_0_2539:
0000:2539 DD CB 00 46      bit     0, (ix+0)
0000:253D CA 45 25      jp      z, loc_0_2545
0000:2540 DD 19          add     ix, de
0000:2542 10 F5      djnz    loc_0_2539
0000:2544 C9          ret
0000:2545          ;
0000:2545          loc_0_2545:
0000:2545          ; CODE XREF: sub_0_2523+1A↑j
0000:2545 CD 57 00          call    rand
0000:2548 FE 60          cp      60h ; ``
0000:254A DD 36 05 7C      ld      (ix+5), 7Ch ; '|'
0000:254E DA 58 25      jp      c, loc_0_2558
0000:2551 3A A3 62      ld      a, (unk_0_62A3)
0000:2554 3D          dec     a
0000:2555 C2 6E 25      jp      nz, loc_0_256E
0000:2558          ; CODE XREF: sub_0_2523+2B↑j
0000:2558          loc_0_2558:
0000:2558 DD 36 05 CC      ld      (ix+5), 0CCh ; 'H'
0000:255C 3A A6 62      ld      a, (unk_0_62A6)
0000:255F 07          rlca
0000:2560          ; CODE XREF: sub_0_2523+50↑j
0000:2560          loc_0_2560:
0000:2560 DD 36 03 07      ld      (ix+3), 7
0000:2564 D2 76 25      jp      nc, loc_0_2576
0000:2567 DD 36 03 F8      ld      (ix+3), 0F8h ; 'o'
0000:256B C3 76 25      jp      loc_0_2576
0000:256E          ;
0000:256E          loc_0_256E:
0000:256E          ; CODE XREF: sub_0_2523+32↑j
0000:256E CD 57 00          call    rand
0000:2571 FE 68          cp      68h ; 'h'
0000:2573 C3 60 25      jp      loc_0_2560
0000:2576          ;
0000:2576          loc_0_2576:
0000:2576          ; CODE XREF: sub_0_2523+41↑j
0000:2576          ; sub_0_2523+48↑j
0000:2576 DD 36 00 01      ld      (ix+0), 1
0000:257A DD 36 07 4B      ld      (ix+7), 4Bh ; 'K'
0000:257E DD 36 09 08      ld      (ix+9), 8
0000:2582 DD 36 0A 03      ld      (ix+0Ah), 3
0000:2586 3E 7C          ld      a, 7Ch ; '|'
0000:2588 32 9B 63      ld      (unk_0_639B), a
0000:258B AF          xor     a
0000:258C 32 9A 63      ld      (unk_0_639A), a
0000:258F          ; CODE XREF: sub_0_2523+5↑j
0000:258F          loc_0_258F:
0000:258F 35          dec     (hl)

```



```

0000:2590 C9                ret
0000:2590                ; End of function sub_0_2523
0000:2590
0000:2591                ; ██████████ S U B R O U T I N E ██████████
0000:2591
0000:2591 sub_0_2591:                ; CODE XREF: sub_0_24EA+6|p
0000:2591 DD 21 A0 65            ld     ix, unk_0_65A0
0000:2595 11 10 00                ld     de, 10h
0000:2598 06 06                ld     b, 6
0000:259A
0000:259A loc_0_259A:                ; CODE XREF: sub_0_2591+2C|j
0000:259A DD CB 00 46            bit     0, (ix+0)
0000:259E CA BB 25            jp     z, loc_0_25BB
0000:25A1 DD 7E 03            ld     a, (ix+3)
0000:25A4 67                ld     h, a
0000:25A5 C6 07                add     a, 7
0000:25A7 FE 0E            cp     0Eh
0000:25A9 DA D6 25            jp     c, loc_0_25D6
0000:25AC DD 7E 05            ld     a, (ix+5)
0000:25AF FE 7C            cp     7Ch ; '|'
0000:25B1 CA C0 25            jp     z, loc_0_25C0
0000:25B4 3A A6 63            ld     a, (unk_0_63A6)
0000:25B7 84                add     a, h
0000:25B8 DD 77 03            ld     (ix+3), a
0000:25BB
0000:25BB loc_0_25BB:                ; CODE XREF: sub_0_2591+D|j
0000:25BB DD 19                ; sub_0_2591+42|j ...
0000:25BD 10 DB            add     ix, de
0000:25BF C9                djnz   loc_0_259A
0000:25C0                ret
0000:25C0
0000:25C0 loc_0_25C0:                ; CODE XREF: sub_0_2591+20|j
0000:25C0 7C                ld     a, h
0000:25C1 FE 80            cp     80h ; 'C'
0000:25C3 CA D6 25            jp     z, loc_0_25D6
0000:25C6 3A A5 63            ld     a, (unk_0_63A5)
0000:25C9 D2 CF 25            nc, loc_0_25CF
0000:25CC 3A A4 63            ld     a, (unk_0_63A4)
0000:25CF
0000:25CF loc_0_25CF:                ; CODE XREF: sub_0_2591+38|j
0000:25CF 84                add     a, h
0000:25D0 DD 77 03            ld     (ix+3), a
0000:25D3 C3 BB 25            jp     loc_0_25BB
0000:25D6
0000:25D6 loc_0_25D6:                ; CODE XREF: sub_0_2591+18|j
0000:25D6 21 B8 69            ; sub_0_2591+32|j
0000:25D6                ld     hl, soft_sprite_ram+0B8h
0000:25D9 3E 06            ld     a, 6
0000:25DB 90                sub     b
0000:25DC
0000:25DC loc_0_25DC:                ; CODE XREF: sub_0_2591+53|j
0000:25DC CA E7 25            jp     z, loc_0_25E7
0000:25DF 2C                inc     l
0000:25E0 2C                inc     l
0000:25E1 2C                inc     l
0000:25E2 2C                inc     l
0000:25E3 3D                dec     a
0000:25E4 C3 DC 25            jp     loc_0_25DC
0000:25E7
0000:25E7 loc_0_25E7:                ; CODE XREF: sub_0_2591+4B|j
0000:25E7                xor     a
0000:25E8 DD 77 00            ld     (ix+0), a
0000:25EB DD 77 03            ld     (ix+3), a
0000:25EE 77                ld     (hl), a
0000:25EF C3 BB 25            jp     loc_0_25BB
0000:25EF                ; End of function sub_0_2591
0000:25EF
0000:25F2                ; ██████████ S U B R O U T I N E ██████████
0000:25F2
0000:25F2 sub_0_25F2:                ; CODE XREF: 0000:19AA|p
0000:25F2 3E 02            ld     a, 2
0000:25F4 F7                rst     30h                ; return if level bit not set
0000:25F5 CD 02 26            call    sub_0_2602
0000:25F8 CD 2F 26            call    sub_0_262F
0000:25FB CD 79 26            call    sub_0_2679
0000:25FE CD D3 2A            call    sub_0_2AD3
0000:2601 C9                ret
0000:2601                ; End of function sub_0_25F2
0000:2601
0000:2602                ; ██████████ S U B R O U T I N E ██████████
0000:2602
0000:2602 sub_0_2602:                ; CODE XREF: 0000:16D5|p
0000:2602                ; sub_0_25F2+3|p
0000:2602                ld     a, (gen_purpose_timer)
0000:2605 0F                rrca
0000:2606 DA 16 26            jp     c, loc_0_2616
0000:2609 21 A0 62            ld     hl, unk_0_62A0
0000:260C 35                dec     (hl)
0000:260D C2 16 26            jp     nz, loc_0_2616
0000:2610 36 80            ld     (hl), 80h ; 'C'
0000:2612 2C                inc     l
0000:2613 CD DE 26            call    sub_0_26DE
0000:2616
0000:2616 loc_0_2616:                ; CODE XREF: sub_0_2602+4|j
0000:2616                ; sub_0_2602+B|j
0000:2616                ld     hl, unk_0_62A1
0000:2619 CD E9 26            call    sub_0_26E9
0000:261C 32 A3 63            ld     (unk_0_63A3), a
0000:261F 3A 1A 60            ld     a, (gen_purpose_timer)
0000:2622 E6 1F            and     1Fh
0000:2624 FE 01            cp     1
0000:2626 C0                ret     nz
0000:2627 11 E4 69            ld     de, soft_sprite_ram+0E4h
0000:262A EB                ex     de, hl
0000:262B CD A6 26            call    sub_0_26A6
0000:262E C9                ret
0000:262E                ; End of function sub_0_2602

```

```

0000:262E
0000:262F
0000:262F ; SUBROUTINE
0000:262F
0000:262F sub_0_262F: ; CODE XREF: sub_0_25F2+6↑p
0000:262F 21 A3 62 ld hl, unk_0_62A3
0000:2632 3A 05 62 ld a, (mario_y)
0000:2635 FE C0 cp 0C0h ; 'L'
0000:2637 DA 6F 26 jp c, loc_0_266F
0000:263A 3A 1A 60 ld a, (gen_purpose_timer)
0000:263D 0F rrca
0000:263E DA 4C 26 jp c, loc_0_264C
0000:2641 2D dec l
0000:2642 35 dec (hl)
0000:2643 C2 4C 26 jp nz, loc_0_264C
0000:2646 36 C0 ld (hl), 0C0h ; 'L'
0000:2648 2C inc l
0000:2649 CD DE 26 call sub_0_26DE
0000:264C
0000:264C loc_0_264C: ; CODE XREF: sub_0_262F+F↑j
0000:264C ; sub_0_262F+14↑j ...
0000:264C ld hl, unk_0_62A3
0000:264F call sub_0_26E9
0000:2652 32 A5 63 ld (unk_0_63A5), a
0000:2655 ED 44 neg
0000:2657 32 A4 63 ld (unk_0_63A4), a
0000:265A 3A 1A 60 ld a, (gen_purpose_timer)
0000:265D E6 1F and 1Fh
0000:265F C0 ret nz
0000:2660 2D dec l
0000:2661 11 EC 69 ld de, soft_sprite_ram+0ECh
0000:2664 EB ex de, hl
0000:2665 CD A6 26 call sub_0_26A6
0000:2668 E6 7F and 7Fh ; ' '
0000:266A 21 ED 69 ld hl, soft_sprite_ram+0EDh
0000:266D 77 ld (hl), a
0000:266E C9 ret
0000:266F
0000:266F loc_0_266F: ; CODE XREF: sub_0_262F+8↑j
0000:266F CB 7E bit 7, (hl)
0000:2671 C2 4C 26 jp nz, loc_0_264C
0000:2674 36 FF ld (hl), 0FFh
0000:2676 C3 4C 26 jp loc_0_264C
0000:2676 ; End of function sub_0_262F
0000:2676
0000:2679
0000:2679 ; SUBROUTINE
0000:2679
0000:2679 sub_0_2679: ; CODE XREF: sub_0_25F2+9↑p
0000:2679 3A 1A 60 ld a, (gen_purpose_timer)
0000:267C 0F rrca
0000:267D DA 8D 26 jp c, loc_0_268D
0000:2680 21 A5 62 ld hl, unk_0_62A5
0000:2683 35 dec (hl)
0000:2684 C2 8D 26 jp nz, loc_0_268D
0000:2687 36 FF ld (hl), 0FFh
0000:2689 2C inc l
0000:268A CD DE 26 call sub_0_26DE
0000:268D
0000:268D loc_0_268D: ; CODE XREF: sub_0_2679+4↑j
0000:268D ; sub_0_2679+B↑j
0000:268D ld hl, unk_0_62A6
0000:2690 call sub_0_26E9
0000:2693 32 A6 63 ld (unk_0_63A6), a
0000:2696 3A 1A 60 ld a, (gen_purpose_timer)
0000:2699 E6 1F and 1Fh
0000:269B FE 02 cp 2
0000:269D C0 ret nz
0000:269E 11 F4 69 ld de, soft_sprite_ram+0F4h
0000:26A1 EB ex de, hl
0000:26A2 CD A6 26 call sub_0_26A6
0000:26A5 C9 ret
0000:26A5 ; End of function sub_0_2679
0000:26A5
0000:26A6
0000:26A6 ; SUBROUTINE
0000:26A6
0000:26A6 sub_0_26A6: ; CODE XREF: sub_0_2602+29↑p
0000:26A6 ; sub_0_262F+36↑p ...
0000:26A6 inc l
0000:26A7 1A ld a, (de)
0000:26A8 17 rla
0000:26A9 DA C5 26 jp c, loc_0_26C5
0000:26AC 7E ld a, (hl)
0000:26AD 3C inc a
0000:26AE FE 53 cp 53h ; 'S'
0000:26B0 C2 B5 26 jp nz, loc_0_26B5
0000:26B3 3E 50 ld a, 50h ; 'P'
0000:26B5
0000:26B5 loc_0_26B5: ; CODE XREF: sub_0_26A6+A↑j
0000:26B5 77 ld (hl), a
0000:26B6 7D ld a, 1
0000:26B7 C6 04 add a, 4
0000:26B9 6F ld l, a
0000:26BA 7E ld a, (hl)
0000:26BB 3D dec a
0000:26BC FE CF cp 0CFh ; 'Q'
0000:26BE C2 C3 26 jp nz, loc_0_26C3
0000:26C1 3E D2 ld a, 0D2h ; 'B'
0000:26C3
0000:26C3 loc_0_26C3: ; CODE XREF: sub_0_26A6+18↑j
0000:26C3 77 ld (hl), a
0000:26C4 C9 ret
0000:26C5
0000:26C5
0000:26C5 loc_0_26C5: ; CODE XREF: sub_0_26A6+3↑j
0000:26C5 7E ld a, (hl)
0000:26C6 3D dec a
0000:26C7 FE 4F cp 4Fh ; 'O'
0000:26C9 C2 CE 26 jp nz, loc_0_26CE
0000:26CC 3E 52 ld a, 52h ; 'R'
0000:26CE

```

```

0000:26CE      loc_0_26CE:      ld      (hl), a      ; CODE XREF: sub_0_26A6+23↑j
0000:26CE 77      ld      a, 1
0000:26CF 7D      ld      a, 1
0000:26D0 C6 04      add     a, 4
0000:26D2 6F      ld      l, a
0000:26D3 7E      ld      a, (hl)
0000:26D4 3C      inc     a
0000:26D5 FE D3      cp      0D3h ; 'Ë'
0000:26D7 C2 DC 26      jp      nz, loc_0_26DC
0000:26DA 3E D0      ld      a, 0D0h ; 'ð'
0000:26DC
0000:26DC      loc_0_26DC:      ld      (hl), a      ; CODE XREF: sub_0_26A6+31↑j
0000:26DC 77      ld      (hl), a
0000:26DD C9      ret
0000:26DD      ; End of function sub_0_26A6
0000:26DD
0000:26DE      ; ██████████ S U B R O U T I N E ██████████
0000:26DE
0000:26DE      sub_0_26DE:      ; CODE XREF: sub_0_2602+11↑p
0000:26DE CB 7E      bit      7, (hl)      ; sub_0_262F+1A↑p ...
0000:26DE      jp      z, loc_0_26E6
0000:26E0 CA E6 26      jp      nc, loc_0_26E6
0000:26E3 36 02      ld      (hl), 2
0000:26E5 C9      ret
0000:26E6
0000:26E6      loc_0_26E6:      ld      (hl), 0FEh ; '■'      ; CODE XREF: sub_0_26DE+2↑j
0000:26E6 36 FE      ld      (hl), 0FEh ; '■'
0000:26E8 C9      ret
0000:26E8      ; End of function sub_0_26DE
0000:26E8
0000:26E9      ; ██████████ S U B R O U T I N E ██████████
0000:26E9
0000:26E9      sub_0_26E9:      ; CODE XREF: sub_0_2602+17↑p
0000:26E9 3A 1A 60      ld      a, (gen_purpose_timer)      ; sub_0_262F+20↑p ...
0000:26E9      and     1
0000:26EC E6 01      and     1
0000:26EE C8      ret     z
0000:26EF CB 7E      bit      7, (hl)
0000:26F1 3E FF      ld      a, 0FFh
0000:26F3 C2 F8 26      jp      nz, loc_0_26F8
0000:26F6 3E 01      ld      a, 1
0000:26F8
0000:26F8      loc_0_26F8:      ld      (hl), a      ; CODE XREF: sub_0_26E9+A↑j
0000:26F8 77      ld      (hl), a
0000:26F9 C9      ret
0000:26F9      ; End of function sub_0_26E9
0000:26F9
0000:26FA      ; ██████████ S U B R O U T I N E ██████████
0000:26FA
0000:26FA      sub_0_26FA:      ; CODE XREF: 0000:19A7↑p
0000:26FA 3E 04      ld      a, 4
0000:26FC F7      rst     30h      ; return if level bit not set
0000:26FD 3A 05 62      ld      a, (mario_y)
0000:2700 FE F0      cp      0F0h ; '-'
0000:2702 D2 7F 27      jp      nc, mario_dies_on_elevator      ; make mario die
0000:2705 3A 29 62      ld      a, (level)
0000:2708 3D      dec     a
0000:2709 3A 1A 60      ld      a, (gen_purpose_timer)
0000:270C C2 1A 27      jp      nz, loc_0_271A
0000:270F E6 03      and     3
0000:2711 FE 01      cp      1
0000:2713 CA 1E 27      jp      z, loc_0_271E
0000:2716 DA 22 27      jp      c, loc_0_2722
0000:2719 C9      ret
0000:271A
0000:271A      loc_0_271A:      ; CODE XREF: sub_0_26FA+12↑j
0000:271A 0F      rrca
0000:271B DA 22 27      jp      c, loc_0_2722
0000:271E
0000:271E      loc_0_271E:      ; CODE XREF: sub_0_26FA+19↑j
0000:271E CD 45 27      call    sub_0_2745
0000:2721 C9      ret
0000:2722
0000:2722      loc_0_2722:      ; CODE XREF: sub_0_26FA+1C↑j
0000:2722 CD 97 27      ; sub_0_26FA+21↑j
0000:2722      call    sub_0_2797
0000:2725 CD DA 27      call    sub_0_27DA
0000:2728 06 06      ld      b, 6
0000:272A 11 10 00      ld      de, 10h
0000:272D 21 58 69      ld      hl, soft_sprite_ram+58h
0000:2730 DD 21 00 66      ld      ix, unk_0_6600
0000:2734
0000:2734      loc_0_2734:      ; CODE XREF: sub_0_26FA+48↑j
0000:2734 DD 7E 03      ld      a, (ix+3)      ; store coordinates
0000:2737 77      ld      (hl), a
0000:2738 2C      inc     l
0000:2739 2C      inc     l
0000:273A 2C      inc     l
0000:273B DD 7E 05      ld      a, (ix+5)
0000:273E 77      ld      (hl), a
0000:273F 2C      inc     l
0000:2740 DD 19      add     ix, de
0000:2742 10 F0      djnz    loc_0_2734
0000:2744 C9      ret
0000:2744      ; End of function sub_0_26FA
0000:2744
0000:2745      ; ██████████ S U B R O U T I N E ██████████
0000:2745
0000:2745      sub_0_2745:      ; CODE XREF: sub_0_26FA+24↑p
0000:2745 3A 98 63      ld      a, (mario_on_elevator)
0000:2748 A7      and     a
0000:2749 C8      ret     z
0000:274A 3A 16 62      ld      a, (mario_jumping)
0000:274D A7      and     a
0000:274E C0      ret     nz
0000:274E      ; jumping?
0000:274E      ; yes, return

```

```

0000:274F 3A 03 62      ld      a, (mario_x)
0000:2752 FE 2C      cp      2Ch ; ','
0000:2754 DA 66 27      jp      c, loc_0_2766      ; not not elevator
0000:2757 FE 43      cp      43h ; 'C'
0000:2759 DA 6F 27      jp      c, loc_0_276F      ; on left elevator
0000:275C FE 6C      cp      6Ch ; 'l'
0000:275E DA 66 27      jp      c, loc_0_2766      ; not on elevator
0000:2761 FE 83      cp      83h ; 'a'
0000:2763 DA 87 27      jp      c, loc_0_2787      ; on right elevator
0000:2766
0000:2766      loc_0_2766:      ; CODE XREF: sub_0_2745+F↑j
0000:2766 AF      ; sub_0_2745+19↑j
0000:2766      xor      a      ; mark off elevator
0000:2767 32 98 63      ld      (mario_on_elevator), a
0000:276A 3C      inc      a
0000:276B 32 21 62      ld      (unk_0_6221), a
0000:276E C9      ret
0000:276F
0000:276F      loc_0_276F:      ; CODE XREF: sub_0_2745+14↑j
0000:276F 3A 05 62      ld      a, (mario_y)
0000:2772 FE 71      cp      71h ; 'q'
0000:2774 DA 7F 27      jp      c, mario_dies_on_elevator      ; make mario die
0000:2777 3D      dec      a      ; on upwards moving elevator
0000:2778 32 05 62      ld      (mario_y), a
0000:277B 32 4F 69      ld      (soft_sprite_ram+4Fh), a
0000:277E C9      ret
0000:277F
0000:277F      mario_dies_on_elevator:      ; CODE XREF: sub_0_26FA+8↑j
0000:277F AF      ; sub_0_2745+2F↑j ...
0000:277F      xor      a
0000:2780 32 00 62      ld      (is_mario_alive), a
0000:2783 32 98 63      ld      (mario_on_elevator), a
0000:2786 C9      ret
0000:2787
0000:2787      loc_0_2787:      ; CODE XREF: sub_0_2745+1E↑j
0000:2787 3A 05 62      ld      a, (mario_y)
0000:278A FE E8      cp      0E8h ; 'P'
0000:278C D2 7F 27      jp      nc, mario_dies_on_elevator
0000:278F 3C      inc      a      ; on downwards moving elevator
0000:2790 32 05 62      ld      (mario_y), a
0000:2793 32 4F 69      ld      (soft_sprite_ram+4Fh), a
0000:2796 C9      ret
0000:2796      ; End of function sub_0_2745
0000:2796
0000:2797      ; ██████████ SUBROUTINE ██████████
0000:2797
0000:2797      sub_0_2797:      ; CODE XREF: sub_0_26FA+28↑p
0000:2797 06 06      ld      b, 6      ; move elevators to the right side
0000:2799 11 10 00      ld      de, 10h
0000:279C DD 21 00 66      ld      ix, unk_0_6600
0000:27A0
0000:27A0      loc_0_27A0:      ; CODE XREF: sub_0_2797+2D↑j
0000:27A0 DD CB 00 46      bit      0, (ix+0)
0000:27A4 CA C2 27      jp      z, loc_0_27C2
0000:27A7 DD CB 0D 5E      bit      3, (ix+0Dh)
0000:27AB CA C7 27      jp      z, loc_0_27C7
0000:27AE DD 7E 05      ld      a, (ix+5)
0000:27B1 3D      dec      a
0000:27B2 DD 77 05      ld      (ix+5), a
0000:27B5 FE 60      cp      60h ; '0'
0000:27B7 C2 C2 27      jp      nz, loc_0_27C2
0000:27BA DD 36 03 77      ld      (ix+3), 77h ; 'w'
0000:27BE DD 36 0D 04      ld      (ix+0Dh), 4
0000:27C2
0000:27C2      loc_0_27C2:      ; CODE XREF: sub_0_2797+D↑j
0000:27C2 DD 19      ; sub_0_2797+20↑j ...
0000:27C2      add      ix, de
0000:27C4 10 DA      djnz     loc_0_27A0
0000:27C6 C9      ret
0000:27C7
0000:27C7      loc_0_27C7:      ; CODE XREF: sub_0_2797+14↑j
0000:27C7 DD 7E 05      ld      a, (ix+5)
0000:27CA 3C      inc      a
0000:27CB DD 77 05      ld      (ix+5), a
0000:27CE FE F8      cp      0F8h ; 'o'
0000:27D0 C2 C2 27      jp      nz, loc_0_27C2
0000:27D3 DD 36 00 00      ld      (ix+0), 0
0000:27D7 C3 C2 27      jp      loc_0_27C2
0000:27D7      ; End of function sub_0_2797
0000:27D7
0000:27DA      ; ██████████ SUBROUTINE ██████████
0000:27DA
0000:27DA      sub_0_27DA:      ; CODE XREF: sub_0_26FA+2B↑p
0000:27DA 21 A7 62      ld      hl, unk_0_62A7      ; move elevators to the left side
0000:27DD 7E      ld      a, (hl)
0000:27DE A7      and      a
0000:27DF C2 06 28      jp      nz, loc_0_2806
0000:27E2 06 06      ld      b, 6
0000:27E4 DD 21 00 66      ld      ix, unk_0_6600
0000:27E8
0000:27E8      loc_0_27E8:      ; CODE XREF: sub_0_27DA+17↑j
0000:27E8 DD CB 00 46      bit      0, (ix+0)
0000:27EC CA F4 27      jp      z, loc_0_27F4
0000:27EF DD 19      add      ix, de
0000:27F1 10 F5      djnz     loc_0_27E8
0000:27F3 C9      ret
0000:27F4
0000:27F4      loc_0_27F4:      ; CODE XREF: sub_0_27DA+12↑j
0000:27F4 DD 36 00 01      ld      (ix+0), 1
0000:27F8 DD 36 03 37      ld      (ix+3), 37h ; '7'
0000:27FC DD 36 05 F8      ld      (ix+5), 0F8h ; 'o'
0000:2800 DD 36 0D 08      ld      (ix+0Dh), 8
0000:2804 36 34      ld      (hl), 34h ; '4'
0000:2806
0000:2806      loc_0_2806:      ; CODE XREF: sub_0_27DA+5↑j
0000:2806 35      dec      (hl)
0000:2807 C9      ret

```

```

0000:2807 ; End of function sub_0_27DA
0000:2807
0000:2808
0000:2808 ; SUBROUTINE
0000:2808
0000:2808 sub_0_2808: ; CODE XREF: 0000:19B3|p
0000:2808 FD 21 00 62 ld iy, is_mario_alive
0000:280C 3A 05 62 ld a, (mario_y)
0000:280F 4F ld c, a
0000:2810 21 07 04 ld hl, 407h
0000:2813 CD 6F 28 call sub_0_286F
0000:2816 A7 and a
0000:2817 C8 ret z
0000:2818 3D dec a ; die
0000:2819 32 00 62 ld (is_mario_alive), a
0000:281C C9 ret
0000:281C ; End of function sub_0_2808
0000:281C
0000:281D ; SUBROUTINE
0000:281D
0000:281D sub_0_281D: ; CODE XREF: 0000:19B6|p
0000:281D 06 02 ld b, 2
0000:281F 11 10 00 ld de, 10h
0000:2822 FD 21 80 66 ld iy, unk_0_6680 ; hammer character data
0000:2826
0000:2826 loc_0_2826: ; CODE XREF: sub_0_281D+12|j
0000:2826 FD CB 01 46 bit 0, (iy+1)
0000:282A C2 32 28 jp nz, loc_0_2832
0000:282D FD 19 add iy, de
0000:282F 10 F5 djnz loc_0_2826
0000:2831 C9 ret
0000:2832 ;
0000:2832
0000:2832 loc_0_2832: ; CODE XREF: sub_0_281D+D|j
0000:2832 FD 4E 05 ld c, (iy+5)
0000:2835 FD 66 09 ld h, (iy+9)
0000:2838 FD 6E 0A ld l, (iy+0Ah)
0000:283B CD 6F 28 call sub_0_286F
0000:283E A7 and a
0000:283F C8 ret z
0000:2840 32 50 63 ld (unk_0_6350), a
0000:2843 3A B9 63 ld a, (unk_0_63B9)
0000:2846 90 sub b
0000:2847 32 54 63 ld (unk_0_6354), a
0000:284A 7B ld a, e
0000:284B 32 53 63 ld (unk_0_6353), a
0000:284E DD 22 51 63 ld (unk_0_6351), ix
0000:2852 C9 ret
0000:2852 ; End of function sub_0_281D
0000:2852
0000:2853 ; SUBROUTINE
0000:2853
0000:2853 sub_0_2853: ; CODE XREF: sub_0_1AC3+15D|p
0000:2853 FD 21 00 62 ld iy, is_mario_alive
0000:2857 3A 05 62 ld a, (mario_y)
0000:285A
0000:285A loc_0_285A:
0000:285A C6 0C add a, 0Ch
0000:285C 4F ld c, a
0000:285D 3A 10 60 ld a, (controller_in)
0000:2860 E6 03 and 3 ; left/right only
0000:2862 21 08 05 ld hl, 508h
0000:2865 CA 6B 28 jp z, loc_0_286B ; not left/right
0000:2868 21 08 13 ld hl, 1308h
0000:286B
0000:286B loc_0_286B: ; CODE XREF: sub_0_2853+12|j
0000:286B CD 88 3E call sub_0_3E88
0000:286E C9 ret
0000:286E ; End of function sub_0_2853
0000:286E
0000:286F ; SUBROUTINE
0000:286F
0000:286F sub_0_286F: ; CODE XREF: sub_0_2808+B|p
0000:286F 3A 27 62 ; sub_0_281D+1E|p
0000:286F ld a, (level_type)
0000:2872 E5 push hl
0000:2873 EF rst 28h ; go!
0000:2873 ;
0000:2873 .dw 0 ; Jump table
0000:2874 00 00
0000:2876 80 28
0000:2878 B0 28
0000:287A E0 28
0000:287C 01 29
0000:287E 00 00
0000:2880
0000:2880 ;
0000:2880
0000:2880 11_check_hammer_hit: ; DATA XREF: sub_0_286F+7|o
0000:2880 E1 pop hl
0000:2881 06 0A ld b, 0Ah
0000:2883 78 ld a, b
0000:2884 32 B9 63 ld (unk_0_63B9), a
0000:2887 11 20 00 ld de, 20h ; ' '
0000:288A DD 21 00 67 ld ix, unk_0_6700
0000:288E CD 13 29 call sub_0_2913
0000:2891 06 05 ld b, 5
0000:2893 78 ld a, b
0000:2894 32 B9 63 ld (unk_0_63B9), a
0000:2897 1E 20 ld e, 20h ; ' '
0000:2899 DD 21 00 64 ld ix, unk_0_6400 ; fireball character data
0000:289D CD 13 29 call sub_0_2913
0000:28A0 06 01 ld b, 1
0000:28A2 78 ld a, b
0000:28A3 32 B9 63 ld (unk_0_63B9), a
0000:28A6 1E 00 ld e, 0
0000:28A8 DD 21 A0 66 ld ix, unk_0_66A0
0000:28AC CD 13 29 call sub_0_2913
0000:28AF C9 ret
0000:28AF ; End of function sub_0_286F
0000:28AF

```

```

0000:28B0      ; -----
0000:28B0
0000:28B0      12_check_hammer_hit:                                ; DATA XREF: sub_0_286F+9|o
0000:28B0 E1                                           ; sub_0_3E88+9|o
0000:28B0      pop      hl
0000:28B1 06 05      ld      b, 5
0000:28B3 78      ld      a, b
0000:28B4 32 B9 63      ld      (unk_0_63B9), a
0000:28B7 11 20 00      ld      de, 20h ; ' '
0000:28BA DD 21 00 64      ld      ix, unk_0_6400                ; fireball character data
0000:28BE CD 13 29      call    sub_0_2913
0000:28C1 06 06      ld      b, 6
0000:28C3 78      ld      a, b
0000:28C4 32 B9 63      ld      (unk_0_63B9), a
0000:28C7 1E 10      ld      e, 10h
0000:28C9 DD 21 A0 65      ld      ix, unk_0_65A0
0000:28CD CD 13 29      call    sub_0_2913
0000:28D0 06 01      ld      b, 1
0000:28D2 78      ld      a, b
0000:28D3 32 B9 63      ld      (unk_0_63B9), a
0000:28D6 1E 00      ld      e, 0
0000:28D8 DD 21 A0 66      ld      ix, unk_0_66A0
0000:28DC CD 13 29      call    sub_0_2913
0000:28DF C9      ret
0000:28E0      ; -----
0000:28E0
0000:28E0      13_check_hammer_hit:                                ; DATA XREF: sub_0_286F+B|o
0000:28E0 E1                                           ; sub_0_3E88+B|o
0000:28E0      pop      hl
0000:28E1 06 05      ld      b, 5
0000:28E3 78      ld      a, b
0000:28E4 32 B9 63      ld      (unk_0_63B9), a
0000:28E7 11 20 00      ld      de, 20h ; ' '
0000:28EA DD 21 00 64      ld      ix, unk_0_6400                ; fireball character data
0000:28EE CD 13 29      call    sub_0_2913
0000:28F1 06 0A      ld      b, 0Ah
0000:28F3 78      ld      a, b
0000:28F4 32 B9 63      ld      (unk_0_63B9), a
0000:28F7 1E 10      ld      e, 10h
0000:28F9 DD 21 00 65      ld      ix, unk_0_6500                ; check if hammer hits a spring
0000:28FD CD 13 29      call    sub_0_2913
0000:2900 C9      ret
0000:2901      ; -----
0000:2901
0000:2901      14_check_hammer_hit:                                ; DATA XREF: sub_0_286F+D|o
0000:2901 E1                                           ; sub_0_3E88+D|o
0000:2901      pop      hl
0000:2902 06 07      ld      b, 7
0000:2904 78      ld      a, b
0000:2905 32 B9 63      ld      (unk_0_63B9), a
0000:2908 11 20 00      ld      de, 20h ; ' '
0000:290B DD 21 00 64      ld      ix, unk_0_6400                ; fireball character data
0000:290F CD 13 29      call    sub_0_2913
0000:2912 C9      ret
0000:2913      ; [REDACTED] S U B R O U T I N E [REDACTED]
0000:2913
0000:2913
0000:2913      sub_0_2913:                                ; CODE XREF: sub_0_286F+1F|p
0000:2913 DD E5                                           ; sub_0_286F+2E|p ...
0000:2913      push     ix
0000:2915      loc_0_2915:                                ; CODE XREF: sub_0_2913+3B|j
0000:2915 DD CB 00 46      bit      0, (ix+0)                    ; check if hammer hits something else
0000:2919 CA 4C 29      jp      z, loc_0_294C
0000:291C 79      ld      a, c
0000:291D DD 96 05      sub      (ix+5)
0000:2920 D2 25 29      jp      nc, loc_0_2925
0000:2923 ED 44      neg
0000:2925      loc_0_2925:                                ; CODE XREF: sub_0_2913+D|j
0000:2925 3C      inc      a
0000:2926 95      sub      l
0000:2927 DA 30 29      jp      c, loc_0_2930
0000:292A DD 96 0A      sub      (ix+0Ah)
0000:292D D2 4C 29      jp      nc, loc_0_294C
0000:2930      loc_0_2930:                                ; CODE XREF: sub_0_2913+14|j
0000:2930 FD 7E 03      ld      a, (iy+3)
0000:2933 DD 96 03      sub      (ix+3)
0000:2936 D2 3B 29      jp      nc, loc_0_293B
0000:2939 ED 44      neg
0000:293B      loc_0_293B:                                ; CODE XREF: sub_0_2913+23|j
0000:293B 94      sub      h
0000:293C DA 45 29      jp      c, loc_0_2945
0000:293F DD 96 09      sub      (ix+9)
0000:2942 D2 4C 29      jp      nc, loc_0_294C
0000:2945      loc_0_2945:                                ; CODE XREF: sub_0_2913+29|j
0000:2945 3E 01      ld      a, 1
0000:2947 DD E1      pop      ix
0000:2949 33      inc      sp
0000:294A 33      inc      sp
0000:294B C9      ret
0000:294C      ; -----
0000:294C
0000:294C      loc_0_294C:                                ; CODE XREF: sub_0_2913+6|j
0000:294C DD 19                                           ; sub_0_2913+1A|j ...
0000:294C      add      ix, de
0000:294E 10 C5      djnz    loc_0_2915
0000:2950 AF      xor      a
0000:2951 DD E1      pop      ix
0000:2953 C9      ret
0000:2953      ; End of function sub_0_2913
0000:2953
0000:2954      ; [REDACTED] S U B R O U T I N E [REDACTED]
0000:2954
0000:2954      sub_0_2954:                                ; CODE XREF: sub_0_1AC3+171|p
0000:2954 3E 0B      ld      a, 0Bh
0000:2956 F7      rst      30h                        ; return if level bit not set
0000:2957 CD 74 29      call    sub_0_2974
0000:295A 32 18 62      ld      (unk_0_6218), a
0000:295D 0F      rrca

```

```

0000:295E 0F rrca
0000:295F 32 85 60 ld (digital_snd_tmrs+5), a
0000:2962 78 ld a, b
0000:2963 A7 and a
0000:2964 C8 ret z
0000:2965 FE 01 cp 1
0000:2967 CA 6F 29 jp z, loc_0_296F
0000:296A DD 36 01 01 ld (ix+1), 1
0000:296E C9 ret
0000:296F ;
0000:296F
0000:296F loc_0_296F: ld (ix+11h), 1 ; CODE XREF: sub_0_2954+13j
0000:296F DD 36 11 01 ret
0000:2973 C9 ; End of function sub_0_2954
0000:2973
0000:2973 ;
0000:2974
0000:2974 ; SUBROUTINE
0000:2974
0000:2974 sub_0_2974: ; CODE XREF: sub_0_2954+3jp
0000:2974 FD 21 00 62 ld iy, is_mario_alive
0000:2978 3A 05 62 ld a, (mario_y)
0000:297B 4F ld c, a
0000:297C 21 08 04 ld hl, 408h
0000:297F 06 02 ld b, 2
0000:2981 11 10 00 ld de, 10h
0000:2984 DD 21 80 66 ld ix, unk_0_6680 ; hammer character data
0000:2988 CD 13 29 call sub_0_2913
0000:298B C9 ret
0000:298B ; End of function sub_0_2974
0000:298B
0000:298B ;
0000:298C
0000:298C ; SUBROUTINE
0000:298C
0000:298C sub_0_298C: ; CODE XREF: sub_0_3202+3Cp
0000:298C 2A C8 63 ld hl, (unk_0_63C8)
0000:298F 7D ld a, 1
0000:2990 C6 0E add a, 0Eh
0000:2992 6F ld l, a
0000:2993 56 ld d, (hl)
0000:2994 2C inc l
0000:2995 7E ld a, (hl)
0000:2996 C6 0C add a, 0Ch
0000:2998 5F ld e, a
0000:2999 EB ex de, hl
0000:299A CD F0 2F call sub_0_2FF0
0000:299D 7E ld a, (hl)
0000:299E FE B0 cp 0B0h ;
0000:29A0 DA AC 29 jp c, loc_0_29AC
0000:29A3 E6 0F and 0Fh
0000:29A5 FE 08 cp 8
0000:29A7 D2 AC 29 jp nc, loc_0_29AC
0000:29AA AF xor a
0000:29AB C9 ret
0000:29AC ;
0000:29AC
0000:29AC loc_0_29AC: ; CODE XREF: sub_0_298C+14j
0000:29AC 3E 01 ld a, 1 ; sub_0_298C+1Bj
0000:29AC C9 ret
0000:29AE ; End of function sub_0_298C
0000:29AE
0000:29AE ;
0000:29AF
0000:29AF ; SUBROUTINE
0000:29AF
0000:29AF sub_0_29AF: ; CODE XREF: sub_0_2B1C+7jp
0000:29AF 3E 04 ld a, 4
0000:29B1 F7 rst 30h ; return if level bit not set
0000:29B2 FD 21 00 62 ld iy, is_mario_alive
0000:29B6 3A 05 62 ld a, (mario_y)
0000:29B9 4F ld c, a
0000:29BA 21 08 04 ld hl, 408h
0000:29BD CD 22 2A call sub_0_2A22
0000:29C0 A7 and a
0000:29C1 CA 20 2A jp z, loc_0_2A20
0000:29C4 3E 06 ld a, 6
0000:29C6 90 sub b
0000:29C7
0000:29C7 loc_0_29C7: ; CODE XREF: sub_0_29AF+1Ej
0000:29C7 CA D0 29 jp z, loc_0_29D0
0000:29CA DD 19 add ix, de
0000:29CC 3D dec a
0000:29CD C3 C7 29 jp loc_0_29C7
0000:29D0 ;
0000:29D0
0000:29D0 loc_0_29D0: ; CODE XREF: sub_0_29AF+18jp
0000:29D0 DD 7E 05 ld a, (ix+5)
0000:29D3 D6 04 sub 4
0000:29D5 57 ld d, a
0000:29D6 3A 0C 62 ld a, (mario_y_before_jump)
0000:29D9 C6 05 add a, 5
0000:29DB BA cp d ; check if on or below elevator
0000:29DC D2 EE 29 jp nc, loc_0_29EE
0000:29DF 7A ld a, d
0000:29E0 D6 08 sub 8
0000:29E2 32 05 62 ld (mario_y), a
0000:29E5 3E 01 ld a, 1 ; flag on elevator
0000:29E7 47 ld b, a
0000:29E8 32 98 63 ld (mario_on_elevator), a
0000:29EB 33 inc sp
0000:29EC 33 inc sp
0000:29ED C9 ret
0000:29EE ;
0000:29EE
0000:29EE loc_0_29EE: ; CODE XREF: sub_0_29AF+2Dj
0000:29EE 3A 0C 62 ld a, (mario_y_before_jump) ; collide with side of elevator
0000:29F1 D6 0E sub 0Eh
0000:29F3 BA cp d
0000:29F4 D2 1B 2A jp nc, loc_0_2A1B
0000:29F7 3A 10 62 ld a, (unk_0_6210)
0000:29FA A7 and a
0000:29FB 3A 03 62 ld a, (mario_x)
0000:29FE CA 08 2A jp z, loc_0_2A08

```

```

0000:2A01 F6 07          or      7
0000:2A03 D6 04          sub      4
0000:2A05 C3 0E 2A      jp      loc_0_2A0E
0000:2A08
0000:2A08
0000:2A08 loc_0_2A08:          ; CODE XREF: sub_0_29AF+4F↑j
0000:2A08 D6 08          sub      8
0000:2A0A F6 07          or      7
0000:2A0C C6 04          add      a, 4
0000:2A0E
0000:2A0E loc_0_2A0E:          ; CODE XREF: sub_0_29AF+56↑j
0000:2A0E 32 03 62      ld      (mario_x), a
0000:2A11 32 4C 69      ld      (soft_sprite_ram+4Ch), a
0000:2A14 3E 01      ld      a, 1
0000:2A16 06 00      ld      b, 0
0000:2A18 33          inc      sp
0000:2A19 33          inc      sp
0000:2A1A C9          ret
0000:2A1B
0000:2A1B
0000:2A1B loc_0_2A1B:          ; CODE XREF: sub_0_29AF+45↑j
0000:2A1B AF          xor      a
0000:2A1C 32 00 62      ld      (is_mario_alive), a
0000:2A1F C9          ret
0000:2A20
0000:2A20
0000:2A20 loc_0_2A20:          ; CODE XREF: sub_0_29AF+12↑j
0000:2A20 47          ld      b, a
0000:2A21 C9          ret
0000:2A21
0000:2A21 ; End of function sub_0_29AF
0000:2A22
0000:2A22 ; ██████████ SUBROUTINE ██████████
0000:2A22
0000:2A22 sub_0_2A22:          ; CODE XREF: sub_0_29AF+E↑p
0000:2A22 06 06          ld      b, 6
0000:2A24 11 10 00      ld      de, 10h
0000:2A27 DD 21 00 66      ld      ix, unk_0_6600
0000:2A2B CD 13 29      call    sub_0_2913
0000:2A2E C9          ret
0000:2A2E ; End of function sub_0_2A22
0000:2A2E
0000:2A2E ; ██████████ SUBROUTINE ██████████
0000:2A2F
0000:2A2F
0000:2A2F sub_0_2A2F:          ; CODE XREF: sub_0_1F72+E5↑p
0000:2A2F DD 7E 03          ; sub_0_1F72+188↑p
0000:2A2F          ld      a, (ix+3)
0000:2A32 67          ld      h, a
0000:2A33 DD 7E 05          ld      a, (ix+5)
0000:2A36 C6 04          add      a, 4
0000:2A38 6F          ld      l, a
0000:2A39 E5          push     hl
0000:2A3A CD F0 2F      call    sub_0_2FF0
0000:2A3D D1          pop      de
0000:2A3E 7E          ld      a, (hl)
0000:2A3F FE B0          cp      0B0h ; 'B'
0000:2A41 DA 7B 2A      jp      c, loc_0_2A7B
0000:2A44 E6 0F          and      0Fh
0000:2A46 FE 08          cp      8
0000:2A48 D2 7B 2A      jp      nc, loc_0_2A7B
0000:2A4B 7E          ld      a, (hl)
0000:2A4C FE C0          cp      0C0h ; 'L'
0000:2A4E CA 7B 2A      jp      z, loc_0_2A7B
0000:2A51 DA 69 2A      jp      c, loc_0_2A69
0000:2A54 FE D0          cp      0D0h ; 'D'
0000:2A56 DA 6E 2A      jp      c, loc_0_2A6E
0000:2A59 FE E0          cp      0E0h ; 'O'
0000:2A5B DA 63 2A      jp      c, loc_0_2A63
0000:2A5E FE F0          cp      0F0h ; '-'
0000:2A60 DA 6E 2A      jp      c, loc_0_2A6E
0000:2A63
0000:2A63 loc_0_2A63:          ; CODE XREF: sub_0_2A2F+2C↑j
0000:2A63 E6 0F          and      0Fh
0000:2A65 3D          dec      a
0000:2A66 C3 72 2A      jp      loc_0_2A72
0000:2A69
0000:2A69
0000:2A69 loc_0_2A69:          ; CODE XREF: sub_0_2A2F+22↑j
0000:2A69 3E FF          ld      a, 0FFh
0000:2A6B C3 72 2A      jp      loc_0_2A72
0000:2A6E
0000:2A6E
0000:2A6E loc_0_2A6E:          ; CODE XREF: sub_0_2A2F+27↑j
0000:2A6E E6 0F          ; sub_0_2A2F+31↑j
0000:2A6E          and      0Fh
0000:2A70 D6 09          sub      9
0000:2A72
0000:2A72 loc_0_2A72:          ; CODE XREF: sub_0_2A2F+37↑j
0000:2A72 4F          ; sub_0_2A2F+3C↑j
0000:2A72          ld      c, a
0000:2A73 7B          ld      a, e
0000:2A74 E6 F8          and      0F8h ; '8'
0000:2A76 81          add      a, c
0000:2A77 BB          cp      e
0000:2A78 DA 7D 2A      jp      c, loc_0_2A7D
0000:2A7B
0000:2A7B loc_0_2A7B:          ; CODE XREF: sub_0_2A2F+12↑j
0000:2A7B AF          ; sub_0_2A2F+19↑j ...
0000:2A7B          xor      a
0000:2A7C C9          ret
0000:2A7D
0000:2A7D
0000:2A7D loc_0_2A7D:          ; CODE XREF: sub_0_2A2F+49↑j
0000:2A7D D6 04          sub      4
0000:2A7F DD 77 05      ld      (ix+5), a
0000:2A82 3E 01      ld      a, 1
0000:2A84 C9          ret
0000:2A84 ; End of function sub_0_2A2F
0000:2A85
0000:2A85 ; ██████████ SUBROUTINE ██████████
0000:2A85
0000:2A85
0000:2A85

```



```

0000:2A85      sub_0_2A85:      ld      a, (mario_climbing)      ; CODE XREF: 0000:19A1↑p
0000:2A85 3A 15 62      and     a      ; climbing?
0000:2A88 A7      ret     nz      ; yes, return
0000:2A89 C0      ld      a, (mario_jumping)
0000:2A8A 3A 16 62      and     a      ; jumping?
0000:2A8D A7      ret     nz      ; yes, return
0000:2A8E C0      ld      a, (mario_on_elevator)
0000:2A8F 3A 98 63      cp      1      ; on elevator?
0000:2A92 FE 01      ret     z      ; yes, return
0000:2A94 C8      ld      a, (mario_x)
0000:2A95 3A 03 62      sub     3
0000:2A98 D6 03      ld      h, a
0000:2A9A 67      ld      a, (mario_y)
0000:2A9B 3A 05 62      add     a, 0Ch
0000:2A9E C6 0C      ld      l, a
0000:2AA0 6F      push    hl
0000:2AA1 E5      call    sub_0_2FF0
0000:2AA2 CD F0 2F      pop     de
0000:2AA5 D1      ld      a, (hl)
0000:2AA7 FE B0      cp      0B0h ; '0'
0000:2AA9 DA B4 2A      jp      c, loc_0_2AB4
0000:2AAC E6 0F      and     0Fh
0000:2AAE FE 08      cp      8
0000:2AB0 D2 B4 2A      jp      nc, loc_0_2AB4
0000:2AB3 C9      ret
;
0000:2AB4
0000:2AB4      loc_0_2AB4:      ; CODE XREF: sub_0_2A85+24↑j
0000:2AB4 7A      ; sub_0_2A85+2B↑j
0000:2AB4      ld      a, d
0000:2AB5      and     7
0000:2AB7 CA CD 2A      jp      z, loc_0_2ACD
0000:2ABA 01 20 00      ld      bc, 20h ; ' '
0000:2ABD ED 42      sbc     hl, bc
0000:2ABF 7E      ld      a, (hl)
0000:2AC0 FE B0      cp      0B0h ; '0'
0000:2AC2 DA CD 2A      jp      c, loc_0_2ACD
0000:2AC5 E6 0F      and     0Fh
0000:2AC7 FE 08      cp      8
0000:2AC9 D2 CD 2A      jp      nc, loc_0_2ACD
0000:2ACC C9      ret
;
0000:2ACD
0000:2ACD      loc_0_2ACD:      ; CODE XREF: sub_0_2A85+32↑j
0000:2ACD 3E 01      ; sub_0_2A85+3D↑j ...
0000:2ACD      ld      a, 1
0000:2ACF 32 21 62      ld      (unk_0_6221), a
0000:2AD2 C9      ret
; End of function sub_0_2A85
0000:2AD2
0000:2AD3      ; SUBROUTINE
0000:2AD3
0000:2AD3      sub_0_2AD3:      ; CODE XREF: sub_0_25F2+C↑p
0000:2AD3 3A 03 62      ld      a, (mario_x)
0000:2AD6 47      ld      b, a
0000:2AD7 3A 05 62      ld      a, (mario_y)
0000:2ADA FE 50      cp      50h ; 'P'
0000:2ADC CA EA 2A      jp      z, loc_0_2AEA
0000:2ADF FE 78      cp      78h ; 'x'
0000:2AE1 CA F6 2A      jp      z, loc_0_2AF6
0000:2AE4 FE C8      cp      0C8h ; 'L'
0000:2AE6 CA F0 2A      jp      z, loc_0_2AF0
0000:2AE9 C9      ret
;
0000:2AEA
0000:2AEA      loc_0_2AEA:      ; CODE XREF: sub_0_2AD3+9↑j
0000:2AEA 3A A3 63      ld      a, (unk_0_63A3)
0000:2AED C3 02 2B      jp      loc_0_2B02
;
0000:2AF0
0000:2AF0      loc_0_2AF0:      ; CODE XREF: sub_0_2AD3+13↑j
0000:2AF0 3A A6 63      ld      a, (unk_0_63A6)
0000:2AF3 C3 02 2B      jp      loc_0_2B02
;
0000:2AF6
0000:2AF6      loc_0_2AF6:      ; CODE XREF: sub_0_2AD3+E↑j
0000:2AF6 78      ld      a, b
0000:2AF7 FE 80      cp      80h ; 'C'
0000:2AF9 3A A5 63      ld      a, (unk_0_63A5)
0000:2AFC D2 02 2B      jp      nc, loc_0_2B02
0000:2AFF 3A A4 63      ld      a, (unk_0_63A4)
0000:2B02
0000:2B02      loc_0_2B02:      ; CODE XREF: sub_0_2AD3+1A↑j
0000:2B02 80      ; sub_0_2AD3+20↑j ...
0000:2B02      add     a, b
0000:2B03 32 03 62      ld      (mario_x), a
0000:2B06 32 4C 69      ld      (soft_sprite_ram+4Ch), a
0000:2B09 CD 1F 24      call    sub_0_241F
0000:2B0C 21 03 62      ld      hl, mario_x
0000:2B0F 1D      dec     e
0000:2B10 CA 18 2B      jp      z, loc_0_2B18
0000:2B13 15      dec     d
0000:2B14 CA 1A 2B      jp      z, loc_0_2B1A
0000:2B17 C9      ret
;
0000:2B18
0000:2B18      loc_0_2B18:      ; CODE XREF: sub_0_2AD3+3D↑j
0000:2B18 35      dec     (hl)
0000:2B19 C9      ret
;
0000:2B1A
0000:2B1A      loc_0_2B1A:      ; CODE XREF: sub_0_2AD3+41↑j
0000:2B1A 34      inc     (hl)
0000:2B1B C9      ret
; End of function sub_0_2AD3
0000:2B1B
0000:2B1C      ; SUBROUTINE
0000:2B1C
0000:2B1C      sub_0_2B1C:      ; CODE XREF: sub_0_1AC3+142↑p
0000:2B1C DD 21 00 62      ld      ix, is_mario_alive
0000:2B20 CD 29 2B      call    sub_0_2B29

```

```

0000:2B23 CD AF 29      call    sub_0_29AF
0000:2B26 AF          xor     a
0000:2B27 47          ld      b, a
0000:2B28 C9          ret
0000:2B28          ; End of function sub_0_2B1C
0000:2B28
0000:2B29          ; ██████████ S U B R O U T I N E ██████████
0000:2B29
0000:2B29      sub_0_2B29:                                ; CODE XREF: sub_0_2B1C+4|p
0000:2B29 3A 27 62      ld      a, (level_type)
0000:2B2C 3D          dec     a
0000:2B2D C2 53 2B      jp      nz, loc_0_2B53
0000:2B30 3A 03 62      ld      a, (mario_x)
0000:2B33 67          ld      h, a
0000:2B34 3A 05 62      ld      a, (mario_y)
0000:2B37 C6 07      add     a, 7
0000:2B39 6F          ld      l, a
0000:2B3A CD 9B 2B      call    sub_0_2B9B
0000:2B3D A7          and     a
0000:2B3E CA 51 2B      jp      z, loc_0_2B51
0000:2B41 7B          ld      a, e
0000:2B42 91          sub     c
0000:2B43 FE 04      cp      4
0000:2B45 D2 74 2B      jp      nc, loc_0_2B74
0000:2B48 79          ld      a, c
0000:2B49 D6 07      sub     7
0000:2B4B 32 05 62      ld      (mario_y), a
0000:2B4E 3E 01      ld      a, 1
0000:2B50 47          ld      b, a
0000:2B51
0000:2B51      loc_0_2B51:                                ; CODE XREF: sub_0_2B29+15|j
0000:2B51 E1          pop     hl
0000:2B52 C9          ret
0000:2B53
0000:2B53      loc_0_2B53:                                ; CODE XREF: sub_0_2B29+4|j
0000:2B53 3A 03 62      ld      a, (mario_x)
0000:2B56 D6 03      sub     3
0000:2B58 67          ld      h, a
0000:2B59 3A 05 62      ld      a, (mario_y)
0000:2B5C C6 07      add     a, 7
0000:2B5E 6F          ld      l, a
0000:2B5F CD 9B 2B      call    sub_0_2B9B
0000:2B62 FE 02      cp      2
0000:2B64 CA 7A 2B      jp      z, loc_0_2B7A
0000:2B67 7A          ld      a, d
0000:2B68 C6 07      add     a, 7
0000:2B6A 67          ld      h, a
0000:2B6B 6B          ld      l, e
0000:2B6C CD 9B 2B      call    sub_0_2B9B
0000:2B6F A7          and     a
0000:2B70 C8          ret     z
0000:2B71 C3 7A 2B      jp      loc_0_2B7A
0000:2B74
0000:2B74      loc_0_2B74:                                ; CODE XREF: sub_0_2B29+1C|j
0000:2B74 3E 00      ld      a, 0
0000:2B76 06 00      ld      b, 0
0000:2B78 E1          pop     hl
0000:2B79 C9          ret
0000:2B7A
0000:2B7A      loc_0_2B7A:                                ; CODE XREF: sub_0_2B29+3B|j
0000:2B7A 3A 10 62      ld      a, (unk_0_6210) ; sub_0_2B29+48|j
0000:2B7A          ld      a, (unk_0_6210)
0000:2B7D A7          and     a
0000:2B7E 3A 03 62      ld      a, (mario_x)
0000:2B81 CA 8B 2B      jp      z, loc_0_2B8B
0000:2B84 F6 07      or      7
0000:2B86 D6 04      sub     4
0000:2B88 C3 91 2B      jp      loc_0_2B91
0000:2B88
0000:2B88      loc_0_2B8B:                                ; CODE XREF: sub_0_2B29+58|j
0000:2B88 D6 08      sub     8
0000:2B8D F6 07      or      7
0000:2B8F C6 04      add     a, 4
0000:2B91
0000:2B91      loc_0_2B91:                                ; CODE XREF: sub_0_2B29+5F|j
0000:2B91 32 03 62      ld      (mario_x), a
0000:2B94 32 4C 69      ld      (soft_sprite_ram+4Ch), a
0000:2B97 3E 01      ld      a, 1
0000:2B99 E1          pop     hl
0000:2B9A C9          ret
0000:2B9A          ; End of function sub_0_2B29
0000:2B9A
0000:2B9B          ; ██████████ S U B R O U T I N E ██████████
0000:2B9B
0000:2B9B      sub_0_2B9B:                                ; CODE XREF: sub_0_2B29+11|p
0000:2B9B E5          ; sub_0_2B29+36|p ...
0000:2B9B          push    hl
0000:2B9C CD F0 2F      call    sub_0_2FF0
0000:2B9F D1          pop     de
0000:2BA0 7E          ld      a, (hl)
0000:2BA1 FE B0      cp      0B0h ; 'B'
0000:2BA3 DA D9 2B      jp      c, loc_0_2BD9
0000:2BA6 E6 0F      and     0Fh
0000:2BA8 FE 08      cp      8
0000:2BAA D2 D9 2B      jp      nc, loc_0_2BD9
0000:2BAD 7E          ld      a, (hl)
0000:2BAE FE C0      cp      0C0h ; 'L'
0000:2BB0 CA D9 2B      jp      z, loc_0_2BD9
0000:2BB3 DA DC 2B      jp      c, loc_0_2BDC
0000:2BB6 FE D0      cp      0D0h ; 'D'
0000:2BB8 DA CB 2B      jp      c, loc_0_2BCB
0000:2BBB FE E0      cp      0E0h ; 'O'
0000:2BBD DA C5 2B      jp      c, loc_0_2BC5
0000:2BC0 FE F0      cp      0F0h ; '-'
0000:2BC2 DA CB 2B      jp      c, loc_0_2BCB
0000:2BC5
0000:2BC5      loc_0_2BC5:                                ; CODE XREF: sub_0_2B9B+22|j
0000:2BC5 E6 0F      and     0Fh

```

```

0000:2BC7 3D          dec     a
0000:2BC8 C3 CF 2B      jp      loc_0_2BCF
0000:2BCB          ;
0000:2BCB          loc_0_2BCB:                                ; CODE XREF: sub_0_2B9B+1D|j
0000:2BCB          ; sub_0_2B9B+27|j
0000:2BCB E6 0F          and     0Fh
0000:2BCB          sub     9
0000:2BCD D6 09          loc_0_2BCF:                                ; CODE XREF: sub_0_2B9B+2D|j
0000:2BCF          ld      c, a
0000:2BCF 4F          ld      a, e
0000:2BD0 7B          and     0F8h ; '0'
0000:2BD1 E6 F8          add     a, c
0000:2BD3 81          ld      c, a
0000:2BD4 4F          cp      e
0000:2BD5 BB          jp      c, loc_0_2BE1
0000:2BD6 DA E1 2B      loc_0_2BD9:                                ; CODE XREF: sub_0_2B9B+8|j
0000:2BD9          ; sub_0_2B9B+F|j ...
0000:2BD9 AF          xor     a
0000:2BDA 47          ld      b, a
0000:2BDB C9          ret
0000:2BDC          ;
0000:2BDC          loc_0_2BDC:                                ; CODE XREF: sub_0_2B9B+18|j
0000:2BDC 7B          ld      a, e
0000:2BDD E6 F8          and     0F8h ; '0'
0000:2BDF 3D          dec     a
0000:2BE0 4F          ld      c, a
0000:2BE1          loc_0_2BE1:                                ; CODE XREF: sub_0_2B9B+3B|j
0000:2BE1          ld      a, (mario_y_before_jump)
0000:2BE4 DD 96 05      sub     (ix+5)
0000:2BE7 83          add     a, e
0000:2BE8 B9          cp      c
0000:2BE9 CA EF 2B      jp      z, loc_0_2BEF
0000:2BEC D2 F8 2B      jp      nc, loc_0_2BF8
0000:2BEF          loc_0_2BEF:                                ; CODE XREF: sub_0_2B9B+4E|j
0000:2BEF 79          ld      a, c
0000:2BF0 D6 07          sub     7
0000:2BF2 32 05 62      ld      (mario_y), a
0000:2BF5 C3 FD 2B      jp      loc_0_2BFD
0000:2BF8          ;
0000:2BF8          loc_0_2BF8:                                ; CODE XREF: sub_0_2B9B+51|j
0000:2BF8 3E 02          ld      a, 2
0000:2BFA 06 00          ld      b, 0
0000:2BFC C9          ret
0000:2BFD          ;
0000:2BFD          loc_0_2BFD:                                ; CODE XREF: sub_0_2B9B+5A|j
0000:2BFD 3E 01          ld      a, 1
0000:2BFF 47          ld      b, a
0000:2C00 E1          pop     hl
0000:2C01 E1          pop     hl
0000:2C02 C9          ret
0000:2C02          ; End of function sub_0_2B9B
0000:2C02          ;
0000:2C03          ; SUBROUTINE
0000:2C03          ;
0000:2C03          sub_0_2C03:                                ; CODE XREF: 0000:1989|p
0000:2C03          ld      a, 1
0000:2C05 F7          rst     30h ; return if level bit not set
0000:2C06 D7          rst     10h ; return if mario not alive
0000:2C07 3A 93 63      ld      a, (barrel_deployment)
0000:2C0A 0F          rrca
0000:2C0B D8          ret     c
0000:2C0C 3A B1 62      ld      a, (unk_0_62B1)
0000:2C0F A7          and     a
0000:2C10 C8          ret     z
0000:2C11 4F          ld      c, a
0000:2C12 3A B0 62      ld      a, (unk_0_62B0)
0000:2C15 D6 02          sub     2
0000:2C17 B9          cp      c
0000:2C18 DA 7B 2C      jp      c, loc_0_2C7B
0000:2C1B 3A 82 63      ld      a, (unk_0_6382)
0000:2C1E CB 4F          bit     1, a
0000:2C20 C2 86 2C      jp      nz, loc_0_2C86
0000:2C23 3A 80 63      ld      a, (unk_0_6380)
0000:2C26 47          ld      b, a
0000:2C27 3A 1A 60      ld      a, (gen_purpose_timer)
0000:2C2A E6 1F          and     1Fh
0000:2C2C          loc_0_2C2C:                                ; CODE XREF: sub_0_2C03+2D|j
0000:2C2C B8          cp      b
0000:2C2D CA 33 2C      jp      z, loc_0_2C33
0000:2C30 10 FA      djnz   loc_0_2C2C
0000:2C32 C9          ret
0000:2C33          ;
0000:2C33          loc_0_2C33:                                ; CODE XREF: sub_0_2C03+2A|j
0000:2C33          ld      a, (unk_0_62B0)
0000:2C36 CB 3F          srl     a
0000:2C38 B9          cp      c
0000:2C39 DA 41 2C      jp      c, loc_0_2C41
0000:2C3C 3A 19 60      ld      a, (random_no+1)
0000:2C3F 0F          rrca
0000:2C40 D0          ret     nc
0000:2C41          loc_0_2C41:                                ; CODE XREF: sub_0_2C03+36|j
0000:2C41 CD 57 00      call    rand
0000:2C44 E6 0F          and     0Fh
0000:2C46 C2 86 2C      jp      nz, loc_0_2C86
0000:2C49          loc_0_2C49:                                ; CODE XREF: sub_0_2C03+7B|j
0000:2C49          ld      a, 1
0000:2C4B          loc_0_2C4B:                                ; CODE XREF: sub_0_2C03+80|j
0000:2C4B          ld      (unk_0_6382), a
0000:2C4E 3C          inc     a
0000:2C4F          loc_0_2C4F:                                ; CODE XREF: sub_0_2C03+89|j

```

```

0000:2C4F 32 8F 63      ld      (unk_0_638F), a
0000:2C52 3E 01          ld      a, 1
0000:2C54 32 92 63      ld      (unk_0_6392), a
0000:2C57 3A B2 62      ld      a, (unk_0_62B2)
0000:2C5A B9           cp      c
0000:2C5B C0           ret     nz
0000:2C5C D6 08          sub     8
0000:2C5E 32 B2 62      ld      (unk_0_62B2), a
0000:2C61 11 20 00      ld      de, 20h ; ' '
0000:2C64 21 00 64      ld      hl, unk_0_6400      ; fireball character data
0000:2C67 06 05          ld      b, 5
0000:2C69
0000:2C69      loc_0_2C69:                                ; CODE XREF: sub_0_2C03+6C1j
0000:2C69 7E          ld      a, (hl)
0000:2C6A A7          and     a
0000:2C6B CA 72 2C      jp      z, loc_0_2C72
0000:2C6E 19          add     hl, de
0000:2C6F 10 F8          djnz   loc_0_2C69
0000:2C71 C9           ret
;
0000:2C72
0000:2C72      loc_0_2C72:                                ; CODE XREF: sub_0_2C03+681j
0000:2C72 3A 82 63      ld      a, (unk_0_6382)
0000:2C75 F6 80          or      80h ; 'C'
0000:2C77 32 82 63      ld      (unk_0_6382), a
0000:2C7A C9           ret
;
0000:2C7B
0000:2C7B      loc_0_2C7B:                                ; CODE XREF: sub_0_2C03+151j
0000:2C7B C6 02          add     a, 2
0000:2C7D B9           cp      c
0000:2C7E CA 49 2C      jp      z, loc_0_2C49
0000:2C81 3E 02          ld      a, 2
0000:2C83 C3 4B 2C      jp      loc_0_2C4B
;
0000:2C86
0000:2C86      loc_0_2C86:                                ; CODE XREF: sub_0_2C03+1D1j
0000:2C86 AF                                ; sub_0_2C03+431j
0000:2C86
0000:2C86
0000:2C87 32 82 63      xor     a
0000:2C87          ld      (unk_0_6382), a
0000:2C8A 3E 03          ld      a, 3
0000:2C8C C3 4F 2C      ld      (unk_0_6382), a
0000:2C8C          ld      loc_0_2C4F
; End of function sub_0_2C03
0000:2C8C
0000:2C8F
0000:2C8F      ; SUBROUTINE
0000:2C8F
0000:2C8F      sub_0_2C8F:                                ; CODE XREF: 0000:19861p
0000:2C8F 3E 01          ld      a, 1
0000:2C91 F7          rst     30h      ; return if level bit not set
0000:2C92 D7          rst     10h      ; return if mario not alive
0000:2C93 3A 93 63      ld      a, (barrel_deployment)
0000:2C96 0F          rrca
0000:2C97 DA 15 2D      jp      c, loc_0_2D15
0000:2C9A 3A 92 63      ld      a, (unk_0_6392)
0000:2C9D 0F          rrca
0000:2C9E D0          ret     nc
0000:2C9F DD 21 00 67      ld      ix, unk_0_6700
0000:2CA3 11 20 00      ld      de, 20h ; ' '
0000:2CA6 06 0A          ld      b, 0Ah
0000:2CA8
0000:2CA8      loc_0_2CA8:                                ; CODE XREF: sub_0_2C8F+261j
0000:2CA8 DD 7E 00          ld      a, (ix+0)
0000:2CAB 0F          rrca
0000:2CAC DA B3 2C      jp      c, loc_0_2CB3
0000:2CAF 0F          rrca
0000:2CB0 D2 B8 2C      jp      nc, loc_0_2CB8
0000:2CB3
0000:2CB3      loc_0_2CB3:                                ; CODE XREF: sub_0_2C8F+1D1j
0000:2CB3 DD 19          add     ix, de
0000:2CB5 10 F1      djnz   loc_0_2CA8
0000:2CB7 C9           ret
;
0000:2CB8
0000:2CB8      loc_0_2CB8:                                ; CODE XREF: sub_0_2C8F+211j
0000:2CB8 DD 22 AA 62      ld      (unk_0_62AA), ix
0000:2CBC DD 36 00 02      ld      (ix+0), 2
0000:2CC0 16 00          ld      d, 0
0000:2CC2 3E 0A          ld      a, 0Ah
0000:2CC4 90          sub     b
0000:2CC5 87          add     a, a
0000:2CC6 87          add     a, a
0000:2CC7 5F          ld      e, a
0000:2CC8 21 80 69      ld      hl, soft_sprite_ram+80h
0000:2CCB 19          add     hl, de
0000:2CCC 22 AC 62      ld      (unk_0_62AC), hl
0000:2CCF 3E 01          ld      a, 1
0000:2CD1 32 93 63      ld      (barrel_deployment), a
0000:2CD4 11 01 05      ld      de, 501h
0000:2CD7 CD 9F 30      sub     sub_0_309F
0000:2CDA 21 B1 62      ld      hl, unk_0_62B1
0000:2CDD 35          dec     (hl)
0000:2CDE C2 E6 2C      jp      nz, loc_0_2CE6
0000:2CE1 3E 01          ld      a, 1
0000:2CE3 32 86 63      ld      (unk_0_6386), a
0000:2CE6
0000:2CE6      loc_0_2CE6:                                ; CODE XREF: sub_0_2C8F+4F1j
0000:2CE6 7E          ld      a, (hl)
0000:2CE7 FE 04          cp      4
0000:2CE9 D2 F6 2C      jp      nc, loc_0_2CF6
0000:2CEC 21 A8 69      ld      hl, soft_sprite_ram+0A8h
0000:2CEF 87          add     a, a
0000:2CF0 87          add     a, a
0000:2CF1 5F          ld      e, a
0000:2CF2 16 00          ld      d, 0
0000:2CF4 19          add     hl, de
0000:2CF5 72          ld      (hl), d
0000:2CF6
0000:2CF6      loc_0_2CF6:                                ; CODE XREF: sub_0_2C8F+5A1j
0000:2CF6 DD 36 07 15      ld      (ix+7), 15h      ; sideways barrel sprite tile
0000:2CFA DD 36 08 0B      ld      (ix+8), 0Bh
0000:2CFE DD 36 15 00      ld      (ix+15h), 0
0000:2D02 3A 82 63      ld      a, (unk_0_6382)
0000:2D05 07          rlca
0000:2D06 D2 15 2D      jp      nc, loc_0_2D15

```

```

0000:2D09 DD 36 07 19      ld      (ix+7), 19h      ; sideways blue barrel sprite tile
0000:2D0D DD 36 08 0C      ld      (ix+8), 0Ch     ; set blue palette for barrel
0000:2D11 DD 36 15 01      ld      (ix+15h), 1
0000:2D15
0000:2D15      loc_0_2D15:      ; CODE XREF: sub_0_2C8F+8[j
0000:2D15 21 AF 62      ; sub_0_2C8F+77[j
0000:2D15      ld      hl, unk_0_62AF
0000:2D18 35      dec     (hl)
0000:2D19 C0      ret     nz
0000:2D1A 36 18      ld      (hl), 18h
0000:2D1C 3A 8F 63      ld      a, (unk_0_638F)
0000:2D1F A7      and     a
0000:2D20 CA 51 2D      jp      z, loc_0_2D51
0000:2D23 4F      ld      c, a
0000:2D24 21 32 39      ld      hl, dk_throw_barrel_spr
0000:2D27 3A 82 63      ld      a, (unk_0_6382)
0000:2D2A 0F      rrca
0000:2D2B DA 2F 2D      jp      c, loc_0_2D2F
0000:2D2E 0D      dec     c
0000:2D2F
0000:2D2F      loc_0_2D2F:      ; CODE XREF: sub_0_2C8F+9C[j
0000:2D2F 79      ld      a, c
0000:2D30 87      add     a, a
0000:2D31 87      add     a, a
0000:2D32 87      add     a, a
0000:2D33 4F      ld      c, a
0000:2D34 87      add     a, a
0000:2D35 87      add     a, a
0000:2D36 81      add     a, c
0000:2D37 5F      ld      e, a
0000:2D38 16 00      ld      d, 0
0000:2D3A 19      add     hl, de
0000:2D3B CD 4E 00      call    copy_sprites_2_11_data
0000:2D3E 21 8F 63      ld      hl, unk_0_638F
0000:2D41 35      dec     (hl)
0000:2D42 C2 51 2D      jp      nz, loc_0_2D51
0000:2D45 3E 01      ld      a, 1
0000:2D47 32 AF 62      ld      (unk_0_62AF), a
0000:2D4A 3A 82 63      ld      a, (unk_0_6382)
0000:2D4D 0F      rrca
0000:2D4E DA 83 2D      jp      c, loc_0_2D83
0000:2D51
0000:2D51      loc_0_2D51:      ; CODE XREF: sub_0_2C8F+91[j
0000:2D51 2A A8 62      ; sub_0_2C8F+B3[j
0000:2D51      ld      hl, (unk_0_62A8)
0000:2D54
0000:2D54      loc_0_2D54:      ; CODE XREF: sub_0_2C8F+FA[j
0000:2D54 7E      ld      a, (hl)
0000:2D55 DD 2A AA 62      ld      ix, (unk_0_62AA)
0000:2D59 ED 5B AC 62      ld      de, (unk_0_62AC)
0000:2D5D FE 7F      cp      7Fh ; ' '
0000:2D5F CA 8C 2D      jp      z, loc_0_2D8C
0000:2D62 4F      ld      c, a
0000:2D63 E6 7F      and     7Fh ; ' '
0000:2D65 12      ld      (de), a
0000:2D66 DD 7E 07      ld      a, (ix+7)
0000:2D69 CB 79      bit     7, c
0000:2D6B CA 70 2D      jp      z, loc_0_2D70
0000:2D6E EE 03      xor     3
0000:2D70
0000:2D70      loc_0_2D70:      ; CODE XREF: sub_0_2C8F+DC[j
0000:2D70 13      inc     de
0000:2D71 12      ld      (de), a
0000:2D72 DD 77 07      ld      (ix+7), a
0000:2D75 DD 7E 08      ld      a, (ix+8)
0000:2D78 13      inc     de
0000:2D79 12      ld      (de), a
0000:2D7A 23      inc     hl
0000:2D7B 7E      ld      a, (hl)
0000:2D7C 13      inc     de
0000:2D7D 12      ld      (de), a
0000:2D7E 23      inc     hl
0000:2D7F 22 A8 62      ld      (unk_0_62A8), hl
0000:2D82 C9      ret
0000:2D83
0000:2D83
0000:2D83      loc_0_2D83:      ; CODE XREF: sub_0_2C8F+BF[j
0000:2D83 21 CC 39      ld      hl, barrel_falling_data
0000:2D86 22 A8 62      ld      (unk_0_62A8), hl
0000:2D89 C3 54 2D      jp      loc_0_2D54
0000:2D8C
0000:2D8C      loc_0_2D8C:      ; CODE XREF: sub_0_2C8F+D0[j
0000:2D8C 21 C3 39      ld      hl, barell_rolling_data
0000:2D8F 22 A8 62      ld      (unk_0_62A8), hl
0000:2D92 DD 36 01 01      ld      (ix+1), 1
0000:2D96 3A 82 63      ld      a, (unk_0_6382)
0000:2D99 0F      rrca
0000:2D9A DA A5 2D      jp      c, loc_0_2DA5
0000:2D9D DD 36 01 00      ld      (ix+1), 0
0000:2DA1 DD 36 02 02      ld      (ix+2), 2
0000:2DA5
0000:2DA5      loc_0_2DA5:      ; CODE XREF: sub_0_2C8F+10B[j
0000:2DA5 DD 36 00 01      ld      (ix+0), 1
0000:2DA9 DD 36 0F 01      ld      (ix+0Fh), 1
0000:2DAD AF      xor     a
0000:2DAE DD 77 10      ld      (ix+10h), a
0000:2DB1 DD 77 11      ld      (ix+11h), a
0000:2DB4 DD 77 12      ld      (ix+12h), a
0000:2DB7 DD 77 13      ld      (ix+13h), a
0000:2DBA DD 77 14      ld      (ix+14h), a
0000:2DBD 32 93 63      ld      (barrel_deployment), a
0000:2DC0 32 92 63      ld      (unk_0_6392), a
0000:2DC3 1A      ld      a, (de)
0000:2DC4 DD 77 03      ld      (ix+3), a
0000:2DC7 13      inc     de
0000:2DC8 13      inc     de
0000:2DC9 13      inc     de
0000:2DCA 1A      ld      a, (de)
0000:2DCB DD 77 05      ld      (ix+5), a
0000:2DCE 21 5C 38      ld      hl, kong_normal_spr
0000:2DD1 CD 4E 00      call    copy_sprites_2_11_data
0000:2DD4 21 0B 69      ld      hl, soft_sprite_ram+0Bh
0000:2DD7 0E FC      ld      c, 0FCh ; '3'
0000:2DD9 FF      rst     38h
0000:2DDA C9      ret
; subtract 4 from x coord for 10 sprites

```

```

0000:2DDA          ; End of function sub_0_2C8F
0000:2DDA
0000:2DDB
0000:2DDB          ; ██████████ S U B R O U T I N E ██████████
0000:2DDB
0000:2DDB          sub_0_2DDB:                                ; CODE XREF: 0000:1995|p
0000:2DDB 3E 0A          ld      a, 0Ah
0000:2DDD F7          rst      30h          ; return if level bit not set
0000:2DDE D7          rst      10h          ; return if mario not alive
0000:2DDF 3A 80 63      ld      a, (unk_0_6380)
0000:2DE2 3C          inc      a
0000:2DE3 A7          and      a
0000:2DE4 1F          rra
0000:2DE5 47          ld      b, a
0000:2DE6 3A 27 62      ld      a, (level_type)
0000:2DE9 FE 02          cp      2
0000:2DEB 20 01          jr      nz, loc_0_2DEE
0000:2DED 04          inc      b
0000:2DEE
0000:2DEE          loc_0_2DEE:                                ; CODE XREF: sub_0_2DDB+10|j
0000:2DEE 3E FE          ld      a, 0FEh ; '■'
0000:2DF0 37          scf
0000:2DF1
0000:2DF1          loc_0_2DF1:                                ; CODE XREF: sub_0_2DDB+18|j
0000:2DF1 1F          rra
0000:2DF2 A7          and      a
0000:2DF3 10 FC      djnz     loc_0_2DF1
0000:2DF5 47          ld      b, a
0000:2DF6 3A 1A 60      ld      a, (gen_purpose_timer)
0000:2DF9 A0          and      b
0000:2DFA C0          ret      nz
0000:2DFB 3E 01          ld      a, 1
0000:2DFD 32 A0 63      ld      (unk_0_63A0), a
0000:2E00 32 9A 63      ld      (unk_0_639A), a
0000:2E03 C9          ret
0000:2E03          ; End of function sub_0_2DDB
0000:2E03
0000:2E04
0000:2E04          ; ██████████ S U B R O U T I N E ██████████
0000:2E04
0000:2E04          sub_0_2E04:                                ; CODE XREF: 0000:198F|p
0000:2E04 3E 04          ld      a, 4
0000:2E06 F7          rst      30h          ; return if level bit not set
0000:2E07 D7          rst      10h          ; return if mario not alive
0000:2E08 DD 21 00 65      ld      ix, unk_0_6500
0000:2E0C FD 21 80 69      ld      iy, soft_sprite_ram+80h
0000:2E10 06 0A          ld      b, 0Ah
0000:2E12
0000:2E12          loc_0_2E12:                                ; CODE XREF: sub_0_2E04+7D|j
0000:2E12 DD 7B 00          ld      a, (ix+0)
0000:2E15 0F          rrca
0000:2E16 D2 A7 2E          jp      nc, loc_0_2EA7
0000:2E19 3A 1A 60      ld      a, (gen_purpose_timer)
0000:2E1C E6 0F          and      0Fh
0000:2E1E C2 29 2E          jp      nz, loc_0_2E29
0000:2E21 FD 7E 01          ld      a, (iy+1)
0000:2E24 EE 07          xor      7
0000:2E26 FD 77 01          ld      (iy+1), a
0000:2E29
0000:2E29          loc_0_2E29:                                ; CODE XREF: sub_0_2E04+1A|j
0000:2E29 DD 7E 0D          ld      a, (ix+0Dh)
0000:2E2C FE 04          cp      4
0000:2E2E CA 84 2E          jp      z, loc_0_2E84
0000:2E31 DD 34 03          inc      (ix+3)
0000:2E34 DD 34 03          inc      (ix+3)
0000:2E37 DD 6E 0E          ld      l, (ix+0Eh)
0000:2E3A DD 66 0F          ld      h, (ix+0Fh)
0000:2E3D 7E          ld      a, (hl)
0000:2E3E 4F          ld      c, a
0000:2E3F FE 7F          cp      7Fh ; ' '
0000:2E41 CA 9C 2E          jp      z, loc_0_2E9C
0000:2E44 23          inc      hl
0000:2E45 DD 86 05          add      a, (ix+5)
0000:2E48 DD 77 05          ld      (ix+5), a
0000:2E4B
0000:2E4B          loc_0_2E4B:                                ; CODE XREF: sub_0_2E04+A0|j
0000:2E4B DD 75 0E          ld      (ix+0Eh), l
0000:2E4E DD 74 0F          ld      (ix+0Fh), h
0000:2E51 DD 7E 03          ld      a, (ix+3)
0000:2E54 FE B7          cp      0B7h ; 'Ä'
0000:2E56 DA 6C 2E          jp      c, loc_0_2E6C
0000:2E59 79          ld      a, c
0000:2E5A FE 7F          cp      7Fh ; ' '
0000:2E5C C2 6C 2E          jp      nz, loc_0_2E6C
0000:2E5F DD 36 0D 04      ld      (ix+0Dh), 4
0000:2E63 AF          xor      a
0000:2E64 32 83 60      ld      (digital_snd_tmrs+3), a
0000:2E67 3E 03          ld      a, 3
0000:2E69 32 84 60      ld      (digital_snd_tmrs+4), a
0000:2E6C
0000:2E6C          loc_0_2E6C:                                ; CODE XREF: sub_0_2E04+52|j
0000:2E6C DD 7E 03          ; sub_0_2E04+58|j ...
0000:2E6C          ld      a, (ix+3)
0000:2E6F FD 77 00          ld      (iy+0), a
0000:2E72 DD 7E 05          ld      a, (ix+5)
0000:2E75 FD 77 03          ld      (iy+3), a
0000:2E78
0000:2E78          loc_0_2E78:                                ; CODE XREF: sub_0_2E04+A7|j
0000:2E78 11 10 00          ; sub_0_2E04+CD|j
0000:2E78          ld      de, 10h
0000:2E7B DD 19          add      ix, de
0000:2E7D 1E 04          ld      e, 4
0000:2E7F FD 19          add      iy, de
0000:2E81 10 8F          djnz     loc_0_2E12
0000:2E83 C9          ret
0000:2E84
0000:2E84          ; _____
0000:2E84
0000:2E84          loc_0_2E84:                                ; CODE XREF: sub_0_2E04+2A|j
0000:2E84 3E 03          ld      a, 3
0000:2E86 DD 86 05          add      a, (ix+5)
0000:2E89 DD 77 05          ld      (ix+5), a
0000:2E8C FE F8          cp      0F8h ; 'ø'
0000:2E8E DA 6C 2E          jp      c, loc_0_2E6C
0000:2E91 DD 36 03 00      ld      (ix+3), 0

```

```

0000:2E95 DD 36 00 00      ld      (ix+0), 0
0000:2E99 C3 6C 2E          jp      loc_0_2E6C
0000:2E9C
0000:2E9C
0000:2E9C      loc_0_2E9C:                                ; CODE XREF: sub_0_2E04+3D↑j
0000:2E9C 21 AA 39      ld      hl, bouncing_spring_data
0000:2E9F 3E 03      ld      a, 3
0000:2EA1 32 83 60      ld      (digital_snd_tmrs+3), a
0000:2EA4 C3 4B 2E          jp      loc_0_2E4B
0000:2EA7
0000:2EA7      loc_0_2EA7:                                ; CODE XREF: sub_0_2E04+12↑j
0000:2EA7 3A 96 63      ld      a, (unk_0_6396)
0000:2EAA 0F          rrca
0000:2EAB D2 78 2E      jp      nc, loc_0_2E78
0000:2EAE AF          xor      a
0000:2EAF 32 96 63      ld      (unk_0_6396), a
0000:2EB2 DD 36 05 50      ld      (ix+5), 50h ; 'P'
0000:2EB6 DD 36 0D 01      ld      (ix+0Dh), 1
0000:2EBA CD 57 00      call    rand
0000:2EBD E6 0F          and     0Fh
0000:2EBF C6 F8          add     a, 0F8h ; '0'
0000:2EC1 DD 77 03      ld      (ix+3), a
0000:2EC4 DD 36 00 01      ld      (ix+0), 1
0000:2EC8 21 AA 39      ld      hl, bouncing_spring_data
0000:2ECB DD 75 0E      ld      (ix+0Eh), 1
0000:2ECE DD 74 0F      ld      (ix+0Fh), h
0000:2ED1 C3 78 2E          jp      loc_0_2E78      ; end of spring routine
0000:2ED1      ; End of function sub_0_2E04
0000:2ED1
0000:2ED4
0000:2ED4      ; ██████████ SUBROUTINE ██████████
0000:2ED4
0000:2ED4      sub_0_2ED4:                                ; CODE XREF: 0000:1998↑p
0000:2ED4 3E 0B          ld      a, 0Bh
0000:2ED6 F7          rst      30h      ; return if level bit not set
0000:2ED7 D7          rst      10h      ; return if mario not alive
0000:2ED8 11 18 6A      ld      de, soft_sprite_ram+118h      ; hammers in sprite ram
0000:2EDB DD 21 80 66      ld      ix, unk_0_6680      ; hammer character data
0000:2EDF DD 7E 01      ld      a, (ix+1)
0000:2EE2 0F          rrca
0000:2EE3 DA ED 2E      jp      c, loc_0_2EED
0000:2EE6 11 1C 6A      ld      de, soft_sprite_ram+11Ch
0000:2EE9 DD 21 90 66      ld      ix, unk_0_6690
0000:2EED
0000:2EED      loc_0_2EED:                                ; CODE XREF: sub_0_2ED4+F↑j
0000:2EED DD 36 0E 00      ld      (ix+0Eh), 0
0000:2EF1 DD 36 0F F0      ld      (ix+0Fh), 0F0h ; '-'
0000:2EF5 3A 17 62      ld      a, (unk_0_6217)
0000:2EF8 0F          rrca
0000:2EF9 D2 97 2F      jp      nc, loc_0_2F97
0000:2EFC AF          xor      a
0000:2EFD 32 18 62      ld      (unk_0_6218), a
0000:2F00 21 89 60      ld      hl, unk_0_6089
0000:2F03 36 04      ld      (hl), 4
0000:2F05 DD 36 09 06      ld      (ix+9), 6
0000:2F09 DD 36 0A 03      ld      (ix+0Ah), 3
0000:2F0D 06 1E      ld      b, 1Eh
0000:2F0F 3A 07 62      ld      a, (mario_sprite_tile)
0000:2F12 CB 27          sla      a
0000:2F14 D2 1B 2F      jp      nc, loc_0_2F1B
0000:2F17 F6 80          or      80h ; 'C'
0000:2F19 CB F8          set     7, b
0000:2F1B
0000:2F1B      loc_0_2F1B:                                ; CODE XREF: sub_0_2ED4+40↑j
0000:2F1B F6 08          or      8
0000:2F1D 4F          ld      c, a
0000:2F1E 3A 94 63      ld      a, (unk_0_6394)
0000:2F21 CB 5F          bit     3, a
0000:2F23 CA 43 2F      jp      z, loc_0_2F43
0000:2F26 CB C0          set     0, b
0000:2F28 CB C1          set     0, c
0000:2F2A DD 36 09 05      ld      (ix+9), 5
0000:2F2E DD 36 0A 06      ld      (ix+0Ah), 6
0000:2F32 DD 36 0F 00      ld      (ix+0Fh), 0
0000:2F36 DD 36 0E F0      ld      (ix+0Eh), 0F0h ; '-'
0000:2F3A CB 79          bit     7, c
0000:2F3C CA 43 2F      jp      z, loc_0_2F43
0000:2F3F DD 36 0E 10      ld      (ix+0Eh), 10h
0000:2F43
0000:2F43      loc_0_2F43:                                ; CODE XREF: sub_0_2ED4+4F↑j
0000:2F43 79          ; sub_0_2ED4+68↑j
0000:2F43
0000:2F43      ld      a, c
0000:2F44 32 4D 69      ld      (soft_sprite_ram+4Dh), a
0000:2F47 0E 07          ld      c, 7
0000:2F49 21 94 63      ld      hl, unk_0_6394
0000:2F4C 34          inc     (hl)
0000:2F4D C2 B7 2F      jp      nz, loc_0_2FB7
0000:2F50 21 95 63      ld      hl, unk_0_6395
0000:2F53 34          inc     (hl)
0000:2F54 7E          ld      a, (hl)
0000:2F55 FE 02          cp      2
0000:2F57 C2 BE 2F      jp      nz, loc_0_2FBE
0000:2F5A AF          xor      a
0000:2F5B 32 95 63      ld      (unk_0_6395), a
0000:2F5E 32 17 62      ld      (unk_0_6217), a
0000:2F61 DD 77 01      ld      (ix+1), a
0000:2F64 3A 03 62      ld      a, (mario_x)
0000:2F67 ED 44          neg
0000:2F69 DD 77 0E      ld      (ix+0Eh), a
0000:2F6C 3A 07 62      ld      a, (mario_sprite_tile)
0000:2F6F 32 4D 69      ld      (soft_sprite_ram+4Dh), a
0000:2F72 DD 36 00 00      ld      (ix+0), 0
0000:2F76 3A 89 63      ld      a, (unk_0_6389)
0000:2F79 32 89 60      ld      (unk_0_6089), a
0000:2F7C
0000:2F7C      loc_0_2F7C:                                ; CODE XREF: sub_0_2ED4+E0↑j
0000:2F7C EB          ; sub_0_2ED4+E7↑j ...
0000:2F7C
0000:2F7C      ex      de, hl
0000:2F7D 3A 03 62      ld      a, (mario_x)
0000:2F80 DD 86 0E          add     a, (ix+0Eh)
0000:2F83 77          ld      (hl), a
0000:2F84 DD 77 03      ld      (ix+3), a
0000:2F87 23          inc     hl
0000:2F88 70          ld      (hl), b

```

```

0000:2F89 23      inc    hl
0000:2F8A 71      ld     (hl), c
0000:2F8B 23      inc    hl
0000:2F8C 3A 05 62   ld     a, (mario_y)           ; calc hammer Y
0000:2F8F DD 86 0F   add    a, (ix+0Fh)
0000:2F92 77      ld     (hl), a
0000:2F93 DD 77 05   ld     (ix+5), a
0000:2F96 C9      ret
;
0000:2F97
0000:2F97      loc_0_2F97:                  ; CODE XREF: sub_0_2ED4+25j
0000:2F97 3A 18 62   ld     a, (unk_0_6218)
0000:2F9A 0F      rrca
0000:2F9B D0      ret    nc
0000:2F9C DD 36 09 06   ld     (ix+9), 6
0000:2FA0 DD 36 0A 03   ld     (ix+0Ah), 3
0000:2FA4 3A 07 62   ld     a, (mario_sprite_tile)
0000:2FA7 07      rlca
0000:2FA8 3E 3C   ld     a, 3Ch ; '<'
0000:2FAA 1F      rra
0000:2FAB 47      ld     b, a                   ; hammer tile #
0000:2FAC 0E 07      ld     c, 7
0000:2FAE 3A 89 60   ld     a, (unk_0_6089)
0000:2FB1 32 89 63   ld     (unk_0_6389), a
0000:2FB4 C3 7C 2F   jp     loc_0_2F7C
;
0000:2FB7
0000:2FB7      loc_0_2FB7:                  ; CODE XREF: sub_0_2ED4+79j
0000:2FB7 3A 95 63   ld     a, (unk_0_6395)
0000:2FBA A7      and    a
0000:2FBB CA 7C 2F   jp     z, loc_0_2F7C
0000:2FBE
0000:2FBE      loc_0_2FBE:                  ; CODE XREF: sub_0_2ED4+83j
0000:2FBE 3A 1A 60   ld     a, (gen_purpose_timer)
0000:2FC1 CB 5F      bit    3, a
0000:2FC3 CA 7C 2F   jp     z, loc_0_2F7C
0000:2FC6 0E 01      ld     c, 1
0000:2FC8 C3 7C 2F   jp     loc_0_2F7C
; End of function sub_0_2ED4
;
; SUBROUTINE
;
0000:2FCB
0000:2FCB      sub_0_2FCB:                  ; CODE XREF: 0000:19BFp
0000:2FCB 3E 0E      ld     a, 0Eh
0000:2FCD F7      rst    30h                   ; return if level bit not set
0000:2FCE 21 B4 62   ld     hl, unk_0_62B4
0000:2FD1 35      dec    (hl)
0000:2FD2 C0      ret    nz
0000:2FD3 3E 03   ld     a, 3
0000:2FD5 32 B9 62   ld     (unk_0_62B9), a
0000:2FD8 32 96 63   ld     (unk_0_6396), a
0000:2FDB 11 01 05   ld     de, 501h
0000:2FDE CD 9F 30   call   sub_0_309F
0000:2FE1 3A B3 62   ld     a, (unk_0_62B3)
0000:2FE4 77      ld     (hl), a
0000:2FE5 21 B1 62   ld     hl, unk_0_62B1
0000:2FE8 35      dec    (hl)
0000:2FE9 C0      ret    nz
0000:2FEA 3E 01   ld     a, 1
0000:2FEC 32 86 63   ld     (unk_0_6386), a
0000:2FEF C9      ret
; End of function sub_0_2FCB
;
; SUBROUTINE
;
0000:2FEF
0000:2FF0
0000:2FF0      sub_0_2FF0:                  ; CODE XREF: sub_0_DA7+10p
0000:2FF0 7D      ld     a, 1                  ; sub_0_DA7+3Dp ...
0000:2FF1 0F      rrca                          ; byte2
0000:2FF2 0F      rrca
0000:2FF3 0F      rrca                          ; byte2/8
0000:2FF4 E6 1F      and    31
0000:2FF6 6F      ld     l, a                  ; L=byte2/8
0000:2FF7 7C      ld     a, h                  ; byte1
0000:2FF8 2F      cpl
0000:2FF9 E6 F8      and    0F8h ; '0'
0000:2FFB 5F      ld     e, a
0000:2FFC AF      xor    a, a
0000:2FFD 67      ld     h, a
0000:2FFE CB 13      rl     e
0000:3000 17      rla
0000:3001 CB 13      rl     e
0000:3003 17      rla
0000:3004 C6 74      add    a, 74h ; 't'          ; start of video RAM
0000:3006 57      ld     d, a
0000:3007 19      add    hl, de                ; HL = screen address
0000:3008 C9      ret
; End of function sub_0_2FF0
;
; SUBROUTINE
;
0000:3009
0000:3009      sub_0_3009:                  ; CODE XREF: 0000:18DFp
0000:3009 57      ld     d, a                  ; sub_0_1AC3+1DBp ...
0000:3009 0F      rrca
0000:300B DA 22 30   jp     c, loc_0_3022
0000:300E 0E 93      ld     c, 93h ; '6'
0000:3010 0F      rrca
0000:3011 0F      rrca
0000:3012 D2 17 30   jp     nc, loc_0_3017
0000:3015 0E 6C      ld     c, 6Ch ; 'l'
0000:3017
0000:3017      loc_0_3017:                  ; CODE XREF: sub_0_3009+9j
0000:3017 07      rlca
0000:3018 DA 31 30   jp     c, loc_0_3031
0000:301B 79      ld     a, c
0000:301C E6 F0      and    0F0h ; '-'
0000:301E 4F      ld     c, a
0000:301F C3 31 30   jp     loc_0_3031
;

```



```

0000:3022
0000:3022      loc_0_3022:                                ; CODE XREF: sub_0_3009+2↑j
0000:3022 0E B4          ld      c, 0B4h ; '↓'
0000:3024 0F          rrca
0000:3024 0F          rrca
0000:3026 D2 2B 30      jp      nc, loc_0_302B
0000:3029 0E 1E          ld      c, 1Eh
0000:302B
0000:302B      loc_0_302B:                                ; CODE XREF: sub_0_3009+1D↑j
0000:302B CB 50          bit     2, b
0000:302D CA 31 30      jp      z, loc_0_3031
0000:3030 05          dec     b
0000:3031
0000:3031      loc_0_3031:                                ; CODE XREF: sub_0_3009+F↑j
0000:3031 79          ; sub_0_3009+16↑j ...
0000:3031          ld      a, c
0000:3032 0F          rrca
0000:3033 0F          rrca
0000:3034 4F          ld      c, a
0000:3035 E6 03          and     3
0000:3037 B8          cp      b
0000:3038 C2 31 30      jp      nz, loc_0_3031
0000:303B 79          ld      a, c
0000:303C 0F          rrca
0000:303D 0F          rrca
0000:303E E6 03          and     3
0000:3040 FE 03          cp      3
0000:3042 C0          ret     nz
0000:3043 CB 92          res     2, d
0000:3045 15          dec     d
0000:3046 C0          ret     nz
0000:3047 3E 04          ld      a, 4
0000:3049 C9          ret
0000:3049      ; End of function sub_0_3009
0000:3049
0000:304A      ; ██████████ SUBROUTINE ██████████
0000:304A
0000:304A
0000:304A
0000:304A      sub_0_304A:                                ; CODE XREF: 0000:0AF0↑p
0000:304A 11 E0 FF      ; 0000:0B38↑p
0000:304A          ld      de, 0FFE0h
0000:304D 3A 8E 63      ld      a, (unk_0_638E)
0000:3050 4F          ld      c, a
0000:3051 06 00          ld      b, 0
0000:3053 21 00 76      ld      hl, VRAM_start+200h
0000:3056 CD 64 30      call    sub_0_3064
0000:3059 21 C0 75      ld      hl, VRAM_start+1C0h
0000:305C CD 64 30      call    sub_0_3064
0000:305F 21 8E 63      ld      hl, unk_0_638E
0000:3062 35          dec     (hl)
0000:3063 C9          ret
0000:3063      ; End of function sub_0_304A
0000:3063
0000:3064      ; ██████████ SUBROUTINE ██████████
0000:3064
0000:3064
0000:3064
0000:3064      sub_0_3064:                                ; CODE XREF: sub_0_304A+C↑p
0000:3064 09          ; sub_0_304A+12↑p
0000:3064          add     hl, bc
0000:3065 7E          ld      a, (hl)
0000:3066 19          add     hl, de
0000:3067 77          ld      (hl), a
0000:3068 C9          ret
0000:3068      ; End of function sub_0_3064
0000:3068
0000:3069      ; -----
0000:3069
0000:3069      loc_0_3069:                                ; DATA XREF: 0000:0A80↑o
0000:3069 DF          ; 0000:0A84↑o ...
0000:3069          rst     18h
0000:306A 2A C0 63      ld      hl, (unk_0_63C0)
0000:306D 34          inc     (hl)
0000:306E C9          ret
0000:306F
0000:306F      ; ██████████ SUBROUTINE ██████████
0000:306F
0000:306F
0000:306F      sub_0_306F:                                ; CODE XREF: 0000:0AE8↑p
0000:306F 21 AF 62      ; 0000:1732↑p ...
0000:306F          ld      hl, unk_0_62AF
0000:3072 34          inc     (hl)
0000:3073 7E          ld      a, (hl)
0000:3074 E6 07          and     7
0000:3076 C0          ret     nz
0000:3077 21 0B 69      ld      hl, soft_sprite_ram+0Bh
0000:307A 0E FC          ld      c, 0FCh ; '3'
0000:307C FF          rst     38h
0000:307D 0E 81          ld      c, 81h ; 'ġ'
0000:307F 21 09 69      ld      hl, soft_sprite_ram+9
0000:3082 CD 96 30      call    sub_0_3096
0000:3085 21 1D 69      ld      hl, soft_sprite_ram+1Dh
0000:3088 CD 96 30      call    sub_0_3096
0000:308B CD 57 00      call    rand
0000:308E E6 80          and     80h ; 'Ç'
0000:3090 21 2D 69      ld      hl, soft_sprite_ram+2Dh
0000:3093 AE          xor     (hl)
0000:3094 77          ld      (hl), a
0000:3095 C9          ret
0000:3095      ; End of function sub_0_306F
0000:3095
0000:3096      ; ██████████ SUBROUTINE ██████████
0000:3096
0000:3096
0000:3096      sub_0_3096:                                ; CODE XREF: sub_0_306F+13↑p
0000:3096 06 02          ; sub_0_306F+19↑p
0000:3096          ld      b, 2
0000:3098
0000:3098      loc_0_3098:                                ; CODE XREF: sub_0_3096+6↑j
0000:3098 79          ld      a, c
0000:3099 AE          xor     (hl)
0000:309A 77          ld      (hl), a
0000:309B 19          add     hl, de
0000:309C 10 FA      djnz    loc_0_3098

```

```

0000:309E C9          ret
0000:309E          ; End of function sub_0_3096
0000:309E
0000:309F          ; ██████████ SUBROUTINE ██████████
0000:309F
0000:309F          sub_0_309F:                                ; CODE XREF: sub_0_17B+3B↑p
0000:309F E5                                ; 0000:01F7↑p ...
0000:309F          push    hl
0000:30A0 21 C0 60      ld      hl, unk_0_60C0
0000:30A3 3A B0 60      ld      a, (unk_0_60B0)
0000:30A6 6F          ld      l, a
0000:30A7 CB 7E          bit     7, (hl)
0000:30A9 CA BB 30      jp      z, loc_0_30BB
0000:30AC 72          ld      (hl), d
0000:30AD 2C          inc     l
0000:30AE 73          ld      (hl), e
0000:30AF 2C          inc     l
0000:30B0 7D          ld      a, l
0000:30B1 FE C0      cp      0C0h ; 'L'
0000:30B3 D2 B8 30      jp      nc, loc_0_30B8
0000:30B6 3E C0      ld      a, 0C0h ; 'L'
0000:30B8
0000:30B8          loc_0_30B8:      ld      (unk_0_60B0), a                ; CODE XREF: sub_0_309F+14↑j
0000:30B8 32 B0 60
0000:30BB          loc_0_30BB:                                ; CODE XREF: sub_0_309F+A↑j
0000:30BB          pop     hl
0000:30BC C9          ret
0000:30BC          ; End of function sub_0_309F
0000:30BC
0000:30BD          ; ██████████ SUBROUTINE ██████████
0000:30BD
0000:30BD          sub_0_30BD:                                ; CODE XREF: 0000:12A3↑p
0000:30BD 21 50 69                                ; 0000:1615↑p
0000:30BD          ld      hl, soft_sprite_ram+50h
0000:30C0 06 02      ld      b, 2
0000:30C2 CD E4 30      call   sub_0_30E4
0000:30C5 2E 80      ld      l, 80h ; 'Ç'
0000:30C7 06 0A      ld      b, 0Ah
0000:30C9 CD E4 30      call   sub_0_30E4
0000:30CC 2E B8      ld      l, 0B8h ; '©'
0000:30CE 06 0B      ld      b, 0Bh
0000:30D0 CD E4 30      call   sub_0_30E4
0000:30D3 21 0C 6A      ld      hl, soft_sprite_ram+10Ch
0000:30D6 06 05      ld      b, 5
0000:30D8 C3 E4 30      jp      sub_0_30E4
0000:30D8          ; End of function sub_0_30BD
0000:30D8
0000:30DB          ; ██████████ SUBROUTINE ██████████
0000:30DB
0000:30DB          sub_0_30DB:                                ; CODE XREF: 0000:12DF↑p
0000:30DB          ld      hl, soft_sprite_ram+4Ch
0000:30DE 36 00      ld      (hl), 0
0000:30E0 2E 58      ld      l, 58h ; 'X'
0000:30E2 06 06      ld      b, 6
0000:30E2          ; End of function sub_0_30DB
0000:30E2
0000:30E4          ; ██████████ SUBROUTINE ██████████
0000:30E4
0000:30E4          sub_0_30E4:                                ; CODE XREF: sub_0_30BD+5↑p
0000:30E4 7D                                ; sub_0_30BD+C↑p ...
0000:30E4          ld      a, 1
0000:30E5          loc_0_30E5:                                ; CODE XREF: sub_0_30E4+6↑j
0000:30E5          ld      (hl), 0
0000:30E7 C6 04      add     a, 4
0000:30E9 6F          ld      l, a
0000:30EA 10 F9      djnz   loc_0_30E5
0000:30EC C9          ret
0000:30EC          ; End of function sub_0_30E4
0000:30EC
0000:30ED          ; ██████████ SUBROUTINE ██████████
0000:30ED
0000:30ED          sub_0_30ED:                                ; CODE XREF: 0000:198C↑p
0000:30ED          call   sub_0_30FA
0000:30F0 CD 3C 31      call   sub_0_313C                ; spawn fireballs?
0000:30F3 CD B1 31      call   sub_0_31B1                ; process fireball AI?
0000:30F6 CD F3 34      call   sub_0_34F3                ; add fireballs to sprite display
0000:30F9 C9          ret
0000:30F9          ; End of function sub_0_30ED
0000:30F9
0000:30FA          ; ██████████ SUBROUTINE ██████████
0000:30FA
0000:30FA          sub_0_30FA:                                ; CODE XREF: sub_0_30ED↑p
0000:30FA          ld      a, (unk_0_6380)
0000:30FD FE 06      cp      6
0000:30FF 38 02      jr      c, loc_0_3103
0000:3101 3E 05      ld      a, 5
0000:3103
0000:3103          loc_0_3103:                                ; CODE XREF: sub_0_30FA+5↑j
0000:3103 EF          rst     28h                    ; go!
0000:3103          ; _____
0000:3104 10 31      .dw loc_0_3110                ; Jump table
0000:3106 10 31      .dw loc_0_3110
0000:3108 1B 31      .dw loc_0_311B
0000:310A 26 31      .dw loc_0_3126
0000:310C 26 31      .dw loc_0_3126
0000:310E 31 31      .dw loc_0_3131
0000:3110          ; _____
0000:3110
0000:3110          loc_0_3110:                                ; DATA XREF: sub_0_30FA+A↑o
0000:3110 3A 1A 60                                ; sub_0_30FA+C↑o
0000:3110          ld      a, (gen_purpose_timer)
0000:3113 E6 01      and     1

```

```

0000:3115 FE 01      cp      1
0000:3117 C8        ret      z
0000:3118 33        inc      sp
0000:3119 33        inc      sp
0000:311A C9        ret
0000:311B
0000:311B
0000:311B 3A 1A 60      ld      a, (gen_purpose_timer) ; DATA XREF: sub_0_30FA+E|o
0000:311E E6 07      and      7
0000:3120 FE 05      cp      5
0000:3122 F8        ret      m
0000:3123 33        inc      sp
0000:3124 33        inc      sp
0000:3125 C9        ret
0000:3126
0000:3126
0000:3126 3A 1A 60      ld      a, (gen_purpose_timer) ; DATA XREF: sub_0_30FA+10|o
0000:3129 E6 03      and      3
0000:312B FE 03      cp      3
0000:312D F8        ret      m
0000:312E 33        inc      sp
0000:312F 33        inc      sp
0000:3130 C9        ret
0000:3131
0000:3131
0000:3131 3A 1A 60      ld      a, (gen_purpose_timer) ; DATA XREF: sub_0_30FA+14|o
0000:3134 E6 07      and      7
0000:3136 FE 07      cp      7
0000:3138 F8        ret      m
0000:3139 33        inc      sp
0000:313A 33        inc      sp
0000:313B C9        ret
0000:313B ; End of function sub_0_30FA
0000:313C
0000:313C
0000:313C
0000:313C
0000:313C
0000:313C
0000:313C DD 21 00 64      ld      ix, unk_0_6400 ; CODE XREF: sub_0_30ED+3|p
0000:3140 AF        xor      a ; fireball character data
0000:3141 32 A1 63      ld      (unk_0_63A1), a
0000:3144 06 05      ld      b, 5
0000:3146 11 20 00      ld      de, 20h ; ' '
0000:3149
0000:3149 7B 00      ld      a, (ix+0) ; CODE XREF: sub_0_313C+30|j
0000:314C FE 00      cp      0
0000:314E CA 7C 31      jp      z, loc_0_317C
0000:3151 3A A1 63      ld      a, (unk_0_63A1)
0000:3154 3C        inc      a
0000:3155 32 A1 63      ld      (unk_0_63A1), a
0000:3158 3E 01      ld      a, 1
0000:315A DD 77 08      ld      (ix+8), a
0000:315D 3A 17 62      ld      a, (unk_0_6217)
0000:3160 FE 01      cp      1
0000:3162 C2 6A 31      jp      nz, loc_0_316A
0000:3165 3E 00      ld      a, 0
0000:3167 DD 77 08      ld      (ix+8), a
0000:316A
0000:316A DD 19        add      ix, de ; CODE XREF: sub_0_313C+26|j
0000:316A      djnz     loc_0_3149 ; sub_0_313C+45|j ...
0000:316C 10 DB      ld      hl, unk_0_63A0
0000:316E 21 A0 63      ld      (hl), 0
0000:3171 36 00      ld      a, (unk_0_63A1)
0000:3173 3A A1 63      ld      a, (unk_0_63A1)
0000:3176 FE 00      cp      0
0000:3178 C0        ret      nz
0000:3179 33        inc      sp
0000:317A 33        inc      sp
0000:317B C9        ret
0000:317C
0000:317C
0000:317C
0000:317C 3A A1 63      ld      a, (unk_0_63A1) ; CODE XREF: sub_0_313C+12|j
0000:317F FE 05      cp      5
0000:3181 CA 6A 31      jp      z, loc_0_316A
0000:3184 3A 27 62      ld      a, (level_type)
0000:3187 FE 02      cp      2 ; cement level?
0000:3189 C2 95 31      jp      nz, loc_0_3195 ; no, continue
0000:318C 3A A1 63      ld      a, (unk_0_63A1) ; cement level timers
0000:318F 4F        ld      c, a
0000:3190 3A 80 63      ld      a, (unk_0_6380)
0000:3193 B9        cp      c
0000:3194 C8        ret      z
0000:3195
0000:3195
0000:3195 3A A0 63      ld      a, (unk_0_63A0) ; CODE XREF: sub_0_313C+4D|j
0000:3198 FE 01      cp      1 ; spawn a fireball
0000:319A C2 6A 31      jp      nz, loc_0_316A
0000:319D DD 77 00      ld      (ix+0), a
0000:31A0 DD 77 18      ld      (ix+18h), a
0000:31A3 AF        xor      a
0000:31A4 32 A0 63      ld      (unk_0_63A0), a
0000:31A7 3A A1 63      ld      a, (unk_0_63A1)
0000:31AA 3C        inc      a
0000:31AB 32 A1 63      ld      (unk_0_63A1), a
0000:31AE C3 6A 31      jp      loc_0_316A
0000:31AE ; End of function sub_0_313C
0000:31B1
0000:31B1
0000:31B1
0000:31B1
0000:31B1
0000:31B1
0000:31B1
0000:31B1 CD DD 31      call     sub_0_31DD ; CODE XREF: sub_0_30ED+6|p
0000:31B4 AF        xor      a
0000:31B5 32 A2 63      ld      (unk_0_63A2), a
0000:31B8 21 E0 63      ld      hl, unk_0_63E0
0000:31BB 22 C8 63      ld      (unk_0_63C8), hl
0000:31BE

```

```

0000:31BE      loc_0_31BE:      ld      hl, (unk_0_63C8)      ; CODE XREF: sub_0_31B1+28|j
0000:31BE 2A C8 63      ld      bc, 20h ; ' '
0000:31C1 01 20 00      add     hl, bc
0000:31C4 09              ld      (unk_0_63C8), hl
0000:31C5 22 C8 63      ld      a, (hl)
0000:31C8 7E              and     a
0000:31C9 A7              jp      z, loc_0_31D0
0000:31CA CA D0 31      call   sub_0_3202
0000:31CD CD 02 32
0000:31D0
0000:31D0      loc_0_31D0:      ; CODE XREF: sub_0_31B1+19|j
0000:31D0 3A A2 63      ld      a, (unk_0_63A2)
0000:31D3 3C              inc     a
0000:31D4 32 A2 63      ld      (unk_0_63A2), a
0000:31D7 FE 05      cp      5
0000:31D9 C2 BE 31      jp      nz, loc_0_31BE
0000:31DC C9              ret
0000:31DC      ; End of function sub_0_31B1
0000:31DC
0000:31DD      ; ██████████ S U B R O U T I N E ██████████
0000:31DD
0000:31DD      sub_0_31DD:      ; CODE XREF: sub_0_31B1|p
0000:31DD 3A 80 63      ld      a, (unk_0_6380)
0000:31E0 FE 03      cp      3
0000:31E2 F8              ret     m
0000:31E3 CD F6 31      call   sub_0_31F6
0000:31E6 FE 01      cp      1
0000:31E8 C0              ret     nz
0000:31E9 21 39 64      ld      hl, unk_0_6439
0000:31EC 3E 02      ld      a, 2
0000:31EE 77              ld      (hl), a
0000:31EF 21 79 64      ld      hl, unk_0_6479
0000:31F2 3E 02      ld      a, 2
0000:31F4 77              ld      (hl), a
0000:31F5 C9              ret
0000:31F5      ; End of function sub_0_31DD
0000:31F5
0000:31F6      ; ██████████ S U B R O U T I N E ██████████
0000:31F6
0000:31F6      sub_0_31F6:      ; CODE XREF: sub_0_31DD+6|p
0000:31F6 3A 18 60      ld      a, (random_no)
0000:31F9 E6 03      and     3
0000:31FB FE 01      cp      1
0000:31FD C0              ret     nz
0000:31FE 3A 1A 60      ld      a, (gen_purpose_timer)
0000:3201 C9              ret
0000:3201      ; End of function sub_0_31F6
0000:3201
0000:3202      ; ██████████ S U B R O U T I N E ██████████
0000:3202
0000:3202      sub_0_3202:      ; CODE XREF: sub_0_31B1+1C|p
0000:3202 DD 2A C8 63      ld      ix, (unk_0_63C8)
0000:3206 DD 7E 18      ld      a, (ix+18h)
0000:3209 FE 01      cp      1
0000:320B CA 7A 32      jp      z, loc_0_327A
0000:320E DD 7E 0D      ld      a, (ix+0Dh)
0000:3211 FE 04      cp      4
0000:3213 F2 30 32      jp      p, loc_0_3230
0000:3216 DD 7E 19      ld      a, (ix+19h)
0000:3219 FE 02      cp      2
0000:321B CA 7E 32      jp      z, loc_0_327E
0000:321E CD 0F 33      call   sub_0_330F
0000:3221 3A 18 60      ld      a, (random_no)
0000:3224 E6 03      and     3
0000:3226 C2 33 32      jp      nz, loc_0_3233
0000:3229
0000:3229      loc_0_3229:      ; CODE XREF: sub_0_3202+7F|j
0000:3229 DD 7E 0D      ld      a, (ix+0Dh)
0000:322C A7              and     a
0000:322D CA 57 32      jp      z, loc_0_3257
0000:3230
0000:3230      loc_0_3230:      ; CODE XREF: sub_0_3202+11|j
0000:3230 CD 3D 33      call   sub_0_333D
0000:3233
0000:3233      loc_0_3233:      ; CODE XREF: sub_0_3202+24|j
0000:3233 DD 7E 0D      ld      a, (ix+0Dh)
0000:3236 FE 04      cp      4
0000:3238 F2 91 32      jp      p, loc_0_3291
0000:323B CD AD 33      call   sub_0_33AD
0000:323E CD 8C 29      call   sub_0_298C
0000:3241 FE 01      cp      1
0000:3243 CA 97 32      jp      z, loc_0_3297
0000:3246 DD 2A C8 63      ld      ix, (unk_0_63C8)
0000:324A DD 7E 0E      ld      a, (ix+0Eh)
0000:324D FE 10      cp      10h
0000:324F DA 8C 32      jp      c, loc_0_328C
0000:3252 FE F0      cp      0F0h ; '-'
0000:3254 D2 84 32      jp      nc, loc_0_3284
0000:3257
0000:3257      loc_0_3257:      ; CODE XREF: sub_0_3202+2B|j
0000:3257 DD 7E 13      ; sub_0_3202+87|j ...
0000:3257
0000:3257      ld      a, (ix+13h)
0000:325A FE 00      cp      0
0000:325C C2 B9 32      jp      nz, loc_0_32B9
0000:325F 3E 11      ld      a, 11h
0000:3261
0000:3261      loc_0_3261:      ; CODE XREF: sub_0_3202+B8|j
0000:3261 DD 77 13      ld      (ix+13h), a
0000:3264 16 00      ld      d, 0
0000:3266 5F      ld      e, a
0000:3267 21 7A 3A      ld      hl, fireball_bouncing_data
0000:326A 19      add     hl, de
0000:326B 7E      ld      a, (hl)
0000:326C DD 46 0E      ld      b, (ix+0Eh)
0000:326F DD 70 03      ld      (ix+3), b
0000:3272 DD 4E 0F      ld      c, (ix+0Fh)
0000:3275 81      add     a, c
0000:3276 DD 77 05      ld      (ix+5), a
0000:3279 C9              ret
0000:327A      ;

```

```

0000:327A      loc_0_327A:                                     ; CODE XREF: sub_0_3202+9↑j
0000:327A      call      sub_0_32BD
0000:327D      C9                                     ;
0000:327E      ;
0000:327E      loc_0_327E:                                     ; CODE XREF: sub_0_3202+19↑j
0000:327E      CD D6 32      call      sub_0_32D6
0000:3281      C3 29 32      jp       loc_0_3229
0000:3284      ;
0000:3284      loc_0_3284:                                     ; CODE XREF: sub_0_3202+52↑j
0000:3284      3E 02      ld       a, 2
0000:3286      loc_0_3286:                                     ; CODE XREF: sub_0_3202+8C↑j
0000:3286      DD 77 0D      ld       (ix+0Dh), a
0000:3289      C3 57 32      jp       loc_0_3257
0000:328C      ;
0000:328C      loc_0_328C:                                     ; CODE XREF: sub_0_3202+4D↑j
0000:328C      3E 01      ld       a, 1
0000:328E      C3 86 32      jp       loc_0_3286
0000:3291      ;
0000:3291      loc_0_3291:                                     ; CODE XREF: sub_0_3202+36↑j
0000:3291      CD E7 33      call      sub_0_33E7
0000:3294      C3 57 32      jp       loc_0_3257
0000:3297      ;
0000:3297      loc_0_3297:                                     ; CODE XREF: sub_0_3202+41↑j
0000:3297      DD 2A C8 63      ld       ix, (unk_0_63C8)
0000:329B      DD 7E 0D      ld       a, (ix+0Dh)
0000:329E      FE 01      cp       1
0000:32A0      C2 B1 32      jp       nz, loc_0_32B1
0000:32A3      3E 02      ld       a, 2
0000:32A5      DD 35 0E      dec      (ix+0Eh)
0000:32A8      ;
0000:32A8      loc_0_32A8:                                     ; CODE XREF: sub_0_3202+B4↑j
0000:32A8      DD 77 0D      ld       (ix+0Dh), a
0000:32AB      CD C3 33      call      sub_0_33C3
0000:32AE      C3 57 32      jp       loc_0_3257
0000:32B1      ;
0000:32B1      loc_0_32B1:                                     ; CODE XREF: sub_0_3202+9E↑j
0000:32B1      3E 01      ld       a, 1
0000:32B3      DD 34 0E      inc      (ix+0Eh)
0000:32B6      C3 A8 32      jp       loc_0_32A8
0000:32B9      ;
0000:32B9      loc_0_32B9:                                     ; CODE XREF: sub_0_3202+5A↑j
0000:32B9      3D      dec      a
0000:32BA      C3 61 32      jp       loc_0_3261
0000:32BA      ; End of function sub_0_3202
0000:32BD      ;
0000:32BD      ; SUBROUTINE
0000:32BD      ;
0000:32BD      sub_0_32BD:                                     ; CODE XREF: sub_0_3202+78↑p
0000:32BD      3A 27 62      ld       a, (level_type)
0000:32C0      FE 01      cp       1
0000:32C2      CA CE 32      jp       z, loc_0_32CE
0000:32C5      FE 02      cp       2
0000:32C7      CA D2 32      jp       z, loc_0_32D2
0000:32CA      CD B9 34      call      sub_0_34B9
0000:32CD      C9                                     ;
0000:32CE      ;
0000:32CE      loc_0_32CE:                                     ; CODE XREF: sub_0_32BD+5↑j
0000:32CE      CD 2C 34      call      sub_0_342C
0000:32D1      C9                                     ;
0000:32D2      ;
0000:32D2      loc_0_32D2:                                     ; CODE XREF: sub_0_32BD+A↑j
0000:32D2      CD 78 34      call      sub_0_3478
0000:32D5      C9      ret
0000:32D5      ; End of function sub_0_32BD
0000:32D6      ;
0000:32D6      ; SUBROUTINE
0000:32D6      ;
0000:32D6      sub_0_32D6:                                     ; CODE XREF: sub_0_3202+7C↑p
0000:32D6      DD 7E 1C      ld       a, (ix+1Ch)
0000:32D9      FE 00      cp       0
0000:32DB      C2 FD 32      jp       nz, loc_0_32FD
0000:32DE      DD 7E 1D      ld       a, (ix+1Dh)
0000:32E1      FE 01      cp       1
0000:32E3      C2 0B 33      jp       nz, loc_0_330B
0000:32E6      DD 36 1D 00      ld       (ix+1Dh), 0
0000:32EA      3A 05 62      ld       a, (mario_y)
0000:32ED      DD 46 0F      ld       b, (ix+0Fh)
0000:32F0      90      sub      b
0000:32F1      DA 03 33      jp       c, loc_0_3303
0000:32F4      DD 36 1C FF      ld       (ix+1Ch), 0FFh
0000:32F8      ;
0000:32F8      loc_0_32F8:                                     ; CODE XREF: sub_0_32D6+2A↑j
0000:32F8      DD 36 0D 00      ld       (ix+0Dh), 0
0000:32FC      C9      ret
0000:32FD      ;
0000:32FD      loc_0_32FD:                                     ; CODE XREF: sub_0_32D6+5↑j
0000:32FD      DD 35 1C      dec      (ix+1Ch)
0000:3300      C2 F8 32      jp       nz, loc_0_32F8
0000:3303      ;
0000:3303      loc_0_3303:                                     ; CODE XREF: sub_0_32D6+1B↑j
0000:3303      DD 36 19 00      ld       (ix+19h), 0
0000:3307      DD 36 1C 00      ld       (ix+1Ch), 0
0000:330B      ;
0000:330B      loc_0_330B:                                     ; CODE XREF: sub_0_32D6+D↑j
0000:330B      CD 0F 33      call      sub_0_330F
0000:330E      C9      ret
0000:330E      ; End of function sub_0_32D6
0000:330F      ;
0000:330F      ; SUBROUTINE
0000:330F      ;

```

```

0000:330F
0000:330F
0000:330F      sub_0_330F:                                ; CODE XREF: sub_0_3202+1C↑p
0000:330F DD 7E 16                                ; sub_0_32D6+35↑p
0000:330F      ld      a, (ix+16h)
0000:3312 FE 00      cp      0
0000:3314 C2 32 33      jp      nz, loc_0_3332
0000:3317 DD 36 16 2B      ld      (ix+16h), 2Bh ; '+'
0000:331B DD 36 0D 00      ld      (ix+0Dh), 0
0000:331F 3A 18 60      ld      a, (random_no)
0000:3322 0F      rrca
0000:3323 D2 32 33      jp      nc, loc_0_3332
0000:3326 DD 7E 0D      ld      a, (ix+0Dh)
0000:3329 FE 01      cp      1
0000:332B CA 36 33      jp      z, loc_0_3336
0000:332E DD 36 0D 01      ld      (ix+0Dh), 1
0000:3332
0000:3332      loc_0_3332:                                ; CODE XREF: sub_0_330F+5↑j
0000:3332 DD 35 16                                ; sub_0_330F+14↑j ...
0000:3332      dec      (ix+16h)
0000:3335 C9      ret
0000:3336
0000:3336      ; _____
0000:3336      loc_0_3336:                                ; CODE XREF: sub_0_330F+1C↑j
0000:3336 DD 36 0D 02      ld      (ix+0Dh), 2
0000:333A C3 32 33      jp      loc_0_3332
0000:333A      ; End of function sub_0_330F
0000:333A
0000:333D      ; ██████████ S U B R O U T I N E ██████████
0000:333D
0000:333D      sub_0_333D:                                ; CODE XREF: sub_0_3202+2E↑p
0000:333D DD 7E 0D      ld      a, (ix+0Dh)
0000:3340 FE 08      cp      8
0000:3342 CA 71 33      jp      z, loc_0_3371
0000:3345 FE 04      cp      4
0000:3347 CA 8A 33      jp      z, loc_0_338A
0000:334A CD A1 33      call    sub_0_33A1
0000:334D DD 7E 0F      ld      a, (ix+0Fh)
0000:3350 C6 08      add     a, 8
0000:3352 57      ld      d, a
0000:3353 DD 7E 0E      ld      a, (ix+0Eh)
0000:3356 01 15 00      ld      bc, 15h
0000:3359 CD 6E 23      call    sub_0_236E
0000:335C A7      and     a
0000:335D CA 99 33      jp      z, loc_0_3399
0000:3360 DD 70 1F      ld      (ix+1Fh), b
0000:3363 3A 05 62      ld      a, (mario_y)
0000:3366 47      ld      b, a
0000:3367 DD 7E 0F      ld      a, (ix+0Fh)
0000:336A 90      sub     b, a
0000:336B D0      ret     nc
0000:336C DD 36 0D 04      ld      (ix+0Dh), 4
0000:3370 C9      ret
0000:3371
0000:3371      ; _____
0000:3371      loc_0_3371:                                ; CODE XREF: sub_0_333D+5↑j
0000:3371 DD 7E 0F      ld      a, (ix+0Fh)
0000:3374 C6 08      add     a, 8
0000:3376 DD 46 1F      ld      b, (ix+1Fh)
0000:3379 B8      cp      b
0000:337A C0      ret     nz
0000:337B DD 36 0D 00      ld      (ix+0Dh), 0
0000:337F DD 7E 19      ld      a, (ix+19h)
0000:3382 FE 02      cp      2
0000:3384 C0      ret     nz
0000:3385 DD 36 1D 01      ld      (ix+1Dh), 1
0000:3389 C9      ret
0000:338A
0000:338A      ; _____
0000:338A      loc_0_338A:                                ; CODE XREF: sub_0_333D+A↑j
0000:338A DD 7E 0F      ld      a, (ix+0Fh)
0000:338D C6 08      add     a, 8
0000:338F DD 46 1F      ld      b, (ix+1Fh)
0000:3392 B8      cp      b
0000:3393 C0      ret     nz
0000:3394 DD 36 0D 00      ld      (ix+0Dh), 0
0000:3398 C9      ret
0000:3399
0000:3399      ; _____
0000:3399      loc_0_3399:                                ; CODE XREF: sub_0_333D+20↑j
0000:3399 DD 70 1F      ld      (ix+1Fh), b
0000:339C DD 36 0D 08      ld      (ix+0Dh), 8
0000:33A0 C9      ret
0000:33A0      ; End of function sub_0_333D
0000:33A0
0000:33A1      ; ██████████ S U B R O U T I N E ██████████
0000:33A1
0000:33A1      sub_0_33A1:                                ; CODE XREF: sub_0_333D+D↑p
0000:33A1 3E 07      ld      a, 7
0000:33A3 F7      rst     30h          ; return if level bit not set
0000:33A4 DD 7E 0F      ld      a, (ix+0Fh)
0000:33A7 FE 59      cp      59h ; 'Y'
0000:33A9 D0      ret     nc
0000:33AA 33      inc     sp
0000:33AB 33      inc     sp
0000:33AC C9      ret
0000:33AC      ; End of function sub_0_33A1
0000:33AC
0000:33AD      ; ██████████ S U B R O U T I N E ██████████
0000:33AD
0000:33AD      sub_0_33AD:                                ; CODE XREF: sub_0_3202+39↑p
0000:33AD DD 7E 0D      ld      a, (ix+0Dh)
0000:33B0 FE 01      cp      1
0000:33B2 CA D9 33      jp      z, loc_0_33D9
0000:33B5 DD 7E 07      ld      a, (ix+7)
0000:33B8 E6 7F      and     7Fh ; ' '
0000:33BA DD 77 07      ld      (ix+7), a
0000:33BD DD 35 0E      dec     (ix+0Eh)
0000:33C0
0000:33C0      loc_0_33C0:                                ; CODE XREF: 0000:33E4↑j

```

```

0000:33C0 CD 09 34      call    sub_0_3409
0000:33C0      ; End of function sub_0_33AD
0000:33C0
0000:33C3
0000:33C3      ; ██████████ SUBROUTINE ██████████
0000:33C3
0000:33C3      sub_0_33C3:                                ; CODE XREF: sub_0_3202+A9↑p
0000:33C3 3A 27 62      ld      a, (level_type)
0000:33C6 FE 01      cp      1
0000:33C8 C0          ret     nz
0000:33C9 DD 66 0E      ld      h, (ix+0Eh)
0000:33CC DD 6E 0F      ld      l, (ix+0Fh)
0000:33CF DD 46 0D      ld      b, (ix+0Dh)
0000:33D2 CD 33 23      call    sub_0_2333
0000:33D5 DD 75 0F      ld      (ix+0Fh), l
0000:33D8 C9          ret
0000:33D8      ; End of function sub_0_33C3
0000:33D8
0000:33D9
0000:33D9      ;
0000:33D9
0000:33D9      loc_0_33D9:                                ; CODE XREF: sub_0_33AD+5↑j
0000:33D9 DD 7E 07      ld      a, (ix+7)
0000:33DC F6 80      or      80h ; 'Ç'
0000:33DE DD 77 07      ld      (ix+7), a
0000:33E1 DD 34 0E      inc     (ix+0Eh)
0000:33E4 C3 C0 33      jp      loc_0_33C0
0000:33E7
0000:33E7      ; ██████████ SUBROUTINE ██████████
0000:33E7
0000:33E7      sub_0_33E7:                                ; CODE XREF: sub_0_3202+8F↑p
0000:33E7 CD 09 34      call    sub_0_3409
0000:33EA DD 7E 0D      ld      a, (ix+0Dh)
0000:33ED FE 08      cp      8
0000:33EF C2 05 34      jp      nz, loc_0_3405
0000:33F2 DD 7E 14      ld      a, (ix+14h)
0000:33F5 A7          and     a
0000:33F6 C2 01 34      jp      nz, loc_0_3401
0000:33F9 DD 36 14 02      ld      (ix+14h), 2
0000:33FD DD 35 0F      dec     (ix+0Fh)
0000:3400 C9          ret
0000:3401
0000:3401      ;
0000:3401
0000:3401      loc_0_3401:                                ; CODE XREF: sub_0_33E7+F↑j
0000:3401 DD 35 14      dec     (ix+14h)
0000:3404 C9          ret
0000:3405
0000:3405      ;
0000:3405
0000:3405      loc_0_3405:                                ; CODE XREF: sub_0_33E7+8↑j
0000:3405 DD 34 0F      inc     (ix+0Fh)
0000:3408 C9          ret
0000:3408      ; End of function sub_0_33E7
0000:3408
0000:3409
0000:3409      ; ██████████ SUBROUTINE ██████████
0000:3409
0000:3409
0000:3409      sub_0_3409:                                ; CODE XREF: sub_0_33AD+13↑p
0000:3409 DD 7E 15      ld      a, (ix+15h)
0000:3409      ; sub_0_33E7↑p
0000:340C A7          and     a
0000:340D C2 28 34      jp      nz, loc_0_3428
0000:3410 DD 36 15 02      ld      (ix+15h), 2
0000:3414 DD 34 07      inc     (ix+7)
0000:3417 DD 7E 07      ld      a, (ix+7)
0000:341A E6 0F      and     0Fh
0000:341C FE 0F      cp      0Fh
0000:341E C0          ret     nz
0000:341F DD 7E 07      ld      a, (ix+7)
0000:3422 EE 02      xor     2
0000:3424 DD 77 07      ld      (ix+7), a
0000:3427 C9          ret
0000:3428
0000:3428      ;
0000:3428
0000:3428      loc_0_3428:                                ; CODE XREF: sub_0_3409+4↑j
0000:3428 DD 35 15      dec     (ix+15h)
0000:342B C9          ret
0000:342B      ; End of function sub_0_3409
0000:342B
0000:342C
0000:342C      ; ██████████ SUBROUTINE ██████████
0000:342C
0000:342C
0000:342C      sub_0_342C:                                ; CODE XREF: sub_0_32BD+11↑p
0000:342C DD 6E 1A      ld      l, (ix+1Ah)
0000:342F DD 66 1B      ld      h, (ix+1Bh)
0000:3432 AF          xor     a
0000:3433 01 00 00      ld      bc, 0
0000:3436 ED 4A      adc     hl, bc
0000:3438 C2 42 34      jp      nz, loc_0_3442
0000:343B 21 8C 3A      ld      hl, fireball_bounce_data
0000:343E DD 36 03 26      ld      (ix+3), 26h ; '&'
0000:3442
0000:3442      loc_0_3442:                                ; CODE XREF: sub_0_342C+C↑j
0000:3442 DD 34 03      inc     (ix+3)
0000:3445
0000:3445      loc_0_3445:                                ; CODE XREF: sub_0_3478+2D↑j
0000:3445      ; sub_0_3478+3E↑j
0000:3445 7E          ld      a, (hl)
0000:3445 FE AA      cp      0AAh ; '-'
0000:3448 CA 56 34      jp      z, loc_0_3456
0000:344B DD 77 05      ld      (ix+5), a
0000:344E 23          inc     hl
0000:344F DD 75 1A      ld      (ix+1Ah), l
0000:3452 DD 74 1B      ld      (ix+1Bh), h
0000:3455 C9          ret
0000:3456
0000:3456      ;
0000:3456
0000:3456      loc_0_3456:                                ; CODE XREF: sub_0_342C+1C↑j
0000:3456 AF          xor     a
0000:3457 DD 77 13      ld      (ix+13h), a
0000:345A DD 77 18      ld      (ix+18h), a
0000:345D DD 77 0D      ld      (ix+0Dh), a
0000:3460 DD 77 1C      ld      (ix+1Ch), a
0000:3463 DD 7E 03      ld      a, (ix+3)

```

```

0000:3466 DD 77 0E      ld      (ix+0Eh), a
0000:3469 DD 7E 05      ld      a, (ix+5)
0000:346C DD 77 0F      ld      (ix+0Fh), a
0000:346F DD 36 1A 00    ld      (ix+1Ah), 0
0000:3473 DD 36 1B 00    ld      (ix+1Bh), 0
0000:3477 C9              ret
0000:3477              ; End of function sub_0_342C
0000:3478
0000:3478              ; ██████████ SUBROUTINE ██████████
0000:3478
0000:3478 sub_0_3478:              ; CODE XREF: sub_0_32BD+15↑p
0000:3478 DD 6E 1A      ld      l, (ix+1Ah)
0000:347B DD 66 1B      ld      h, (ix+1Bh)
0000:347E AF          xor      a
0000:347F 01 00 00    ld      bc, 0
0000:3482 ED 4A      adc     hl, bc
0000:3484 C2 9A 34    jp      nz, loc_0_349A
0000:3487 21 AC 3A    ld      hl, cement_fireball_data
0000:348A 3A 03 62    ld      a, (mario_x)
0000:348D CB 7F      bit     7, a
0000:348F CA A8 34    jp      z, loc_0_34A8
0000:3492 DD 36 0D 01    ld      (ix+0Dh), 1
0000:3496 DD 36 03 7E    ld      (ix+3), 7Eh ; '~'
0000:349A
0000:349A loc_0_349A:              ; CODE XREF: sub_0_3478+C↑j
0000:349A DD 7E 0D              ; sub_0_3478+38↑j
0000:349A          ld      a, (ix+0Dh)
0000:349D FE 01      cp      1
0000:349F C2 B3 34    jp      nz, loc_0_34B3
0000:34A2 DD 34 03      inc     (ix+3)
0000:34A5 C3 45 34    jp      loc_0_3445
0000:34A8
0000:34A8 loc_0_34A8:              ; CODE XREF: sub_0_3478+17↑j
0000:34A8 DD 36 0D 02    ld      (ix+0Dh), 2
0000:34AC DD 36 03 80    ld      (ix+3), 80h ; 'G'
0000:34B0 C3 9A 34    jp      loc_0_349A
0000:34B3
0000:34B3 loc_0_34B3:              ; CODE XREF: sub_0_3478+27↑j
0000:34B3 DD 35 03      dec     (ix+3)
0000:34B6 C3 45 34    jp      loc_0_3445
0000:34B6              ; End of function sub_0_3478
0000:34B9
0000:34B9              ; ██████████ SUBROUTINE ██████████
0000:34B9
0000:34B9 sub_0_34B9:              ; CODE XREF: sub_0_32BD+D↑p
0000:34B9 3A 27 62    ld      a, (level_type)
0000:34BC FE 03      cp      3
0000:34BE C8          ret     z
0000:34BF 3A 03 62    ld      a, (mario_x)
0000:34C2 CB 7F      bit     7, a
0000:34C4 C2 ED 34    jp      nz, loc_0_34ED
0000:34C7 21 C4 3A    ld      hl, rivet_fireball_data
0000:34CA
0000:34CA loc_0_34CA:              ; CODE XREF: sub_0_34B9+37↑j
0000:34CA          ld      b, 0
0000:34CC 3A 19 60    ld      a, (random_no+1)
0000:34CF E6 06      and     6
0000:34D1 4F      ld      c, a
0000:34D2 09      add     hl, bc
0000:34D3 7E      ld      a, (hl)
0000:34D4 DD 77 03    ld      (ix+3), a
0000:34D7 DD 77 0E    ld      (ix+0Eh), a
0000:34DA 23      inc     hl
0000:34DB 7E      ld      a, (hl)
0000:34DC DD 77 05    ld      (ix+5), a
0000:34DF DD 77 0F    ld      (ix+0Fh), a
0000:34E2 AF          xor      a
0000:34E3 DD 77 0D    ld      (ix+0Dh), a
0000:34E6 DD 77 18    ld      (ix+18h), a
0000:34E9 DD 77 1C    ld      (ix+1Ch), a
0000:34EC C9          ret
0000:34ED
0000:34ED loc_0_34ED:              ; CODE XREF: sub_0_34B9+B↑j
0000:34ED          ld      hl, rivet_fireball_start_points
0000:34F0 C3 CA 34    jp      loc_0_34CA
0000:34F0              ; End of function sub_0_34B9
0000:34F3
0000:34F3              ; ██████████ SUBROUTINE ██████████
0000:34F3
0000:34F3 sub_0_34F3:              ; CODE XREF: sub_0_30ED+9↑p
0000:34F3          ld      hl, unk_0_6400          ; fireball character data
0000:34F6 11 D0 69    ld      de, soft_sprite_ram+0D0h ; fireballs in sprite ram
0000:34F9 06 05      ld      b, 5              ; 5 fireballs (max)
0000:34FB
0000:34FB loc_0_34FB:              ; CODE XREF: sub_0_34F3+28↑j
0000:34FB          ld      a, (hl)
0000:34FC A7      and     a
0000:34FD CA 1E 35    jp      z, loc_0_351E
0000:3500 2C      inc     l
0000:3501 2C      inc     l
0000:3502 2C      inc     l
0000:3503 7E      ld      a, (hl)          ; fireball X coordinate
0000:3504 12      ld      (de), a
0000:3505 3E 04      ld      a, 4
0000:3507 85      add     a, l
0000:3508 6F      ld      l, a
0000:3509 1C      inc     e
0000:350A 7E      ld      a, (hl)          ; fireball sprite tile #
0000:350B 12      ld      (de), a
0000:350C 2C      inc     l
0000:350D 1C      inc     e
0000:350E 7E      ld      a, (hl)          ; fireball palette
0000:350F 12      ld      (de), a
0000:3510 2D      dec     l
0000:3511 2D      dec     l
0000:3512 2D      dec     l
0000:3513 1C      inc     e

```



```

0000:3514 7E      ld      a, (hl)                ; fireball Y coord
0000:3515 12      ld      (de), a
0000:3516 13      inc     de
0000:3517
0000:3517      loc_0_3517:                  ; CODE XREF: sub_0_34F3+33|j
0000:3517 3E 1B      ld      a, 1Bh
0000:3519 85      add     a, 1
0000:351A 6F      ld      l, a
0000:351B 10 DE     djnz    loc_0_34FB
0000:351D C9      ret
0000:351E
0000:351E      loc_0_351E:                  ; CODE XREF: sub_0_34F3+A|j
0000:351E 3E 05      ld      a, 5
0000:3520 85      add     a, 1
0000:3521 6F      ld      l, a
0000:3522 3E 04      ld      a, 4
0000:3524 83      add     a, e
0000:3525 5F      ld      e, a
0000:3526 C3 17 35   jp      loc_0_3517
0000:3526      ; End of function sub_0_34F3
0000:3526
0000:3526      ;
0000:3529 00 00 00   Bonus_Points_Tbl:.db 0, 0, 0      ; DATA XREF: sub_0_51C+9|o
0000:3529                                     ; 0 pts
0000:352C 00 01 00   .db 0, 1, 0                      ; 100 pts
0000:352F 00 02 00   .db 0, 2, 0                      ; 200 pts
0000:3532 00 03 00   .db 0, 3, 0                      ; 300 pts
0000:3535 00 04 00   .db 0, 4, 0                      ; 400 pts
0000:3538 00 05 00   .db 0, 5, 0                      ; 500 pts
0000:353B 00 06 00   .db 0, 6, 0                      ; 600 pts
0000:353E 00 07 00   .db 0, 7, 0                      ; 700 pts
0000:3541 00 08 00   .db 0, 8, 0                      ; 800 pts
0000:3544 00 09 00   .db 0, 9, 0                      ; 900 pts
0000:3547 00 00 00   .db 0, 0, 0                      ; 0 pts
0000:354A 00 10 00   .db 0, 10h, 0                   ; 1000 pts
0000:354D 00 20 00   .db 0, 20h, 0                   ; 2000 pts
0000:3550 00 30 00   .db 0, 30h, 0                   ; 3000 pts
0000:3553 00 40 00   .db 0, 40h, 0                   ; 4000 pts
0000:3556 00 50 00   .db 0, 50h, 0                   ; 5000 pts
0000:3559 00 60 00   .db 0, 60h, 0                   ; 6000 pts
0000:355C 00 70 00   .db 0, 70h, 0                   ; 7000 pts
0000:355F 00 80 00   .db 0, 80h, 0                   ; 8000 pts
0000:3562 00 90 00   .db 0, 90h, 0                   ; 9000 pts
0000:3565 94 77   high_score_tbl:.dw VRAM_start+394h ; DATA XREF: sub_0_207+53|o
0000:3567 01 23 24 10+ .db 1, 23h, 24h, 10h, 10h, 0, 0, 7, 6, 5, 0, 10h, 10h
0000:3567 10 00 00 07+ .db 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h
0000:3567 06 05 00 10+ .db 10h, 3Fh, 0, 50h, 76h, 0
0000:3585 F4 76      .dw VRAM_start+2F4h
0000:3587 96 77      .dw VRAM_start+396h
0000:3589 02 1E 14 10+ .db 2, 1Eh, 14h, 10h, 10h, 0, 0, 6, 1, 0, 0, 10h, 10h
0000:3589 10 00 00 06+ .db 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h
0000:3589 01 00 00 10+ .db 10h, 3Fh, 0, 0, 61h, 0
0000:35A7 F6 76      .dw VRAM_start+2F6h
0000:35A9 98 77      .dw VRAM_start+398h
0000:35AB 03 22 14 10+ .db 3, 22h, 14h, 10h, 10h, 0, 0, 5, 9, 5, 0, 10h, 10h
0000:35AB 10 00 00 05+ .db 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h
0000:35AB 09 05 00 10+ .db 10h, 3Fh, 0, 50h, 59h, 0
0000:35C9 F8 76      .dw VRAM_start+2F8h
0000:35CB 9A 77      .dw VRAM_start+39Ah
0000:35CD 04 24 18 10+ .db 4, 24h, 18h, 10h, 10h, 0, 0, 5, 0, 5, 0, 10h, 10h
0000:35CD 10 00 00 05+ .db 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h
0000:35CD 00 05 00 10+ .db 10h, 3Fh, 0, 50h, 50h, 0
0000:35EB FA 76      .dw VRAM_start+2FAh
0000:35ED 9C 77      .dw VRAM_start+39Ch
0000:35EF 05 24 18 10+ .db 5, 24h, 18h, 10h, 10h, 0, 0, 4, 3, 0, 0, 10h, 10h
0000:35EF 10 00 00 04+ .db 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h, 10h
0000:35EF 03 00 00 10+ .db 10h, 3Fh, 0, 0, 43h, 0
0000:360D FC 76      .dw VRAM_start+2FCh
0000:360F 3B 5C 4B 5C+letter_coords: .db 3Bh, 5Ch, 4Bh, 5Ch, 5Bh, 5Ch, 6Bh, 5Ch, 7Bh, 5Ch, 8Bh
0000:360F 5B 5C 6B 5C+                                     ; DATA XREF: sub_0_15FA+4|o
0000:360F 7B 5C 8B 5C+ .db 5Ch, 9Bh, 5Ch, 0ABh, 5Ch, 0BBh, 5Ch, 0CBh, 5Ch, 3Bh
0000:360F 9B 5C AB 5C+ .db 6Ch, 4Bh, 6Ch, 5Bh, 6Ch, 6Bh, 6Ch, 7Bh, 6Ch, 8Bh, 6Ch
0000:360F BB 5C CB 5C+ .db 9Bh, 6Ch, 0ABh, 6Ch, 0BBh, 6Ch, 0CBh, 6Ch, 3Bh, 7Ch
0000:360F 3B 6C 4B 6C+ .db 4Bh, 7Ch, 5Bh, 7Ch, 6Bh, 7Ch, 7Bh, 7Ch, 8Bh, 7Ch, 9Bh
0000:360F 5B 6C 6B 6C+ .db 7Ch, 0ABh, 7Ch, 0BBh, 7Ch, 0CBh, 7Ch
0000:364B 8B 36      message_table: .dw aGAME_OVER
0000:364D 01 00      .dw 1
0000:364F 98 36      .dw aPLAYER
0000:3651 A5 36      .dw aPLAYER_
0000:3653 B2 36      .dw aHIGH_SCORE
0000:3655 BF 36      .dw aCREDIT
0000:3657 06 00      .dw 6
0000:3659 CC 36      .dw aHOW_HIGH_CAN_YOU_GET
0000:365B 08 00      .dw 8
0000:365D E6 36      .dw aONLY_1_PLAYER_BUTTON
0000:365F FD 36      .dw a1_OR_2_PLAYERS
0000:3661 0B 00      .dw 0Bh
0000:3663 15 37      .dw aPUSH
0000:3665 1C 37      .dw aNAME_REGISTRATION
0000:3667 30 37      .dw aNAME
0000:3669 38 37      .dw a???
0000:366B 47 37      .dw aA_B_C_D_E_F_G_H_I_J
0000:366D 5D 37      .dw aK_L_M_N_O_P_Q_R_S_T
0000:366F 73 37      .dw aU_V_W_X_Y_Z_rub_end
0000:3671 8B 37      .dw aREGI_TIME
0000:3673 00 61      .dw 6100h
0000:3675 22 61      .dw 6122h
0000:3677 44 61      .dw 6144h
0000:3679 66 61      .dw 6166h
0000:367B 88 61      .dw 6188h
0000:367D 9E 37      .dw aRANK_SCORE_NAME
0000:367F B6 37      .dw aYOUR_NAME_WAS_REGISTERED
0000:3681 D2 37      .dw aINSERT_COIN
0000:3683 E1 37      .dw aPLAYER_COIN
0000:3685 1D 00      .dw 1Dh
0000:3687 00 3F      .dw byte_0_3EFF+1
0000:3689 09 3F      .dw byte_0_3F09
0000:368B 96 76 17 11+aGAME_OVER: .db 96h, 76h, 17h, 11h, 1Dh, 15h, 10h, 10h, 1Fh, 26h, 15h
0000:368B 1D 15 10 10+                                     ; DATA XREF: 0000:364B|o
0000:368B 1F 26 15 22+ .db 22h, 3Fh
0000:3698 94 76 20 1C+aPLAYER: .db 94h, 76h, 20h, 1Ch, 11h, 29h, 15h, 22h, 10h, 30h, 32h
0000:3698 11 29 15 22+                                     ; DATA XREF: 0000:364F|o
0000:3698 10 30 32 31+ .db 31h, 3Fh
0000:36A5 94 76 20 1C+aPLAYER_: .db 94h, 76h, 20h, 1Ch, 11h, 29h, 15h, 22h, 10h, 30h, 33h
0000:36A5 11 29 15 22+                                     ; DATA XREF: 0000:3651|o

```

```

0000:36A5 10 30 33 31+      .db 31h, 3Fh
0000:36B2 80 76 18 19+aHIGH_SCORE: .db 80h, 76h, 18h, 19h, 17h, 18h, 10h, 23h, 13h, 1Fh, 22h
0000:36B2 17 18 10 23+      ; DATA XREF: 0000:3653|o
0000:36B2 13 1F 22 15+      .db 15h, 3Fh
0000:36BF 9F 75 13 22+aCREDIT: .db 9Fh, 75h, 13h, 22h, 15h, 14h, 19h, 24h, 10h, 10h, 10h
0000:36BF 15 14 19 24+      ; DATA XREF: 0000:3655|o
0000:36BF 10 10 10 10+      .db 10h, 3Fh
0000:36CC 5E 77 18 1F+aHOW_HIGH_CAN_YOU_GET: .db 5Eh, 77h, 18h, 1Fh, 27h, 10h, 18h, 19h, 17h, 18h, 10h
0000:36CC 27 10 18 19+      ; DATA XREF: 0000:3659|o
0000:36CC 17 18 10 13+      .db 13h, 11h, 1Eh, 10h, 29h, 1Fh, 25h, 10h, 17h, 15h, 24h
0000:36CC 11 1E 10 29+      .db 10h, 0FBh, 10h, 3Fh
0000:36E6 29 77 1F 1E+aONLY_1_PLAYER_BUTTON: .db 29h, 77h, 1Fh, 1Eh, 1Ch, 29h, 10h, 1, 10h, 20h, 1Ch
0000:36E6 1C 29 10 01+      ; DATA XREF: 0000:365D|o
0000:36E6 10 20 1C 11+      .db 11h, 29h, 15h, 22h, 10h, 12h, 25h, 24h, 24h, 1Fh, 1Eh
0000:36E6 29 15 22 10+      .db 3Fh
0000:36FD 29 77 01 10+a1_OR_2_PLAYERS: .db 29h, 77h, 1, 10h, 1Fh, 22h, 10h, 2, 10h, 20h, 1Ch
0000:36FD 1F 22 10 02+      ; DATA XREF: 0000:365F|o
0000:36FD 10 20 1C 11+      .db 11h, 29h, 15h, 22h, 23h, 10h, 12h, 25h, 24h, 24h, 1Fh
0000:36FD 29 15 22 23+      .db 1Eh, 3Fh
0000:3715 27 76 20 25+aPUSH: .db 27h, 76h, 20h, 25h, 23h, 18h, 3Fh ; DATA XREF: 0000:3663|o
0000:371C 06 77 1E 11+aNAME_REGISTRATION: .db 6, 77h, 1Eh, 11h, 1Dh, 15h, 10h, 22h, 15h, 17h, 19h
0000:371C 1D 15 10 22+      ; DATA XREF: 0000:3665|o
0000:371C 15 17 19 23+      .db 23h, 24h, 22h, 11h, 24h, 19h, 1Fh, 1Eh, 3Fh
0000:3730 88 76 1E 11+aNAME: .db 88h, 76h, 1Eh, 11h, 1Dh, 15h, 2Eh, 3Fh ; DATA XREF: 0000:3667|o
0000:3738 E9 75 2D 2D+a??? : .db 0E9h, 75h, 2Dh, 2Dh, 2Dh, 10h, 10h, 10h, 10h, 10h
0000:3738 2D 10 10 10+      ; DATA XREF: 0000:3669|o
0000:3738 10 10 10 10+      .db 10h, 10h, 10h, 10h, 3Fh
0000:3747 08 77 11 10+aA_B_C_D_E_F_G_H_I_J: .db 08h, 77h, 11h, 10h, 12h, 10h, 13h, 10h, 14h, 10h, 15h
0000:3747 12 10 13 10+      ; DATA XREF: 0000:366B|o
0000:3747 14 10 15 10+      .db 10h, 16h, 10h, 17h, 10h, 18h, 10h, 19h, 10h, 1Ah, 3Fh
0000:375D 0D 77      aK_L_M_N_O_P_Q_R_S_T: .dw VRAM_start+30Dh ; DATA XREF: 0000:366D|o
0000:375F 1B 10 1C 10+      .db 1Bh, 10h, 1Ch, 10h, 1Dh, 10h, 1Eh, 10h, 1Fh, 10h, 20h
0000:375F 1D 10 1E 10+      .db 10h, 21h, 10h, 22h, 10h, 23h, 10h, 24h, 3Fh
0000:3773 0F 77      aU_V_W_X_Y_Z_rub_end: .dw VRAM_start+30Fh ; DATA XREF: 0000:366F|o
0000:3775 25 10 26 10+      .db 25h, 10h, 26h, 10h, 27h, 10h, 28h, 10h, 29h, 10h, 2Ah
0000:3775 27 10 28 10+      .db 10h, 2Bh, 10h, 2Ch, 44h, 45h, 46h, 47h, 48h, 10h, 3Fh
0000:378B F2 76      aREGI_TIME: .dw VRAM_start+2F2h ; DATA XREF: 0000:3671|o
0000:378D 22 15 17 19+      .db 22h, 15h, 17h, 19h, 10h, 24h, 19h, 1Dh, 15h, 10h, 10h
0000:378D 10 24 19 1D+      .db 30h, 3, 0, 31h, 10h, 3Fh
0000:379E 92 77      aRANK_SCORE_NAME: .dw VRAM_start+392h ; DATA XREF: 0000:367D|o
0000:37A0 22 11 1E 1B+      .db 22h, 11h, 1Eh, 1Bh, 10h, 10h, 23h, 13h, 1Fh, 22h, 15h
0000:37A0 10 20 23 13+      .db 10h, 10h, 1Eh, 11h, 1Dh, 15h, 10h, 10h, 10h, 10h, 3Fh
0000:37B6 72 77      aYOUR_NAME_WAS_REGISTERED: .dw VRAM_start+372h ; DATA XREF: 0000:367F|o
0000:37B8 29 1F 25 22+      .db 29h, 1Fh, 25h, 22h, 10h, 1Eh, 11h, 1Dh, 15h, 10h, 27h
0000:37B8 10 1E 11 1D+      .db 11h, 23h, 10h, 22h, 15h, 17h, 19h, 23h, 24h, 15h, 22h
0000:37B8 15 10 27 11+      .db 15h, 14h, 42h, 3Fh
0000:37D2 A7 76      aINSERT_COIN: .dw VRAM_start+2A7h ; DATA XREF: 0000:3681|o
0000:37D4 19 1E 23 15+      .db 19h, 1Eh, 23h, 15h, 22h, 24h, 10h, 13h, 1Fh, 19h, 1Eh
0000:37D4 22 24 10 13+      .db 10h, 3Fh
0000:37E1 0A 77      aPLAYER_COIN: .dw VRAM_start+30Ah ; DATA XREF: 0000:3683|o
0000:37E3 10 10 20 1C+      .db 10h, 10h, 20h, 1Ch, 11h, 29h, 15h, 22h, 10h, 10h, 10h
0000:37E3 11 29 15 22+      .db 10h, 13h, 1Fh, 19h, 1Eh, 3Fh
0000:37F4 FC 76      .dw VRAM_start+2FCh
0000:37F6 49 4A 10 1E+a_NINTENDO: .db 49h, 4Ah, 10h, 1Eh, 19h, 1Eh, 24h, 15h, 1Eh, 14h, 1Fh
0000:37F6 19 1E 24 15+      .db 10h, 10h, 10h, 10h, 3Fh
0000:3806 7C 75      .dw VRAM_start+17Ch
0000:3808 01 09 08 01+      .db 1, 9, 8, 1, 3Fh
0000:380D 02 97 38 68+draw_data_climb: .db 2, 97h, 38h, 68h, 38h, 2, 0DFh, 54h, 10h, 54h, 2, 0EFh
0000:380D 38 02 DF 54+      ; DATA XREF: 0000:0A92|o
0000:380D 10 54 02 EF+      .db 6Dh, 20h, 6Dh, 2, 0DFh, 8Eh, 10h, 8Eh, 2, 0EFh, 0AFh
0000:380D 6D 20 6D 02+      .db 20h, 0AFh, 2, 0DFh, 0D0h, 10h, 0D0h, 2, 0EFh, 0F1h
0000:380D DF 8E 10 8E+      .db 10h, 0F1h, 0, 53h, 18h, 53h, 54h, 0, 63h, 18h, 63h
0000:380D 02 EF AF 20+      .db 54h, 0, 93h, 38h, 93h, 54h, 0, 83h, 54h, 83h, 0F1h
0000:380D AF 02 DF D0+      .db 0, 93h, 54h, 93h, 0F1h, 0AAh
0000:384A 8D      bonus_graphic_tiles: .db 8Dh ; i ; DATA XREF: 0000:064D|o
0000:384B 7D      .db 7Dh ; }
0000:384C 8C      .db 8Ch ; i
0000:384D 6F      .db 6Fh ; o
0000:384E 00      .db 0 ;
0000:384F 7C      .db 7Ch ; |
0000:3850 6E      .db 6Eh ; n
0000:3851 00      .db 0 ;
0000:3852 7C      .db 7Ch ; |
0000:3853 6D      .db 6Dh ; m
0000:3854 00      .db 0 ;
0000:3855 7C      .db 7Ch ; |
0000:3856 6C      .db 6Ch ; l
0000:3857 00      .db 0 ;
0000:3858 7C      .db 7Ch ; |
0000:3859 8F      .db 8Fh ; A
0000:385A 7F      .db 7Fh ;
0000:385B 8E      .db 8Eh ; A
0000:385C 47 27 08 50+kong_normal_spr: .db 47h, 27h, 8, 50h ; DATA XREF: animate_kong_and_pauline+74|o
0000:385C 2F A7 08 50+      ; 0000:0B1E|o ...
0000:385C 3B 25 08 50+      .db 2Fh, 0A7h, 8, 50h
0000:385C 00 70 08 48+      .db 3Bh, 25h, 8, 50h
0000:385C 3B 23 07 40+      .db 0, 70h, 8, 48h
0000:385C 46 A9 08 44+      .db 3Bh, 23h, 7, 40h
0000:385C 00 70 08 48+      .db 46h, 0A9h, 8, 44h
0000:385C 30 29 08 44+      .db 0, 70h, 8, 48h
0000:385C 00 70 08 48+      .db 30h, 29h, 8, 44h
0000:385C 00 70 0A 48      .db 0, 70h, 8, 48h
0000:385C      .db 0, 70h, 0Ah, 48h
0000:3884 6F 10 09 23+pauline_spr: .db 6Fh, 10h, 9, 23h
0000:3884 6F 11 0A 33      .db 6Fh, 11h, 0Ah, 33h
0000:388C 50 34 08 3C kong_climbing_spr: .db 50h, 34h, 8, 3Ch ; DATA XREF: 0000:0AC0|o
0000:388C      ; 0000:168B|o ...
0000:3890 00 35 08 3C      .db 0, 35h, 8, 3Ch
0000:3894 53 32 08 40      .db 53h, 32h, 8, 40h
0000:3898 63 33 08 40      .db 63h, 33h, 8, 40h
0000:389C 00 70 08 48      .db 0, 70h, 8, 48h
0000:38A0 53 36 08 50      .db 53h, 36h, 8, 50h
0000:38A4 63 37 08 50      .db 63h, 37h, 8, 50h
0000:38A8 6B 31 08 41      .db 6Bh, 31h, 8, 41h
0000:38AC 00 70 08 48      .db 0, 70h, 8, 48h
0000:38B0 6A 14 0A 48      .db 6Ah, 14h, 0Ah, 48h
0000:38B4 FD FD FD FD+dk_intro_jump_up_data: .db 0FDh, 0FDh, 0FDh, 0FDh, 0FDh, 0FDh, 0FEh, 0FEh
0000:38B4 FD FD FE+      ; DATA XREF: 0000:0AA9|o
0000:38B4 FE FE FE+      .db 0FEh, 0FEh, 0FEh, 0FEh, 0FFh, 0FFh, 0FFh, 0
0000:38B4 FE FF FF+      .db 0, 1, 1, 1, 7Fh
0000:38CB FF FF FF FF+dk_intro_jump_across_data: .db 0FFh, 0FFh, 0FFh, 0FFh, 0FFh, 0, 0FFh, 0, 0, 1, 0
0000:38CB FF 00 FF 00+      ; DATA XREF: 0000:0AAF|o
0000:38CB 00 01 00 01+      ; 0000:0B86|o
0000:38CB 01 01 01 01+      .db 1, 1, 1, 1, 1, 7Fh
0000:38DC 04 7F F0 10+draw_data_bend_girders_2: .db 4, 7Fh, 0F0h, 10h, 0F0h, 2, 0DFh, 0F2h, 70h, 0F8h
0000:38DC F0 02 DF F2+      ; DATA XREF: 0000:0B91|o

```

```

0000:38DC 70 F8 02 6F+ .db 2, 6Fh, 0F8h, 10h, 0F8h, 0AAh, 4, 0DFh, 0D0h, 90h
0000:38DC F8 10 F8 AA+ .db 0D0h, 2, 0DFh, 0DCh, 20h, 0D1h, 0AAh, 0FFh, 0FFh, 0FFh
0000:38DC 04 DF D0 90+ .db 0FFh, 0FFh, 4, 0DFh, 0A8h, 20h, 0A8h, 4, 5Fh, 0B0h
0000:38DC D0 02 DF DC+ .db 20h, 0B0h, 2, 0DFh, 0B0h, 20h, 0BBh, 0AAh, 4, 0DFh
0000:38DC 20 D1 AA FF+ .db 88h, 30h, 88h, 4, 0DFh, 90h, 0B0h, 90h, 2, 0DFh, 9Ah
0000:38DC FF FF FF FF+ .db 20h, 8Fh, 0AAh, 4, 0BFh, 68h, 20h, 68h, 4, 3Fh, 70h
0000:38DC 04 DF A8 20+ .db 20h, 70h, 2, 0DFh, 6Eh, 20h, 79h, 0AAh
0000:392C 02 DF 58 A0+draw_data_bend_girders_1:.db 2, 0DFh, 58h, 0A0h, 55h, 0AAh ; DATA XREF: 0000:0B48|o
0000:392C 00 70 08 44+dk_throw_barrel_spr:.db 0, 70h, 8, 44h, 2Bh, 0ACh, 8, 4Ch, 3Bh, 0AEh, 8, 4Ch ; DATA XREF: 0000:1671|o
0000:3932 2B AC 08 4C+ ; DATA XREF: 0000:1671|o
0000:3932 3B AE 08 4C+ ; sub_0_2C8F+95|o
0000:3932 3B AF 08 3C+ .db 3Bh, 0AFh, 8, 3Ch, 4Bh, 0B0h, 7, 3Ch, 4Bh, 0ADh, 8
0000:3932 4B B0 07 3C+ .db 4Ch, 0, 70h, 8, 44h, 0, 70h, 8, 44h, 0, 70h, 8, 44h
0000:3932 4B AD 08 4C+ .db 0, 70h, 0Ah, 44h, 47h, 27h, 8, 4Ch, 2Fh, 0A7h, 8, 4Ch
0000:3932 00 70 08 44+ .db 3Bh, 25h, 8, 4Ch, 0, 70h, 8, 44h, 3Bh, 23h, 7, 3Ch
0000:3932 00 70 08 44+ .db 4Bh, 2Ah, 8, 3Ch, 4Bh, 2Bh, 8, 4Ch, 2Bh, 0AAh, 8, 3Ch
0000:3932 00 70 08 44+ .db 2Bh, 0ABh, 8, 4Ch, 0, 70h, 0Ah, 44h, 0, 70h, 8, 44h
0000:3932 00 70 0A 44+ .db 4Bh, 2Ch, 8, 4Ch, 3Bh, 2Eh, 8, 4Ch, 3Bh, 2Fh, 8, 3Ch
0000:3932 47 27 08 4C+ .db 2Bh, 30h, 7, 3Ch, 2Bh, 2Dh, 8, 4Ch, 0, 70h, 8, 44h
0000:3932 2F A7 08 4C+ .db 0, 70h, 8, 44h, 0, 70h, 8, 44h, 0, 70h, 0Ah, 44h
0000:39AA FD FD FE+bounding_spring_data:.db 0FDh, 0FDh, 0FDh, 0FEh, 0FEh, 0FEh, 0FEh, 0FEh, 0FFh, 0FFh ; DATA XREF: sub_0_2E04+98|o
0000:39AA FE FE FE FF+ ; DATA XREF: sub_0_2E04+C4|o
0000:39AA FF 00 FF 00+ ; sub_0_2E04+C4|o
0000:39AA 00 01 00 01+ .db 0, 0FFh, 0, 0, 1, 0, 1, 1, 2, 2, 2, 2, 3, 3, 3, 7Fh
0000:39C3 1E 4E BB 4C+barell_rolling_data:.db 1Eh, 4Eh, 0BBh, 4Ch, 0D8h, 4Eh, 59h, 4Eh, 7Fh
0000:39C3 D8 4E 59 4E+ ; DATA XREF: sub_0_2C8F+FD|o
0000:39CC BB 4D 7F barrel_falling_data:.db 0BBh, 4Dh, 7Fh ; DATA XREF: sub_0_2C8F+F4|o
0000:39CF 47 27 08 50 dk_thrash_right_spr:.db 47h, 27h, 8, 50h ; DATA XREF: animate_kong_and_pauline+43|o
0000:39CF ; 0000:0816|o
0000:39D3 2D 26 08 50 .db 2Dh, 26h, 8, 50h
0000:39D7 3B 25 08 50 .db 3Bh, 25h, 8, 50h
0000:39DB 00 70 08 48 .db 0, 70h, 8, 48h
0000:39DF 3B 24 07 40 .db 3Bh, 24h, 7, 40h
0000:39E3 4B 28 08 40 .db 4Bh, 28h, 8, 40h
0000:39E7 00 70 08 48 .db 0, 70h, 8, 48h
0000:39EB 30 29 08 44 .db 30h, 29h, 8, 44h
0000:39EF 00 70 08 48 .db 0, 70h, 8, 48h
0000:39F3 00 70 0A 48 .db 0, 70h, 0Ah, 48h
0000:39F7 49 A6 08 50 dk_thrash_left_spr:.db 49h, 0A6h, 8, 50h ; DATA XREF: animate_kong_and_pauline+4A|o
0000:39FB 2F A7 08 50 .db 2Fh, 0A7h, 8, 50h
0000:39FF 3B 25 08 50 .db 3Bh, 25h, 8, 50h
0000:3A03 00 70 08 48 .db 0, 70h, 8, 48h
0000:3A07 3B 24 07 40 .db 3Bh, 24h, 7, 40h
0000:3A0B 46 A9 08 44 .db 46h, 0A9h, 8, 44h
0000:3A0F 00 70 08 48 .db 0, 70h, 8, 48h
0000:3A13 2B A8 08 40 .db 2Bh, 0A8h, 8, 40h
0000:3A17 00 70 08 48 .db 0, 70h, 8, 48h
0000:3A1B 00 70 0A 48 .db 0, 70h, 0Ah, 48h
0000:3A1F 73 A7 88 60 fk_falling_spr:.db 73h, 0A7h, 88h, 60h ; DATA XREF: 0000:1870|o
0000:3A23 8B 27 88 60 .db 8Bh, 27h, 88h, 60h
0000:3A27 7F 25 88 60 .db 7Fh, 25h, 88h, 60h
0000:3A2B 00 70 88 68 .db 0, 70h, 88h, 68h
0000:3A2F 7F 24 87 70 .db 7Fh, 24h, 87h, 70h
0000:3A33 74 29 88 6C .db 74h, 29h, 88h, 6Ch
0000:3A37 00 70 88 68 .db 0, 70h, 88h, 68h
0000:3A3B 8A A9 88 6C .db 8Ah, 0A9h, 88h, 6Ch
0000:3A3F 00 70 88 68 .db 0, 70h, 88h, 68h
0000:3A43 00 70 8A 68 .db 0, 70h, 8Ah, 68h
0000:3A47 05 AF F0 50+draw_data_rivet_end1:.db 5, 0AFh, 0F0h, 50h, 0F0h, 0AAh ; DATA XREF: 0000:17D9|o
0000:3A4D 05 AF E8 50+draw_data_rivet_end2:.db 5, 0AFh, 0E8h, 50h, 0E8h, 0AAh ; DATA XREF: 0000:17E5|o
0000:3A53 05 AF E0 50+draw_data_rivet_end3:.db 5, 0AFh, 0E0h, 50h, 0E0h, 0AAh ; DATA XREF: 0000:17F1|o
0000:3A59 05 AF D8 50+draw_data_rivet_end4:.db 5, 0AFh, 0D8h, 50h, 0D8h, 0AAh ; DATA XREF: 0000:17FD|o
0000:3A5F 05 B7 58 48+draw_data_rivet_end5:.db 5, 0B7h, 58h, 48h, 58h, 0AAh ; DATA XREF: 0000:18A5|o
0000:3A65 01 04 01 03+level_seq_1: .db 1, 4, 1, 3, 4, 1, 2, 3, 4, 1, 2, 1, 3, 4 ; DATA XREF: 0000:095F|o
0000:3A73 01 02 01 03+level_seq_2: .db 1, 2, 1, 3, 1, 4, 7Fh ; DATA XREF: 0000:1799|o
0000:3A73 01 04 7F ; 0000:1947|o
0000:3A7A FF 00 FF FF+fireball_bouncing_data:.db 0FFh, 0, 0FFh, 0FFh, 0FEh, 0FEh, 0FEh, 0FEh, 0FEh, 0FEh ; DATA XREF: sub_0_3202+65|o
0000:3A7A FE FE FE FE+ ; DATA XREF: sub_0_3202+65|o
0000:3A7A FE FE FE FE+ .db 0FEh, 0FEh, 0FEh, 0FEh, 0FEh, 0FEh, 0FEh, 0FFh, 0FFh, 0
0000:3A8C E8 E5 E3 E2+fireball_bounce_data:.db 0E8h, 0E5h, 0E3h, 0E2h, 0E1h, 0E0h, 0DFh, 0DEh, 0DDh ; DATA XREF: sub_0_342C+F|o
0000:3A8C E1 00 DF DE+ ; DATA XREF: sub_0_342C+F|o
0000:3A8C DD DD DC DC+ .db 0DDh, 0DCh, 0DCh, 0DCh, 0DCh, 0DCh, 0DCh, 0DDh, 0DDh
0000:3A8C DC DC DC DC+ .db 0DEh, 0DFh, 0E0h, 0E1h, 0E2h, 0E3h, 0E4h, 0E5h, 0E7h
0000:3A8C DD DD DE DF+ .db 0E9h, 0EBh, 0EDh, 0F0h, 0AAh
0000:3AAC 80 7B 78 76+cement_fireball_data:.db 80h, 7Bh, 78h, 76h, 74h, 73h, 72h, 71h, 70h, 70h, 6Fh ; DATA XREF: sub_0_3478+F|o
0000:3AAC 74 73 72 71+ ; DATA XREF: sub_0_3478+F|o
0000:3AAC 70 70 6F 6F+ .db 6Fh, 6Fh, 70h, 70h, 71h, 72h, 73h, 74h, 75h, 76h, 77h
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 ; DATA XREF: sub_0_34B9+E|o
0000:3AC4 E6 C8 D6 78+ ; DATA XREF: sub_0_34B9+E|o
0000:3AC4 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 ; DATA XREF: sub_0_34B9+34|o
0000:3AD4 2B 78 12 F0+ ; DATA XREF: sub_0_34B9+34|o
0000:3AD4 1B C8 23 A0+ .db 23h, 0A0h, 12h, 0F0h, 1Bh, 0C8h
0000:3AE4 02 97 38 68+draw_data_girder:.db 2, 97h, 38h, 68h, 38h, 2, 9Fh, 54h, 10h, 54h, 2, 0DFh
0000:3AE4 38 02 9F 54+ ; DATA XREF: 0000:0CD4|o
0000:3AE4 10 54 02 DF+ ; sub_0_2441+19|o
0000:3AE4 58 A0 55 02+ .db 58h, 0A0h, 55h, 2, 0EFh, 6Dh, 20h, 79h, 2, 0DFh, 9Ah
0000:3AE4 EF 6D 20 79+ .db 10h, 8Eh, 2, 0EFh, 0AFh, 20h, 0BBh, 2, 0DFh, 0DCh
0000:3AE4 02 DF 9A 10+ .db 10h, 0D0h, 2, 0FFh, 0F0h, 80h, 0F7h, 2, 7Fh, 0F8h
0000:3AE4 8E 02 EF AF+ .db 0, 0F8h, 0, 0CBh, 57h, 0CBh, 6Fh, 0, 0CBh, 99h, 0CBh
0000:3AE4 20 BB 02 DF+ .db 0B1h, 0, 0CBh, 0DBh, 0CBh, 0F3h, 0, 63h, 18h, 63h
0000:3AE4 DC 10 D0 02+ .db 54h, 1, 63h, 0D5h, 63h, 0F8h, 0, 33h, 78h, 33h, 90h
0000:3AE4 FF F0 80 F7+ .db 0, 33h, 0BAh, 33h, 0D2h, 0, 53h, 18h, 53h, 54h, 1
0000:3AE4 02 7F FB 00+ .db 53h, 92h, 53h, 0B8h, 0, 5Bh, 76h, 5Bh, 92h, 0, 73h
0000:3AE4 F8 00 CB 57+ .db 0B6h, 73h, 0D6h, 0, 83h, 95h, 83h, 0B5h, 0, 93h, 38h
0000:3AE4 CB 6F 00 CB+ .db 93h, 54h, 1, 0BBh, 70h, 0BBh, 98h, 1, 6Bh, 54h, 6Bh
0000:3AE4 99 CB B1 00+ .db 75h, 0AAh
0000:3B5D 06 8F 90 70+draw_data_cement:.db 6, 8Fh, 90h, 70h, 90h, 6, 8Fh, 98h, 70h, 98h, 6, 8Fh
0000:3B5D 90 06 8F 98+ ; DATA XREF: 0000:0CDF|o
0000:3B5D 70 98 06 8F+ ; sub_0_2441+20|o
0000:3B5D A0 70 A0 00+ .db 0A0h, 70h, 0A0h, 0, 63h, 18h, 63h, 58h, 0, 63h, 80h
0000:3B5D 63 18 63 58+ .db 63h, 0A8h, 0, 63h, 0D0h, 63h, 0F8h, 0, 53h, 18h, 53h
0000:3B5D 00 63 80 63+ .db 58h, 0, 53h, 0A8h, 53h, 0D0h, 0, 9Bh, 80h, 9Bh, 0A8h
0000:3B5D A8 00 63 D0+ .db 0, 9Bh, 0D0h, 9Bh, 0F8h, 1, 23h, 58h, 23h, 80h, 1
0000:3B5D 63 F8 00 53+ .db 0DBh, 58h, 0DBh, 80h, 0, 2Bh, 80h, 2Bh, 0A8h, 0, 0D3h
0000:3B5D 18 53 58 00+ .db 80h, 0D3h, 0A8h, 0, 0A3h, 0A8h, 0A3h, 0D0h, 0, 2Bh
0000:3B5D 53 A8 53 D0+ .db 0D0h, 2Bh, 0F8h, 0, 0D3h, 0D0h, 0D3h, 0F8h, 0, 93h
0000:3B5D 00 9B 80 9B+ .db 38h, 93h, 58h, 2, 97h, 38h, 68h, 38h, 3, 0EFh, 58h
0000:3B5D A8 00 9B D0+ .db 10h, 58h, 3, 0F7h, 80h, 88h, 80h, 3, 77h, 80h, 8, 80h
0000:3B5D 9B F8 01 23+ .db 2, 0A7h, 0A8h, 50h, 0A8h, 2, 0E7h, 0A8h, 0B8h, 0A8h
0000:3B5D 58 23 80 01+ .db 2, 3Fh, 0A8h, 18h, 0A8h, 3, 0EFh, 0D0h, 10h, 0D0h
0000:3B5D DB 58 DB 80+ .db 2, 0EFh, 0F8h, 10h, 0F8h, 0AAh
0000:3BE5 00 63 18 63+draw_data_elevator:.db 0, 63h, 18h, 63h, 58h, 0, 63h, 88h, 63h, 0D0h, 0, 53h ; DATA XREF: 0000:0CFA|o
0000:3BE5 58 00 63 88+ ; sub_0_2441+27|o
0000:3BE5 63 D0 00 53+ ; sub_0_2441+27|o

```

```

0000:3BE5 18 53 58 00+      .db 18h, 53h, 58h, 0, 53h, 88h, 53h, 0D0h, 0, 0E3h, 68h
0000:3BE5 53 88 53 D0+      .db 0E3h, 90h, 0, 0E3h, 0B8h, 0E3h, 0D0h, 0, 0CBh, 90h
0000:3BE5 00 E3 68 E3+      .db 0CBh, 0B0h, 0, 0B3h, 58h, 0B3h, 78h, 0, 9Bh, 80h, 9Bh
0000:3BE5 90 00 E3 B8+      .db 0A0h, 0, 93h, 38h, 93h, 58h, 0, 23h, 88h, 23h, 0C0h
0000:3BE5 E3 D0 00 CB+      .db 0, 1Bh, 0C0h, 1Bh, 0E8h, 2, 97h, 38h, 68h, 38h, 2
0000:3BE5 90 CB B0 00+      .db 0B7h, 58h, 10h, 58h, 2, 0EFh, 68h, 0E0h, 68h, 2, 0D7h
0000:3BE5 B3 58 B3 78+      .db 70h, 0C8h, 70h, 2, 0BFh, 78h, 0B0h, 78h, 2, 0A7h, 80h
0000:3BE5 00 9B 80 9B+      .db 90h, 80h, 2, 67h, 88h, 48h, 88h, 2, 27h, 88h, 10h
0000:3BE5 A0 00 93 38+      .db 88h, 2, 0EFh, 90h, 0C8h, 90h, 2, 0A7h, 0A0h, 98h, 0A0h
0000:3BE5 93 58 00 23+      .db 2, 0BFh, 0A8h, 0B0h, 0A8h, 2, 0D7h, 0B0h, 0C8h, 0B0h
0000:3BE5 88 23 C0 00+      .db 2, 0EFh, 0B8h, 0E0h, 0B8h, 2, 27h, 0C0h, 10h, 0C0h
0000:3BE5 1B C0 1B E8+      .db 2, 0EFh, 0D0h, 0D8h, 0D0h, 2, 67h, 0D0h, 50h, 0D0h
0000:3BE5 02 97 38 68+      .db 2, 0CFh, 0D8h, 0C0h, 0D8h, 2, 0B7h, 0E0h, 0A8h, 0E0h
0000:3BE5 38 02 B7 58+      .db 2, 9Fh, 0E8h, 88h, 0E8h, 2, 27h, 0E8h, 10h, 0E8h, 2
0000:3BE5 10 58 02 EF+      .db 0EFh, 0F8h, 10h, 0F8h, 0AAh
0000:3C8B 00 7B 80 7B+draw_data_rivets: .db 0, 7Bh, 80h, 7Bh, 0A8h, 0, 7Bh, 0D0h, 7Bh, 0F8h, 0
0000:3C8B A8 00 7B D0+      ; DATA XREF: 0000:0CC3!o
0000:3C8B 7B F8 00 33+      ; sub_0_2441+2D!o
0000:3C8B 58 33 80 00+      .db 33h, 58h, 33h, 80h, 0, 53h, 58h, 53h, 80h, 0, 0ABh
0000:3C8B 53 58 53 80+      .db 58h, 0ABh, 80h, 0, 0CBh, 58h, 0CBh, 80h, 0, 2Bh, 80h
0000:3C8B 00 AB 58 AB+      .db 2Bh, 0A8h, 0, 0D3h, 80h, 0D3h, 0A8h, 0, 23h, 0A8h
0000:3C8B 80 00 CB 58+      .db 23h, 0D0h, 0, 5Bh, 0A8h, 5Bh, 0D0h, 0, 0A3h, 0A8h
0000:3C8B CB 80 00 2B+      .db 0A3h, 0D0h, 0, 0DBh, 0A8h, 0DBh, 0D0h, 0, 1Bh, 0D0h
0000:3C8B 80 2B A8 00+      .db 1Bh, 0F8h, 0, 0E3h, 0D0h, 0E3h, 0F8h, 5, 0B7h, 30h
0000:3C8B D3 80 D3 A8+      .db 48h, 30h, 5, 0CFh, 58h, 30h, 58h, 5, 0D7h, 80h, 28h
0000:3C8B 00 23 A8 23+      .db 80h, 5, 0DFh, 0A8h, 20h, 0A8h, 5, 0E7h, 0D0h, 18h
0000:3C8B D0 00 5B A8+      .db 0D0h, 5, 0EFh, 0F8h, 10h, 0F8h, 0AAh
0000:3CF0 10 82 85 8B+draw_data_how_high: .db 10h, 82h, 85h, 8Bh, 10h, 85h, 80h, 8Bh, 10h, 87h, 85h
0000:3CF0 10 85 80 8B+      ; DATA XREF: 0000:0C50!o
0000:3CF0 10 87 85 8B+      .db 8Bh, 81h, 80h, 80h, 8Bh, 81h, 82h, 85h, 8Bh, 81h, 85h
0000:3CF0 81 80 80 8B+      .db 80h, 8Bh
0000:3D08 05          title_screen:      .db 5
                                ; DATA XREF: 0000:07F7!o
                                ; RLE-encoded "DONKEY KONG" title
0000:3D09 88 77          .dw VRAM_start+388h
0000:3D0B 01          .db 1
0000:3D0C 68 77          .dw VRAM_start+368h
0000:3D0E 01          .db 1
0000:3D0F 6C 77          .dw VRAM_start+36Ch
0000:3D11 03          .db 3
0000:3D12 49 77          .dw VRAM_start+349h
0000:3D14 05          .db 5
0000:3D15 08 77          .dw VRAM_start+308h
0000:3D17 01          .db 1
0000:3D18 E8 76          .dw VRAM_start+2E8h
0000:3D1A 01          .db 1
0000:3D1B EC 76          .dw VRAM_start+2ECh
0000:3D1D 05          .db 5
0000:3D1E C8 76          .dw VRAM_start+2C8h
0000:3D20 05          .db 5
0000:3D21 88 76          .dw VRAM_start+288h
0000:3D23 02          .db 2
0000:3D24 69 76          .dw VRAM_start+269h
0000:3D26 02          .db 2
0000:3D27 4A 76          .dw VRAM_start+24Ah
0000:3D29 05          .db 5
0000:3D2A 28 76          .dw VRAM_start+228h
0000:3D2C 05          .db 5
0000:3D2D E8 75          .dw VRAM_start+1E8h
0000:3D2F 01          .db 1
0000:3D30 CA 75          .dw VRAM_start+1CAh
0000:3D32 03          .db 3
0000:3D33 A9 75          .dw VRAM_start+1A9h
0000:3D35 01          .db 1
0000:3D36 88 75          .dw VRAM_start+188h
0000:3D38 01          .db 1
0000:3D39 8C 75          .dw VRAM_start+18Ch
0000:3D3B 05          .db 5
0000:3D3C 48 75          .dw VRAM_start+148h
0000:3D3E 01          .db 1
0000:3D3F 28 75          .dw VRAM_start+128h
0000:3D41 01          .db 1
0000:3D42 2A 75          .dw VRAM_start+12Ah
0000:3D44 01          .db 1
0000:3D45 2C 75          .dw VRAM_start+12Ch
0000:3D47 01          .db 1
0000:3D48 08 75          .dw VRAM_start+108h
0000:3D4A 01          .db 1
0000:3D4B 0A 75          .dw VRAM_start+10Ah
0000:3D4D 01          .db 1
0000:3D4E 0C 75          .dw VRAM_start+10Ch
0000:3D50 03          .db 3
0000:3D51 C8 74          .dw VRAM_start+0C8h
0000:3D53 03          .db 3
0000:3D54 AA 74          .dw VRAM_start+0AAh
0000:3D56 03          .db 3
0000:3D57 88 74          .dw VRAM_start+88h
0000:3D59 05          .db 5
0000:3D5A 2F 77          .dw VRAM_start+32Fh
0000:3D5C 05          .db 5
0000:3D5D 0F 77          .dw VRAM_start+30Fh
0000:3D5F 02          .db 2
0000:3D60 F0 76          .dw VRAM_start+2F0h
0000:3D62 02          .db 2
0000:3D63 CF 76          .dw VRAM_start+2CFh
0000:3D65 02          .db 2
0000:3D66 D2 76          .dw VRAM_start+2D2h
0000:3D68 05          .db 5
0000:3D69 8F 76          .dw VRAM_start+28Fh
0000:3D6B 05          .db 5
0000:3D6C 6F 76          .dw VRAM_start+26Fh
0000:3D6E 01          .db 1
0000:3D6F 4F 76          .dw VRAM_start+24Fh
0000:3D71 01          .db 1
0000:3D72 53 76          .dw VRAM_start+253h
0000:3D74 05          .db 5
0000:3D75 2F 76          .dw VRAM_start+22Fh
0000:3D77 05          .db 5
0000:3D78 EF 75          .dw VRAM_start+1EFh
0000:3D7A 02          .db 2
0000:3D7B D0 75          .dw VRAM_start+1D0h
0000:3D7D 02          .db 2
0000:3D7E B1 75          .dw VRAM_start+1B1h
0000:3D80 05          .db 5
0000:3D81 8F 75          .dw VRAM_start+18Fh
0000:3D83 03          .db 3
0000:3D84 50 75          .dw VRAM_start+150h

```

```

0000:3D86 05 .db 5
0000:3D87 2F 75 .dw VRAM_start+12Fh
0000:3D89 01 .db 1
0000:3D8A 0F 75 .dw VRAM_start+10Fh
0000:3D8C 01 .db 1
0000:3D8D 13 75 .dw VRAM_start+113h
0000:3D8F 01 .db 1
0000:3D90 EF 74 .dw VRAM_start+0EFh
0000:3D92 01 .db 1
0000:3D93 F1 74 .dw VRAM_start+0F1h
0000:3D95 01 .db 1
0000:3D96 F3 74 .dw VRAM_start+0F3h
0000:3D98 02 .db 2
0000:3D99 D1 74 .dw VRAM_start+0D1h
0000:3D9B 00 .db 0
0000:3D9C 00 00 23 68+level_init_data: .db 0, 0, 23h, 68h, 1, 11h, 0, 0, 0, 10h, 0DBh, 68h, 1
0000:3D9C 01 11 00 00+ ; DATA XREF: 0000:0F6F[o
0000:3D9C 00 10 DB 68+ .db 40h, 0, 0, 8, 1, 1, 1, 1, 1, 1, 1, 1, 0, 0, 0, 0
0000:3D9C 01 40 00 00+ .db 0, 0, 80h, 1, 0C0h, 0FFh, 1, 0FFh, 0FFh, 34h, 0C3h
0000:3D9C 08 01 01 01+ .db 39h, 0, 67h, 80h, 69h, 1Ah, 1, 0, 0, 0, 0, 0, 0, 0
0000:3D9C 01 01 01 01+ .db 0, 4, 0, 10h, 0, 0, 0, 0
0000:3DDC 1E 18 0B 4B+top_barrel_spr: .db 1Eh, 18h, 0Bh, 4Bh, 14h, 18h, 0Bh, 4Bh, 1Eh, 18h, 0Bh
0000:3DDC 14 18 0B 4B+ ; DATA XREF: 0000:0FD7[o
0000:3DDC 1E 18 0B 3B+ .db 3Bh, 14h, 18h, 0Bh, 3Bh
0000:3DEC 3D 01 03 02 fireball_spr: .db 3Dh, 1, 3, 2 ; DATA XREF: 0000:0FE2[o
0000:3DEC ; 0000:101F[o ...
0000:3DF0 4D 01 04 01 fireball_rivet_spr: .db 4Dh, 1, 4, 1 ; DATA XREF: 0000:1131[o
0000:3DF4 27 70 01 E0+girders_extra_spr: .db 27h, 70h, 1, 0E0h, 0, 0 ; DATA XREF: 0000:0FEF[o
0000:3DFA 7F 40 01 78+cement_extra_spr: .db 7Fh, 40h, 1, 78h, 2, 0 ; DATA XREF: 0000:1049[o
0000:3E00 27 49 0C F0 girder_oil_barrel_spr: .db 27h, 49h, 0Ch, 0F0h ; DATA XREF: 0000:0FF5[o
0000:3E04 7F 49 0C 88 cement_oil_barrel_spr: .db 7Fh, 49h, 0Ch, 88h ; DATA XREF: 0000:104F[o
0000:3E08 1E 07 03 09 hammer_pickup_spr: .db 1Eh, 7, 3, 9 ; DATA XREF: sub_0_11A6+9[o
0000:3E0C 24 64 BB C0 girder_hammer_locs: .db 24h, 64h, 0BBh, 0C0h ; DATA XREF: 0000:1000[o
0000:3E10 23 8D 7B B4 cement_hammer_locs: .db 23h, 8Dh, 7Bh, 0B4h ; DATA XREF: 0000:1070[o
0000:3E14 1B 8C 7C 64 rivet_hammer_locs: .db 1Bh, 8Ch, 7Ch, 64h ; DATA XREF: 0000:113D[o
0000:3E18 4B 0E 04 02 cement_pie_spr: .db 4Bh, 0Eh, 4, 2 ; DATA XREF: 0000:102E[o
0000:3E1C 23 46 03 68+cement_ladder_spr: .db 23h, 46h, 3, 68h, 0DBh, 46h, 3, 68h ; DATA XREF: 0000:105A[o
0000:3E24 17 50 00 5C+cement_conveyer_spr: .db 17h, 50h, 0, 5Ch, 0E7h, 0D0h, 0, 5Ch, 8Ch, 50h, 0 ; DATA XREF: 0000:1065[o
0000:3E24 E7 D0 00 5C+ ; DATA XREF: 0000:1065[o
0000:3E24 8C 50 00 84+ .db 84h, 73h, 0D0h, 0, 84h, 17h, 50h, 0, 0D4h, 0E7h, 0D0h
0000:3E24 73 D0 00 84+ .db 0, 0D4h
0000:3E3C 53 73 0A A0+cement_obj_spr: .db 53h, 73h, 0Ah, 0A0h, 8Bh, 74h, 0Ah, 0F0h, 0DBh, 75h
0000:3E3C 8B 74 0A F0+ ; DATA XREF: 0000:1076[o
0000:3E3C DB 75 0A A0 .db 0Ah, 0A0h
0000:3E48 5B 73 0A C8+elevator_obj_spr: .db 5Bh, 73h, 0Ah, 0C8h, 0E3h, 74h, 0Ah, 60h, 1Bh, 75h
0000:3E48 E3 74 0A 60+ ; DATA XREF: 0000:10DE[o
0000:3E48 1B 75 0A 80 .db 0Ah, 80h
0000:3E54 DB 73 0A C8+rivit_obj_spr: .db 0DBh, 73h, 0Ah, 0C8h, 93h, 74h, 0Ah, 0F0h, 33h, 75h
0000:3E54 93 74 0A F0+ ; DATA XREF: 0000:1143[o
0000:3E54 33 75 0A 50 .db 0Ah, 50h
0000:3E60 44 03 08 04 elevator_spr: .db 44h, 3, 8, 4 ; DATA XREF: 0000:10C3[o
0000:3E64 37 F4 37 C0+elevator_spr_xy: .db 37h, 0F4h, 37h, 0C0h, 37h, 8Ch, 77h, 70h, 77h, 0A4h ; DATA XREF: 0000:10B7[o
0000:3E64 37 8C 77 70+ ; DATA XREF: 0000:10B7[o
0000:3E64 77 A4 77 D8 .db 77h, 0D8h
0000:3E70 ;
0000:3E70
0000:3E70 loc_0_3E70: ld de, 1 ; CODE XREF: sub_0_1DBD+1A[j
0000:3E70 11 01 00
0000:3E73
0000:3E73 loc_0_3E73: ld b, 7Bh ; '{
0000:3E73 06 7B rra
0000:3E75 1F ld nc, loc_0_1E28
0000:3E76 D2 28 1E ld e, 3
0000:3E79 1E 03 ld b, 7Dh ; '}'
0000:3E7B 06 7D rra
0000:3E7D 1F ld nc, loc_0_1E28
0000:3E7E D2 28 1E ld e, 5
0000:3E81 1E 05 ld b, 7Fh ; ' '
0000:3E83 06 7F ld loc_0_1E28
0000:3E85 C3 28 1E jp
0000:3E88 ;
0000:3E88 SUBROUTINE
0000:3E88
0000:3E88 sub_0_3E88: ; CODE XREF: sub_0_2853+18[p
0000:3E88 3A 27 62 ld a, (level_type)
0000:3E8B E5 push hl
0000:3E8C EF rst 28h ; go!
0000:3E8C ;
0000:3E8D 00 00 .dw 0 ; Jump table
0000:3E8F 99 3E .dw loc_0_3E99
0000:3E91 B0 28 .dw l2_check_hammer_hit
0000:3E93 E0 28 .dw l3_check_hammer_hit
0000:3E95 01 29 .dw l4_check_hammer_hit
0000:3E97 00 00 .dw 0
0000:3E99 ;
0000:3E99 loc_0_3E99: ; DATA XREF: sub_0_3E88+7[o
0000:3E99 E1 pop hl
0000:3E9A AF xor a
0000:3E9B 32 60 60 ld (unk_0_6060), a
0000:3E9E 06 0A ld b, 0Ah
0000:3EA0 11 20 00 ld de, 20h ; ' '
0000:3EA3 DD 21 00 67 ld ix, unk_0_6700
0000:3EA7 CD C3 3E call sub_0_3EC3
0000:3EAA 06 05 ld b, 5
0000:3EAC DD 21 00 64 ld ix, unk_0_6400 ; fireball character data
0000:3EB0 CD C3 3E call sub_0_3EC3
0000:3EB3 3A 60 60 ld a, (unk_0_6060)
0000:3EB6 A7 and a
0000:3EB7 C8 ret z
0000:3EB8 FE 01 cp 1
0000:3EBA C8 ret z
0000:3EBB FE 03 cp 3
0000:3EBD 3E 03 ld a, 3
0000:3EBF D8 ret c
0000:3EC0 3E 07 ld a, 7
0000:3EC2 C9 ret
0000:3EC2 ; End of function sub_0_3E88
0000:3EC2
0000:3EC3 ;
0000:3EC3 SUBROUTINE
0000:3EC3
0000:3EC3 sub_0_3EC3: ; CODE XREF: sub_0_3E88+1F[p
0000:3EC3 DD CB 00 46 ; sub_0_3E88+28[p ...

```

```

0000:3EC3          bit      0, (ix+0)
0000:3EC7 CA FA 3E          jp      z, loc_0_3EFA
0000:3ECA 79              ld      a, c
0000:3ECB DD 96 05          sub     (ix+5)
0000:3ECE D2 D3 3E          jp      nc, loc_0_3ED3
0000:3ED1 ED 44              neg
0000:3ED3
0000:3ED3          loc_0_3ED3:                                     ; CODE XREF: sub_0_3EC3+B↑j
0000:3ED3 3C              inc      a
0000:3ED4 95              sub     l
0000:3ED5 DA DE 3E          jp      c, loc_0_3EDE
0000:3ED8 DD 96 0A          sub     (ix+0Ah)
0000:3EDB D2 FA 3E          jp      nc, loc_0_3EFA
0000:3EDE
0000:3EDE          loc_0_3EDE:                                     ; CODE XREF: sub_0_3EC3+12↑j
0000:3EDE FD 7E 03          ld      a, (iy+3)
0000:3EE1 DD 96 03          sub     (ix+3)
0000:3EE4 D2 E9 3E          jp      nc, loc_0_3EE9
0000:3EE7 ED 44              neg
0000:3EE9
0000:3EE9          loc_0_3EE9:                                     ; CODE XREF: sub_0_3EC3+21↑j
0000:3EE9 94              sub     h
0000:3EEA DA F3 3E          jp      c, loc_0_3EF3
0000:3EED DD 96 09          sub     (ix+9)
0000:3EF0 D2 FA 3E          jp      nc, loc_0_3EFA
0000:3EF3
0000:3EF3          loc_0_3EF3:                                     ; CODE XREF: sub_0_3EC3+27↑j
0000:3EF3 3A 60 60          ld      a, (unk_0_6060)
0000:3EF6 3C              inc      a
0000:3EF7 32 60 60          ld      (unk_0_6060), a
0000:3EFA
0000:3EFA          loc_0_3EFA:                                     ; CODE XREF: sub_0_3EC3+4↑j
0000:3EFA DD 19                                     ; sub_0_3EC3+18↑j ...
0000:3EFA          add     ix, de
0000:3EFC 10 C5          djnz   sub_0_3EC3
0000:3EFE C9              ret
0000:3EFE          ; End of function sub_0_3EC3
0000:3EFE
0000:3EFE          ;
0000:3EFF 00 5C 76 49+byte_0_3EFF: .db 0, 5Ch, 76h, 49h, 4Ah, 1, 9, 8, 1, 3Fh ; DATA XREF: 0000:3687|o
0000:3F09 7D 77 1E 19+byte_0_3F09: .db 7Dh, 77h, 1Eh, 19h, 1Eh, 24h, 15h, 1Eh, 14h, 1Fh, 10h ; DATA XREF: 0000:3689|o
0000:3F09 1E 24 15 1E+          ; sub_0_2441|o
0000:3F09 14 1F 10 1F+          .db 1Fh, 16h, 10h, 11h, 1Dh, 15h, 22h, 19h, 13h, 11h, 10h
0000:3F09 16 10 11 1D+          .db 19h, 1Eh, 13h, 2Bh, 3Fh
0000:3F09 15 22 19 13+
0000:3F24
0000:3F24          ; SUBROUTINE
0000:3F24
0000:3F24          sub_0_3F24:                                     ; CODE XREF: 0000:081C↑p
0000:3F24 21 AF 74          ld      hl, VRAM_start+0AFh
0000:3F27 11 E0 FF          ld      de, 0FFEOh
0000:3F2A 36 9F          ld      (hl), 9Fh ; 'f'
0000:3F2C 19          add     hl, de
0000:3F2D 36 9E          ld      (hl), 9Eh ; 'x'
0000:3F2F C9              ret
0000:3F2F          ; End of function sub_0_3F24
0000:3F2F
0000:3F2F          ;
0000:3F30 50 52 4F 47+ProgramWeWouldTeachYou_Tel_tokyo:.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          loc_0_3FA0:                                     ; CODE XREF: 0000:0CD1↑j
0000:3FA0 CD A6 3F          call   sub_0_3FA6
0000:3FA3 C3 5F 0D          jp      loc_0_D5F
0000:3FA6
0000:3FA6          ; SUBROUTINE
0000:3FA6
0000:3FA6          sub_0_3FA6:                                     ; CODE XREF: 0000:3FA0↑p
0000:3FA6 3E 02          ld      a, 2
0000:3FA8 F7              rst     30h ; return if level bit not set
0000:3FA9 06 02          ld      b, 2
0000:3FAB 21 6C 77          ld      hl, VRAM_start+36Ch
0000:3FAE
0000:3FAE          loc_0_3FAE:                                     ; CODE XREF: sub_0_3FA6+11↑j
0000:3FAE 36 10          ld      (hl), 10h
0000:3FB0 23          inc     hl
0000:3FB1 23          inc     hl
0000:3FB2 36 C0          ld      (hl), 0C0h ; 'L'
0000:3FB4 21 8C 74          ld      hl, VRAM_start+8Ch
0000:3FB7 10 F5          djnz   loc_0_3FAE
0000:3FB9 C9              ret
0000:3FB9          ; End of function sub_0_3FA6
0000:3FB9
0000:3FB9          ;
0000:3FBA 00 00 00 00+          .db 0, 0, 0, 0, 0, 0
0000:3FC0
0000:3FC0          ; SUBROUTINE
0000:3FC0
0000:3FC0          sub_0_3FC0:                                     ; CODE XREF: 0000:2285↑p
0000:3FC0 21 4D 69          ld      hl, soft_sprite_ram+4Dh
0000:3FC3 36 03          ld      (hl), 3
0000:3FC5 2C          inc     l
0000:3FC6 2C          inc     l
0000:3FC7 C9              ret
0000:3FC7          ; End of function sub_0_3FC0
0000:3FC7
0000:3FC7          ;
0000:3FC8 00 00 41 7F+          .db 0, 0, 41h, 7Fh, 7Fh, 41h, 0, 0, 0, 7Fh, 7Fh, 18h, 3Ch
0000:3FC8 7F 41 00 00+          .db 76h, 63h, 41h, 0, 0, 7Fh, 7Fh, 49h, 49h, 49h, 41h
0000:3FC8 00 7F 7F 18+          .db 0, 1Ch, 3Eh, 63h, 41h, 49h, 79h, 79h, 0, 7Ch, 7Eh
0000:3FC8 3C 76 63 41+          .db 13h, 11h, 13h, 7Eh, 7Ch, 0, 7Fh, 7Fh, 0Eh, 1Ch, 0Eh
0000:3FC8 00 00 7F 7F+          .db 7Fh, 7Fh, 0, 0, 41h, 7Fh, 7Fh, 41h, 0, 0
0000:3FC8 49 49 49 41+; end of 'ROM'
0000:3FC8 00 1C 3E 63+
0000:6000
0000:6000
0000:6000          ; Segment type: Regular
0000:6000          ; segment 'RAM'
0000:6000          .org 6000h
0000:6000 ??          RAM_start: .block 1 ; DATA XREF: 0000:0268|o
0000:6001 ??          no_of_credits: .block 1 ; DATA XREF: display_credits+5↑o
0000:6001          ; 0000:073F↑r ...

```

```

0000:6002 ??                .block 1
0000:6003 ??                .block 1
0000:6004 ??                .block 1 ; DATA XREF: sub_0_17B+5[o
0000:6005 ??                .block 1 ; DATA XREF: 0000:00C6[r
0000:6005 ??                .block 1 ; sub_0_17B+12[r ...
0000:6006 ??                .block 1
0000:6007 ??                .block 1
0000:6008 ??                .block 1
0000:6009*??               sixteen_bit_countdown_msb:.block 1 ; DATA XREF: return_NOT_16bit_timeout[o
0000:6009*??               eight_bit_countdown:.block 1 ; DATA XREF: return_NOT_8bit_timeout[o
0000:6009*??               ; 0000:078E[o ...
0000:600A ??                main_sequencer: .block 1 ; DATA XREF: 0000:01EE[w
0000:600A ??                ; 0000:06FE[r ...
0000:600B ??                .block 1
0000:600C ??                .block 1
0000:600D ??                unk_0_600D: .block 1
0000:600E ??                unk_0_600E: .block 1
0000:600F ??                two_players: .block 1
0000:6010 ??                controller_in: .block 1 ; DATA XREF: 0000:00AC[w
0000:6010 ??                ; 0000:1502[r ...
0000:6011 ??                last_raw_in: .block 1
0000:6012 ??                .block 1
0000:6013 ??                .block 1
0000:6014 ??                .block 1
0000:6015 ??                .block 1
0000:6016 ??                .block 1
0000:6017 ??                .block 1
0000:6018 ?? ??           random_no: .block 2 ; DATA XREF: rand[r
0000:6018 ??                ; rand+B[w ...
0000:601A ??                gen_purpose_timer:.block 1 ; DATA XREF: rand+3[o
0000:601A ??                ; 0000:00B5[o ...
0000:601B ??                .block 1
0000:601C ??                .block 1
0000:601D ??                .block 1
0000:601E ??                .block 1
0000:601F ??                .block 1
0000:6020 ??                lives_per_game: .block 1 ; DATA XREF: sub_0_207+4[o
0000:6020 ??                ; 0000:0922[r ...
0000:6021 ??                bonus_setting: .block 1 ; DATA XREF: sub_0_350+1E[o
0000:6021 ??                ; 7/10/15/20K
0000:6022 ?? ?? ?? ?? coinage: .block 4 ; DATA XREF: sub_0_17B+27[o
0000:6026 ??                upright: .block 1 ; DATA XREF: 0000:0087[r
0000:6026 ??                ; 0000:099F[r ...
0000:6027 ??                .block 1
0000:6028 ??                .block 1
0000:6029 ??                .block 1
0000:602A ??                .block 1
0000:602B ??                .block 1
0000:602C ??                .block 1
0000:602D ??                .block 1
0000:602E ??                .block 1
0000:602F ??                .block 1
0000:6030 ??                unk_0_6030: .block 1 ; DATA XREF: 0000:1499[o
0000:6030 ??                ; 0000:14FC[o
0000:6031 ??                unk_0_6031: .block 1
0000:6032 ??                unk_0_6032: .block 1 ; DATA XREF: 0000:158A[o
0000:6032 ??                ; 0000:15B2[w
0000:6033 ??                .block 1
0000:6034 ??                unk_0_6034: .block 1 ; DATA XREF: 0000:14DC[o
0000:6035 ??                unk_0_6035: .block 1
0000:6036 ??                unk_0_6036: .block 1
0000:6037 ??                .block 1
0000:6038 ??                unk_0_6038: .block 1
0000:6039 ??                .block 1
0000:603A ??                unk_0_603A: .block 1
0000:603B ??                .block 1
0000:603C ??                .block 1
0000:603D ??                .block 1
0000:603E ??                .block 1
0000:603F ??                .block 1
0000:6040 ??                p1_level_data: .block 1 ; DATA XREF: 0000:093E[o
0000:6040 ??                ; 0000:09AB[o ...
0000:6040 ??                ; game init data copied here
0000:6041 ??                .block 1
0000:6042 ?? ??           .block 2 ; ptr sequence data
0000:6044 ??                .block 1
0000:6045 ??                .block 1
0000:6046 ??                .block 1
0000:6047 ??                .block 1
0000:6048 ??                p2_level_data: .block 1 ; DATA XREF: 0000:0909[o
0000:6048 ??                ; 0000:091F[o ...
0000:6049 ??                .block 1
0000:604A ??                .block 1
0000:604B ??                .block 1
0000:604C ??                .block 1
0000:604D ??                .block 1
0000:604E ??                .block 1
0000:604F ??                .block 1
0000:6050 ??                .block 1
0000:6051 ??                .block 1
0000:6052 ??                .block 1
0000:6053 ??                .block 1
0000:6054 ??                .block 1
0000:6055 ??                .block 1
0000:6056 ??                .block 1
0000:6057 ??                .block 1
0000:6058 ??                .block 1
0000:6059 ??                .block 1
0000:605A ??                .block 1
0000:605B ??                .block 1
0000:605C ??                .block 1
0000:605D ??                .block 1
0000:605E ??                .block 1
0000:605F ??                .block 1
0000:6060 ??                unk_0_6060: .block 1
0000:6061 ??                .block 1
0000:6062 ??                .block 1
0000:6063 ??                .block 1
0000:6064 ??                .block 1
0000:6065 ??                .block 1
0000:6066 ??                .block 1
0000:6067 ??                .block 1
0000:6068 ??                .block 1
0000:6069 ??                .block 1
0000:606A ??                .block 1
0000:606B ??                .block 1
0000:606C ??                .block 1

```



```

0000:606D ?? .block 1
0000:606E ?? .block 1
0000:606F ?? .block 1
0000:6070 ?? .block 1
0000:6071 ?? .block 1
0000:6072 ?? .block 1
0000:6073 ?? .block 1
0000:6074 ?? .block 1
0000:6075 ?? .block 1
0000:6076 ?? .block 1
0000:6077 ?? .block 1
0000:6078 ?? .block 1
0000:6079 ?? .block 1
0000:607A ?? .block 1
0000:607B ?? .block 1
0000:607C ?? .block 1
0000:607D ?? .block 1
0000:607E ?? .block 1
0000:607F ?? .block 1
0000:6080 ?? ?? ?? ??+digital_snd_tmrs:.block 8
0000:6080 ?? ?? ?? ?? ; DATA XREF: update_sounds[o
0000:6088 ?? unk_0_6088: .block 1 ; stop_sound+6[o ...
0000:6088 ; DATA XREF: update_sounds+2E[o
0000:6089 ?? unk_0_6089: .block 1 ; 0000:12A8[w
0000:6089 ; DATA XREF: 0000:067A[w
0000:608A ?? unk_0_608A: .block 1 ; 0000:0CC0[w ...
0000:608A ; DATA XREF: 0000:0ADB[o
0000:608B ?? unk_0_608B: .block 1 ; 0000:0BB3[o ...
0000:608C ?? .block 1 ; DATA XREF: update_sounds+1A[o
0000:608D ?? .block 1
0000:608E ?? .block 1
0000:608F ?? .block 1
0000:6090 ?? .block 1
0000:6091 ?? .block 1
0000:6092 ?? .block 1
0000:6093 ?? .block 1
0000:6094 ?? .block 1
0000:6095 ?? .block 1
0000:6096 ?? .block 1
0000:6097 ?? .block 1
0000:6098 ?? .block 1
0000:6099 ?? .block 1
0000:609A ?? .block 1
0000:609B ?? .block 1
0000:609C ?? .block 1
0000:609D ?? .block 1
0000:609E ?? .block 1
0000:609F ?? .block 1
0000:60A0 ?? .block 1
0000:60A1 ?? .block 1
0000:60A2 ?? .block 1
0000:60A3 ?? .block 1
0000:60A4 ?? .block 1
0000:60A5 ?? .block 1
0000:60A6 ?? .block 1
0000:60A7 ?? .block 1
0000:60A8 ?? .block 1
0000:60A9 ?? .block 1
0000:60AA ?? .block 1
0000:60AB ?? .block 1
0000:60AC ?? .block 1
0000:60AD ?? .block 1
0000:60AE ?? .block 1
0000:60AF ?? .block 1
0000:60B0 ?? unk_0_60B0: .block 1
0000:60B1 ?? unk_0_60B1: .block 1
0000:60B2 ?? unk_0_60B2: .block 1
0000:60B2 ; DATA XREF: 0000:01C9[o
0000:60B3 ?? unk_0_60B3: .block 1 ; sub_0_55F[o ...
0000:60B4 ?? unk_0_60B4: .block 1 ; DATA XREF: sub_0_350+5[o
0000:60B5 ?? unk_0_60B5: .block 1 ; DATA XREF: sub_0_5C6+5[o
0000:60B5 ; DATA XREF: sub_0_55F+8[o
0000:60B6 ?? unk_0_60B6: .block 1 ; sub_0_59B+D[o ...
0000:60B7 ?? unk_0_60B7: .block 1 ; DATA XREF: sub_0_350+E[o
0000:60B8 ?? unk_0_60B8: .block 1 ; DATA XREF: sub_0_5C6+C[o
0000:60B8 ; DATA XREF: sub_0_51C+37[o
0000:60B9 ?? .block 1 ; sub_0_59B+15[o
0000:60BA ?? unk_0_60BA: .block 1
0000:60BA ; DATA XREF: sub_0_51C+24[o
0000:60BB ?? .block 1 ; sub_0_5C6+14[o
0000:60BC ?? .block 1
0000:60BD ?? .block 1
0000:60BE ?? .block 1
0000:60BF ?? .block 1
0000:60C0 ?? unk_0_60C0: .block 1
0000:60C0 ; DATA XREF: 0000:0291[o
0000:60C0 ; sub_0_309F+1[o
0000:60C1 ?? .block 1
0000:60C2 ?? .block 1
0000:60C3 ?? .block 1
0000:60C4 ?? .block 1
0000:60C5 ?? .block 1
0000:60C6 ?? .block 1
0000:60C7 ?? .block 1
0000:60C8 ?? .block 1
0000:60C9 ?? .block 1
0000:60CA ?? .block 1
0000:60CB ?? .block 1
0000:60CC ?? .block 1
0000:60CD ?? .block 1
0000:60CE ?? .block 1
0000:60CF ?? .block 1
0000:60D0 ?? .block 1
0000:60D1 ?? .block 1
0000:60D2 ?? .block 1
0000:60D3 ?? .block 1
0000:60D4 ?? .block 1
0000:60D5 ?? .block 1
0000:60D6 ?? .block 1
0000:60D7 ?? .block 1
0000:60D8 ?? .block 1
0000:60D9 ?? .block 1
0000:60DA ?? .block 1
0000:60DB ?? .block 1
0000:60DC ?? .block 1
0000:60DD ?? .block 1
0000:60DE ?? .block 1

```



```
0000:60DF ?? .block 1
0000:60E0 ?? .block 1
0000:60E1 ?? .block 1
0000:60E2 ?? .block 1
0000:60E3 ?? .block 1
0000:60E4 ?? .block 1
0000:60E5 ?? .block 1
0000:60E6 ?? .block 1
0000:60E7 ?? .block 1
0000:60E8 ?? .block 1
0000:60E9 ?? .block 1
0000:60EA ?? .block 1
0000:60EB ?? .block 1
0000:60EC ?? .block 1
0000:60ED ?? .block 1
0000:60EE ?? .block 1
0000:60EF ?? .block 1
0000:60F0 ?? .block 1
0000:60F1 ?? .block 1
0000:60F2 ?? .block 1
0000:60F3 ?? .block 1
0000:60F4 ?? .block 1
0000:60F5 ?? .block 1
0000:60F6 ?? .block 1
0000:60F7 ?? .block 1
0000:60F8 ?? .block 1
0000:60F9 ?? .block 1
0000:60FA ?? .block 1
0000:60FB ?? .block 1
0000:60FC ?? .block 1
0000:60FD ?? .block 1
0000:60FE ?? .block 1
0000:60FF ?? .block 1
0000:6100 ?? ?? ?? ??+high_score_tbl_ram: .block 0AAh ; DATA XREF: sub_0_207+56↑o
0000:61AA ?? .block 1
0000:61AB ?? .block 1
0000:61AC ?? .block 1
0000:61AD ?? .block 1
0000:61AE ?? .block 1
0000:61AF ?? .block 1
0000:61B0 ?? .block 1
0000:61B1 ?? unk_0_61B1: .block 1 ; DATA XREF: sub_0_13CA+D↑o
0000:61B2 ?? .block 1
0000:61B3 ?? .block 1
0000:61B4 ?? .block 1
0000:61B5 ?? .block 1
0000:61B6 ?? .block 1
0000:61B7 ?? .block 1
0000:61B8 ?? .block 1
0000:61B9 ?? .block 1
0000:61BA ?? .block 1
0000:61BB ?? .block 1
0000:61BC ?? .block 1
0000:61BD ?? .block 1
0000:61BE ?? .block 1
0000:61BF ?? .block 1
0000:61C0 ?? .block 1
0000:61C1 ?? .block 1
0000:61C2 ?? .block 1
0000:61C3 ?? .block 1
0000:61C4 ?? .block 1
0000:61C5 ?? .block 1
0000:61C6 ?? unk_0_61C6: .block 1 ; DATA XREF: sub_0_13CA↑o
0000:61C7 ?? unk_0_61C7: .block 1 ; DATA XREF: sub_0_13CA+2F↑o
0000:61C8 ?? .block 1
0000:61C9 ?? .block 1
0000:61CA ?? .block 1
0000:61CB ?? .block 1
0000:61CC ?? .block 1
0000:61CD ?? .block 1
0000:61CE ?? .block 1
0000:61CF ?? .block 1
0000:61D0 ?? .block 1
0000:61D1 ?? .block 1
0000:61D2 ?? .block 1
0000:61D3 ?? .block 1
0000:61D4 ?? .block 1
0000:61D5 ?? .block 1
0000:61D6 ?? .block 1
0000:61D7 ?? .block 1
0000:61D8 ?? .block 1
0000:61D9 ?? .block 1
0000:61DA ?? .block 1
0000:61DB ?? .block 1
0000:61DC ?? .block 1
0000:61DD ?? .block 1
0000:61DE ?? .block 1
0000:61DF ?? .block 1
0000:61E0 ?? .block 1
0000:61E1 ?? .block 1
0000:61E2 ?? .block 1
0000:61E3 ?? .block 1
0000:61E4 ?? .block 1
0000:61E5 ?? .block 1
0000:61E6 ?? .block 1
0000:61E7 ?? .block 1
0000:61E8 ?? .block 1
0000:61E9 ?? .block 1
0000:61EA ?? .block 1
0000:61EB ?? .block 1
0000:61EC ?? .block 1
0000:61ED ?? .block 1
0000:61EE ?? .block 1
0000:61EF ?? .block 1
0000:61F0 ?? .block 1
0000:61F1 ?? .block 1
0000:61F2 ?? .block 1
0000:61F3 ?? .block 1
0000:61F4 ?? .block 1
0000:61F5 ?? .block 1
0000:61F6 ?? .block 1
0000:61F7 ?? .block 1
0000:61F8 ?? .block 1
0000:61F9 ?? .block 1
0000:61FA ?? .block 1
0000:61FB ?? .block 1
```

```

0000:61FC ??                .block 1
0000:61FD ??                .block 1
0000:61FE ??                .block 1
0000:61FF ??                .block 1
0000:6200 ??                is_mario_alive: .block 1
                                ; DATA XREF: return_if_mario_not_alive|r
                                ; 0000:0BE3|r ...
0000:6201 ??                .block 1
0000:6202 ??                unk_0_6202: .block 1
0000:6203 ??                mario_x: .block 1
                                ; DATA XREF: animate_kong_and_pauline+D6|r
                                ; animate_kong_and_pauline+10E|r ...
0000:6204 ??                unk_0_6204: .block 1
0000:6205 ??                mario_y: .block 1
                                ; DATA XREF: sub_0_19DA+13|r
                                ; sub_0_1A33+22|r ...
0000:6206 ??                unk_0_6206: .block 1
0000:6207 ??                mario_sprite_tile: .block 1
                                ; DATA XREF: sub_0_1AC3+54|o
                                ; sub_0_1AC3+9D|o ...
0000:6208 ??                mario_hflip_pal: .block 1
0000:6209 ??                unk_0_6209: .block 1
0000:620A ??                .block 1
                                ; DATA XREF: 0000:0FA5|o
0000:620B ??                mario_x_before_jump: .block 1
0000:620C ??                mario_y_before_jump: .block 1
0000:620D ??                .block 1
0000:620E ??                unk_0_620E: .block 1
                                ; DATA XREF: sub_0_1AC3+E6|w
                                ; sub_0_1AC3+1B6|o ...
                                ; DATA XREF: sub_0_1AC3+1CE|r
                                ; sub_0_1AC3+1EA|r ...
                                ; DATA XREF: sub_0_1AC3+B0|o
                                ; sub_0_1F46+F|w ...
0000:620F ??                unk_0_620F: .block 1
0000:6210 ??                unk_0_6210: .block 1
0000:6211 ??                unk_0_6211: .block 1
0000:6212 ??                unk_0_6212: .block 1
0000:6213 ??                unk_0_6213: .block 1
0000:6214 ??                unk_0_6214: .block 1
0000:6215 ??                mario_climbing: .block 1
0000:6216 ??                mario_jumping: .block 1
0000:6217 ??                unk_0_6217: .block 1
0000:6218 ??                unk_0_6218: .block 1
0000:6219 ??                unk_0_6219: .block 1
0000:621A ??                unk_0_621A: .block 1
                                ; DATA XREF: sub_0_1AC3+5D|o
                                ; sub_0_1AC3+2B3|r ...
0000:621A ??                .block 1
0000:621B ??                unk_0_621C: .block 1
                                ; DATA XREF: sub_0_1AC3+262|o
                                ; sub_0_1AC3+2BD|r
0000:621C ??                .block 1
0000:621D ??                unk_0_621E: .block 1
                                ; DATA XREF: sub_0_1AC3+7|r
                                ; sub_0_1AC3+92|o ...
0000:621E ??                .block 1
0000:621F ??                unk_0_621F: .block 1
0000:6220 ??                unk_0_6220: .block 1
0000:6221 ??                unk_0_6221: .block 1
0000:6222 ??                unk_0_6222: .block 1
0000:6223 ??                .block 1
0000:6224 ??                unk_0_6224: .block 1
0000:6225 ??                unk_0_6225: .block 1
0000:6226 ??                .block 1
0000:6227 ??                level_type: .block 1
                                ; DATA XREF: sub_0_30+14|o
                                ; 0000:01EA|w ...
                                ; DATA XREF: 0000:01D9|w
                                ; sub_0_350+28|o ...
                                ; DATA XREF: 0000:01D6|w
                                ; sub_0_37F+15|r ...
                                ; keeps incrementing
0000:6228 ??                life_no: .block 1
0000:6228 ??                level: .block 1
0000:6229 ??                .block 1
0000:6229 ??                seq_data: .block 2
0000:622C ??                unk_0_622C: .block 1
                                ; DATA XREF: 0000:0A6E|o
                                ; 0000:12F6|w ...
0000:622C ??                awarded_bonus_life: .block 1
0000:622D ??                unk_0_622E: .block 1
                                ; DATA XREF: 0000:0C05|r
                                ; 0000:0C0E|w ...
0000:622E ??                .block 1
0000:622F ??                unk_0_622F: .block 1
0000:6230 ??                .block 1
0000:6231 ??                .block 1
0000:6232 ??                .block 1
0000:6233 ??                .block 1
0000:6234 ??                .block 1
0000:6235 ??                .block 1
0000:6236 ??                .block 1
0000:6237 ??                .block 1
0000:6238 ??                .block 1
0000:6239 ??                .block 1
0000:623A ??                .block 1
0000:623B ??                .block 1
0000:623C ??                .block 1
0000:623D ??                .block 1
0000:623E ??                .block 1
0000:623F ??                .block 1
0000:6240 ??                .block 1
0000:6241 ??                .block 1
0000:6242 ??                .block 1
0000:6243 ??                .block 1
0000:6244 ??                .block 1
0000:6245 ??                .block 1
0000:6246 ??                .block 1
0000:6247 ??                .block 1
0000:6248 ??                .block 1
0000:6249 ??                .block 1
0000:624A ??                .block 1
0000:624B ??                .block 1
0000:624C ??                .block 1
0000:624D ??                .block 1
0000:624E ??                .block 1
0000:624F ??                .block 1
0000:6250 ??                .block 1
0000:6251 ??                .block 1
0000:6252 ??                .block 1
0000:6253 ??                .block 1
0000:6254 ??                .block 1
0000:6255 ??                .block 1
0000:6256 ??                .block 1
0000:6257 ??                .block 1
0000:6258 ??                .block 1
0000:6259 ??                .block 1
0000:625A ??                .block 1
0000:625B ??                .block 1
0000:625C ??                .block 1
0000:625D ??                .block 1
0000:625E ??                .block 1
0000:625F ??                .block 1
0000:6260 ??                .block 1

```

```

0000:6261 ?? .block 1
0000:6262 ?? .block 1
0000:6263 ?? .block 1
0000:6264 ?? .block 1
0000:6265 ?? .block 1
0000:6266 ?? .block 1
0000:6267 ?? .block 1
0000:6268 ?? .block 1
0000:6269 ?? .block 1
0000:626A ?? .block 1
0000:626B ?? .block 1
0000:626C ?? .block 1
0000:626D ?? .block 1
0000:626E ?? .block 1
0000:626F ?? .block 1
0000:6270 ?? .block 1
0000:6271 ?? .block 1
0000:6272 ?? .block 1
0000:6273 ?? .block 1
0000:6274 ?? .block 1
0000:6275 ?? .block 1
0000:6276 ?? .block 1
0000:6277 ?? .block 1
0000:6278 ?? .block 1
0000:6279 ?? .block 1
0000:627A ?? .block 1
0000:627B ?? .block 1
0000:627C ?? .block 1
0000:627D ?? .block 1
0000:627E ?? .block 1
0000:627F ?? .block 1
0000:6280 ?? unk_0_6280: .block 1 ; DATA XREF: 0000:0F64!o
; 0000:0F72!o ...
0000:6281 ?? .block 1
0000:6282 ?? .block 1
0000:6283 ?? .block 1
0000:6284 ?? .block 1
0000:6285 ?? .block 1
0000:6286 ?? .block 1
0000:6287 ?? .block 1
0000:6288 ?? unk_0_6288: .block 1 ; DATA XREF: sub_0_2207+E!o
0000:6289 ?? .block 1
0000:628A ?? .block 1
0000:628B ?? .block 1
0000:628C ?? .block 1
0000:628D ?? .block 1
0000:628E ?? .block 1
0000:628F ?? .block 1
0000:6290 ?? unk_0_6290: .block 1 ; DATA XREF: sub_0_1A33+53!o
; sub_0_1E57+29!r
0000:6291 ?? unk_0_6291: .block 1
0000:6292 ?? unk_0_6292: .block 1 ; DATA XREF: sub_0_1A33+48!o
0000:6293 ?? .block 1
0000:6294 ?? .block 1
0000:6295 ?? .block 1
0000:6296 ?? .block 1
0000:6297 ?? .block 1
0000:6298 ?? .block 1
0000:6299 ?? .block 1
0000:629A ?? .block 1
0000:629B ?? .block 1
0000:629C ?? .block 1
0000:629D ?? .block 1
0000:629E ?? .block 1
0000:629F ?? .block 1
0000:62A0 ?? unk_0_62A0: .block 1 ; DATA XREF: 0000:16BC!w
; 0000:16D2!w ...
; DATA XREF: sub_0_2602+14!o
0000:62A1 ?? unk_0_62A1: .block 1
0000:62A2 ?? .block 1
0000:62A3 ?? unk_0_62A3: .block 1 ; DATA XREF: sub_0_2523+2E!r
; sub_0_262F!o ...
0000:62A4 ?? .block 1
0000:62A5 ?? unk_0_62A5: .block 1 ; DATA XREF: sub_0_2679+7!o
0000:62A6 ?? unk_0_62A6: .block 1 ; DATA XREF: sub_0_2523+39!r
; sub_0_2679+14!o
; DATA XREF: sub_0_27DA!o
0000:62A7 ?? unk_0_62A7: .block 1
0000:62A8 ?? unk_0_62A8: .block 1
0000:62A9 ?? .block 1
0000:62AA ?? unk_0_62AA: .block 1
0000:62AB ?? .block 1
0000:62AC ?? unk_0_62AC: .block 1
0000:62AD ?? .block 1
0000:62AE ?? .block 1
0000:62AF ?? unk_0_62AF: .block 1 ; DATA XREF: 0000:0AA6!w
; 0000:0AEB!r ...
; DATA XREF: 0000:063A!r
; 0000:0F8E!o ...
; DATA XREF: sub_0_2C03+9!r
; sub_0_2C8F+4B!o ...
0000:62B0 ?? unk_0_62B0: .block 1
0000:62B1 ?? unk_0_62B1: .block 1
0000:62B2 ?? unk_0_62B2: .block 1
0000:62B3 ?? unk_0_62B3: .block 1
0000:62B4 ?? unk_0_62B4: .block 1 ; DATA XREF: sub_0_2FCB+3!o
0000:62B5 ?? .block 1
0000:62B6 ?? .block 1
0000:62B7 ?? .block 1
0000:62B8 ?? unk_0_62B8: .block 1 ; DATA XREF: sub_0_3A2+9!o
0000:62B9 ?? unk_0_62B9: .block 1
0000:62BA ?? unk_0_62BA: .block 1 ; DATA XREF: sub_0_3A2+2F!o
; sub_0_3A2+3E!w
0000:62BB ?? .block 1
0000:62BC ?? .block 1
0000:62BD ?? .block 1
0000:62BE ?? .block 1
0000:62BF ?? .block 1
0000:62C0 ?? .block 1
0000:62C1 ?? .block 1
0000:62C2 ?? .block 1
0000:62C3 ?? .block 1
0000:62C4 ?? .block 1
0000:62C5 ?? .block 1
0000:62C6 ?? .block 1
0000:62C7 ?? .block 1
0000:62C8 ?? .block 1
0000:62C9 ?? .block 1
0000:62CA ?? .block 1
0000:62CB ?? .block 1

```

```
0000:62CC ?? .block 1
0000:62CD ?? .block 1
0000:62CE ?? .block 1
0000:62CF ?? .block 1
0000:62D0 ?? .block 1
0000:62D1 ?? .block 1
0000:62D2 ?? .block 1
0000:62D3 ?? .block 1
0000:62D4 ?? .block 1
0000:62D5 ?? .block 1
0000:62D6 ?? .block 1
0000:62D7 ?? .block 1
0000:62D8 ?? .block 1
0000:62D9 ?? .block 1
0000:62DA ?? .block 1
0000:62DB ?? .block 1
0000:62DC ?? .block 1
0000:62DD ?? .block 1
0000:62DE ?? .block 1
0000:62DF ?? .block 1
0000:62E0 ?? .block 1
0000:62E1 ?? .block 1
0000:62E2 ?? .block 1
0000:62E3 ?? .block 1
0000:62E4 ?? .block 1
0000:62E5 ?? .block 1
0000:62E6 ?? .block 1
0000:62E7 ?? .block 1
0000:62E8 ?? .block 1
0000:62E9 ?? .block 1
0000:62EA ?? .block 1
0000:62EB ?? .block 1
0000:62EC ?? .block 1
0000:62ED ?? .block 1
0000:62EE ?? .block 1
0000:62EF ?? .block 1
0000:62F0 ?? .block 1
0000:62F1 ?? .block 1
0000:62F2 ?? .block 1
0000:62F3 ?? .block 1
0000:62F4 ?? .block 1
0000:62F5 ?? .block 1
0000:62F6 ?? .block 1
0000:62F7 ?? .block 1
0000:62F8 ?? .block 1
0000:62F9 ?? .block 1
0000:62FA ?? .block 1
0000:62FB ?? .block 1
0000:62FC ?? .block 1
0000:62FD ?? .block 1
0000:62FE ?? .block 1
0000:62FF ?? .block 1
0000:6300 ?? unk_0_6300: .block 1 ; DATA XREF: sub_0_236E!o
0000:6300 ; sub_0_2441+30!o
0000:6301 ?? .block 1
0000:6302 ?? .block 1
0000:6303 ?? .block 1
0000:6304 ?? .block 1
0000:6305 ?? .block 1
0000:6306 ?? .block 1
0000:6307 ?? .block 1
0000:6308 ?? .block 1
0000:6309 ?? .block 1
0000:630A ?? .block 1
0000:630B ?? .block 1
0000:630C ?? .block 1
0000:630D ?? .block 1
0000:630E ?? .block 1
0000:630F ?? .block 1
0000:6310 ?? unk_0_6310: .block 1 ; DATA XREF: sub_0_2441+B!o
0000:6311 ?? .block 1
0000:6312 ?? .block 1
0000:6313 ?? .block 1
0000:6314 ?? .block 1
0000:6315 ?? .block 1
0000:6316 ?? .block 1
0000:6317 ?? .block 1
0000:6318 ?? .block 1
0000:6319 ?? .block 1
0000:631A ?? .block 1
0000:631B ?? .block 1
0000:631C ?? .block 1
0000:631D ?? .block 1
0000:631E ?? .block 1
0000:631F ?? .block 1
0000:6320 ?? .block 1
0000:6321 ?? .block 1
0000:6322 ?? .block 1
0000:6323 ?? .block 1
0000:6324 ?? .block 1
0000:6325 ?? .block 1
0000:6326 ?? .block 1
0000:6327 ?? .block 1
0000:6328 ?? .block 1
0000:6329 ?? .block 1
0000:632A ?? .block 1
0000:632B ?? .block 1
0000:632C ?? .block 1
0000:632D ?? .block 1
0000:632E ?? .block 1
0000:632F ?? .block 1
0000:6330 ?? .block 1
0000:6331 ?? .block 1
0000:6332 ?? .block 1
0000:6333 ?? .block 1
0000:6334 ?? .block 1
0000:6335 ?? .block 1
0000:6336 ?? .block 1
0000:6337 ?? .block 1
0000:6338 ?? .block 1
0000:6339 ?? .block 1
0000:633A ?? .block 1
0000:633B ?? .block 1
0000:633C ?? .block 1
0000:633D ?? .block 1
0000:633E ?? .block 1
```

```

0000:633F ??                .block 1
0000:6340 ??                .block 1
0000:6341 ??                .block 1
0000:6341 ??                ; DATA XREF: sub_0_1DBD+E|w
0000:6341 ??                ; 0000:1E4A|o
0000:6342 ??                .block 1
0000:6343 ??                .block 1
0000:6344 ??                .block 1
0000:6345 ??                .block 1
0000:6345 ??                ; DATA XREF: sub_0_1E96|r
0000:6345 ??                ; sub_0_1E96+60|o
0000:6346 ??                .block 1
0000:6346 ??                ; DATA XREF: 0000:1F09|o
0000:6346 ??                ; 0000:1F23|o
0000:6347 ??                .block 1
0000:6348 ??                .block 1
0000:6349 ??                .block 1
0000:634A ??                .block 1
0000:634B ??                .block 1
0000:634C ??                .block 1
0000:634D ??                .block 1
0000:634E ??                .block 1
0000:634F ??                .block 1
0000:6350 ??                .block 1
0000:6351 ??                .block 1
0000:6352 ??                .block 1
0000:6353 ??                .block 1
0000:6354 ??                .block 1
0000:6355 ??                .block 1
0000:6356 ??                .block 1
0000:6357 ??                .block 1
0000:6358 ??                .block 1
0000:6359 ??                .block 1
0000:635A ??                .block 1
0000:635B ??                .block 1
0000:635C ??                .block 1
0000:635D ??                .block 1
0000:635E ??                .block 1
0000:635F ??                .block 1
0000:6360 ??                .block 1
0000:6361 ??                .block 1
0000:6362 ??                .block 1
0000:6363 ??                .block 1
0000:6364 ??                .block 1
0000:6365 ??                .block 1
0000:6366 ??                .block 1
0000:6367 ??                .block 1
0000:6368 ??                .block 1
0000:6369 ??                .block 1
0000:636A ??                .block 1
0000:636B ??                .block 1
0000:636C ??                .block 1
0000:636D ??                .block 1
0000:636E ??                .block 1
0000:636F ??                .block 1
0000:6370 ??                .block 1
0000:6371 ??                .block 1
0000:6372 ??                .block 1
0000:6373 ??                .block 1
0000:6374 ??                .block 1
0000:6375 ??                .block 1
0000:6376 ??                .block 1
0000:6377 ??                .block 1
0000:6378 ??                .block 1
0000:6379 ??                .block 1
0000:637A ??                .block 1
0000:637B ??                .block 1
0000:637C ??                .block 1
0000:637D ??                .block 1
0000:637E ??                .block 1
0000:637F ??                .block 1
0000:6380 ??                .block 1
0000:6381 ??                .block 1
0000:6382 ??                .block 1
0000:6383 ??                .block 1
0000:6384 ??                .block 1
0000:6385 ??                .block 1
0000:6385 ??                ; DATA XREF: sub_0_37F+7|o
0000:6385 ??                ; DATA XREF: 0000:02D1|o
0000:6385 ??                ; DATA XREF: sub_0_37F|o
0000:6385 ??                ; DATA XREF: 0000:0A76|r
0000:6385 ??                ; 0000:0ABA|o ...
0000:6386 ??                .block 1
0000:6387 ??                .block 1
0000:6388 ??                .block 1
0000:6388 ??                ; DATA XREF: 0000:161F|r
0000:6388 ??                ; 0000:1633|r ...
0000:6389 ??                .block 1
0000:638A ??                .block 1
0000:638A ??                ; DATA XREF: 0000:07CB|r
0000:638A ??                ; 0000:07D5|w ...
0000:638B ??                .block 1
0000:638C ??                .block 1
0000:638D ??                .block 1
0000:638D ??                ; DATA XREF: 0000:0B58|w
0000:638D ??                ; 0000:0B94|r ...
0000:638E ??                .block 1
0000:638E ??                ; DATA XREF: 0000:0AD4|w
0000:638E ??                ; 0000:0B3B|r ...
0000:638F ??                .block 1
0000:638F ??                ; DATA XREF: sub_0_2C03+4C|w
0000:638F ??                ; sub_0_2C8F+8D|r ...
0000:6390 ??                .block 1
0000:6390 ??                ; DATA XREF: animate_kong_and_pauline+2B|o
0000:6390 ??                ; animate_kong_and_pauline+8B|r ...
0000:6391 ??                .block 1
0000:6392 ??                .block 1
0000:6393 ??                .block 1
0000:6394 ??                .block 1
0000:6394 ??                ; DATA XREF: sub_0_2ED4+4A|r
0000:6394 ??                ; sub_0_2ED4+75|o
0000:6395 ??                .block 1
0000:6395 ??                ; DATA XREF: sub_0_2ED4+7C|o
0000:6395 ??                ; sub_0_2ED4+87|w ...
0000:6396 ??                .block 1
0000:6397 ??                .block 1
0000:6398 ??                .block 1
0000:6399 ??                .block 1
0000:639A ??                .block 1
0000:639B ??                .block 1
0000:639B ??                ; DATA XREF: sub_0_2523|o
0000:639B ??                ; sub_0_2523+65|w
0000:639C ??                .block 1
0000:639D ??                .block 1
0000:639D ??                ; DATA XREF: 0000:127F|r
0000:639E ??                .block 1
0000:639E ??                ; 0000:1295|o ...
0000:639E ??                ; DATA XREF: 0000:129B|w
0000:639E ??                ; 0000:12B2|o
0000:639F ??                .block 1
0000:63A0 ??                .block 1
0000:63A0 ??                ; DATA XREF: sub_0_3A2+39|w
0000:63A0 ??                ; 0000:0768|w ...
0000:63A1 ??                .block 1
0000:63A2 ??                .block 1

```

```
0000:63A3 ??      unk_0_63A3:      .block 1
0000:63A4 ??      unk_0_63A4:      .block 1
0000:63A5 ??      unk_0_63A5:      .block 1
0000:63A6 ??      unk_0_63A6:      .block 1
0000:63A7 ??      unk_0_63A7:      .block 1
                                ; DATA XREF: 0000:0BFA|o
                                ; 0000:0C43|r ...
0000:63A8 ??      unk_0_63A8:      .block 1
0000:63A9 ??      .block 1
0000:63AA ??      .block 1
0000:63AB ??      unk_0_63AB:      .block 1
0000:63AC ??      .block 1
0000:63AD ??      unk_0_63AD:      .block 1
0000:63AE ??      .block 1
0000:63AF ??      unk_0_63AF:      .block 1
0000:63B0 ??      unk_0_63B0:      .block 1
0000:63B1 ??      unk_0_63B1:      .block 1
0000:63B2 ??      unk_0_63B2:      .block 1
0000:63B3 ??      unk_0_63B3:      .block 1
0000:63B4 ??      unk_0_63B4:      .block 1
0000:63B5 ??      unk_0_63B5:      .block 1
0000:63B6 ??      .block 1
0000:63B7 ??      unk_0_63B7:      .block 1
0000:63B8 ??      unk_0_63B8:      .block 1
                                ; DATA XREF: 0000:0635|r
                                ; 0000:06AC|o
0000:63B8 ??      .block 1
0000:63B9 ??      unk_0_63B9:      .block 1
0000:63BA ??      .block 1
0000:63BB ??      .block 1
0000:63BC ??      .block 1
0000:63BD ??      .block 1
0000:63BE ??      .block 1
0000:63BF ??      .block 1
0000:63C0 ??      unk_0_63C0:      .block 1
0000:63C1 ??      .block 1
0000:63C2 ??      unk_0_63C2:      .block 1
0000:63C3 ??      .block 1
0000:63C4 ??      unk_0_63C4:      .block 1
0000:63C5 ??      .block 1
0000:63C6 ??      .block 1
0000:63C7 ??      .block 1
0000:63C8 ??      unk_0_63C8:      .block 1
0000:63C9 ??      .block 1
0000:63CA ??      .block 1
0000:63CB ??      .block 1
0000:63CC ??      attract_movement_entry: .block 1
                                ; DATA XREF: next_attract_action+3|o
0000:63CD ??      .block 1
0000:63CE ??      .block 1
0000:63CF ??      .block 1
0000:63D0 ??      .block 1
0000:63D1 ??      .block 1
0000:63D2 ??      .block 1
0000:63D3 ??      .block 1
0000:63D4 ??      .block 1
0000:63D5 ??      .block 1
0000:63D6 ??      .block 1
0000:63D7 ??      .block 1
0000:63D8 ??      .block 1
0000:63D9 ??      .block 1
0000:63DA ??      .block 1
0000:63DB ??      .block 1
0000:63DC ??      .block 1
0000:63DD ??      .block 1
0000:63DE ??      .block 1
0000:63DF ??      .block 1
0000:63E0 ??      unk_0_63E0:      .block 1
                                ; DATA XREF: sub_0_31B1+7|o
0000:63E1 ??      .block 1
0000:63E2 ??      .block 1
0000:63E3 ??      .block 1
0000:63E4 ??      .block 1
0000:63E5 ??      .block 1
0000:63E6 ??      .block 1
0000:63E7 ??      .block 1
0000:63E8 ??      .block 1
0000:63E9 ??      .block 1
0000:63EA ??      .block 1
0000:63EB ??      .block 1
0000:63EC ??      .block 1
0000:63ED ??      .block 1
0000:63EE ??      .block 1
0000:63EF ??      .block 1
0000:63F0 ??      .block 1
0000:63F1 ??      .block 1
0000:63F2 ??      .block 1
0000:63F3 ??      .block 1
0000:63F4 ??      .block 1
0000:63F5 ??      .block 1
0000:63F6 ??      .block 1
0000:63F7 ??      .block 1
0000:63F8 ??      .block 1
0000:63F9 ??      .block 1
0000:63FA ??      .block 1
0000:63FB ??      .block 1
0000:63FC ??      .block 1
0000:63FD ??      .block 1
0000:63FE ??      .block 1
0000:63FF ??      .block 1
0000:6400 ??      unk_0_6400:      .block 1
                                ; DATA XREF: 0000:10E9|o
                                ; sub_0_286F+2A|o ...
0000:6400 ??      .block 1
0000:6401 ??      .block 1
0000:6402 ??      .block 1
0000:6403 ??      .block 1
0000:6404 ??      .block 1
0000:6405 ??      .block 1
0000:6406 ??      .block 1
0000:6407 ??      unk_0_6407:      .block 1
                                ; DATA XREF: 0000:0FE5|o
                                ; 0000:1022|o ...
0000:6407 ??      .block 1
0000:6408 ??      .block 1
0000:6409 ??      .block 1
0000:640A ??      .block 1
0000:640B ??      .block 1
0000:640C ??      .block 1
0000:640D ??      .block 1
0000:640E ??      .block 1
0000:640F ??      .block 1
0000:6410 ??      .block 1
0000:6411 ??      .block 1
0000:6412 ??      .block 1
```

```
0000:6413 ?? .block 1
0000:6414 ?? .block 1
0000:6415 ?? .block 1
0000:6416 ?? .block 1
0000:6417 ?? .block 1
0000:6418 ?? .block 1
0000:6419 ?? .block 1
0000:641A ?? .block 1
0000:641B ?? .block 1
0000:641C ?? .block 1
0000:641D ?? .block 1
0000:641E ?? .block 1
0000:641F ?? .block 1
0000:6420 ?? .block 1
0000:6421 ?? .block 1
0000:6422 ?? .block 1
0000:6423 ?? .block 1
0000:6424 ?? .block 1
0000:6425 ?? .block 1
0000:6426 ?? .block 1
0000:6427 ?? .block 1
0000:6428 ?? .block 1
0000:6429 ?? .block 1
0000:642A ?? .block 1
0000:642B ?? .block 1
0000:642C ?? .block 1
0000:642D ?? .block 1
0000:642E ?? .block 1
0000:642F ?? .block 1
0000:6430 ?? .block 1
0000:6431 ?? .block 1
0000:6432 ?? .block 1
0000:6433 ?? .block 1
0000:6434 ?? .block 1
0000:6435 ?? .block 1
0000:6436 ?? .block 1
0000:6437 ?? .block 1
0000:6438 ?? .block 1
0000:6439 ?? unk_0_6439: ; DATA XREF: sub_0_31DD+C|o
0000:643A ?? .block 1
0000:643B ?? .block 1
0000:643C ?? .block 1
0000:643D ?? .block 1
0000:643E ?? .block 1
0000:643F ?? .block 1
0000:6440 ?? .block 1
0000:6441 ?? .block 1
0000:6442 ?? .block 1
0000:6443 ?? .block 1
0000:6444 ?? .block 1
0000:6445 ?? .block 1
0000:6446 ?? .block 1
0000:6447 ?? .block 1
0000:6448 ?? .block 1
0000:6449 ?? .block 1
0000:644A ?? .block 1
0000:644B ?? .block 1
0000:644C ?? .block 1
0000:644D ?? .block 1
0000:644E ?? .block 1
0000:644F ?? .block 1
0000:6450 ?? .block 1
0000:6451 ?? .block 1
0000:6452 ?? .block 1
0000:6453 ?? .block 1
0000:6454 ?? .block 1
0000:6455 ?? .block 1
0000:6456 ?? .block 1
0000:6457 ?? .block 1
0000:6458 ?? .block 1
0000:6459 ?? .block 1
0000:645A ?? .block 1
0000:645B ?? .block 1
0000:645C ?? .block 1
0000:645D ?? .block 1
0000:645E ?? .block 1
0000:645F ?? .block 1
0000:6460 ?? .block 1
0000:6461 ?? .block 1
0000:6462 ?? .block 1
0000:6463 ?? .block 1
0000:6464 ?? .block 1
0000:6465 ?? .block 1
0000:6466 ?? .block 1
0000:6467 ?? .block 1
0000:6468 ?? .block 1
0000:6469 ?? .block 1
0000:646A ?? .block 1
0000:646B ?? .block 1
0000:646C ?? .block 1
0000:646D ?? .block 1
0000:646E ?? .block 1
0000:646F ?? .block 1
0000:6470 ?? .block 1
0000:6471 ?? .block 1
0000:6472 ?? .block 1
0000:6473 ?? .block 1
0000:6474 ?? .block 1
0000:6475 ?? .block 1
0000:6476 ?? .block 1
0000:6477 ?? .block 1
0000:6478 ?? unk_0_6479: ; DATA XREF: sub_0_31DD+12|o
0000:6479 ?? .block 1
0000:647A ?? .block 1
0000:647B ?? .block 1
0000:647C ?? .block 1
0000:647D ?? .block 1
0000:647E ?? .block 1
0000:647F ?? .block 1
0000:6480 ?? .block 1
0000:6481 ?? .block 1
0000:6482 ?? .block 1
0000:6483 ?? .block 1
0000:6484 ?? .block 1
0000:6485 ?? .block 1
0000:6486 ?? .block 1
```

```
0000:6487 ?? .block 1
0000:6488 ?? .block 1
0000:6489 ?? .block 1
0000:648A ?? .block 1
0000:648B ?? .block 1
0000:648C ?? .block 1
0000:648D ?? .block 1
0000:648E ?? .block 1
0000:648F ?? .block 1
0000:6490 ?? .block 1
0000:6491 ?? .block 1
0000:6492 ?? .block 1
0000:6493 ?? .block 1
0000:6494 ?? .block 1
0000:6495 ?? .block 1
0000:6496 ?? .block 1
0000:6497 ?? .block 1
0000:6498 ?? .block 1
0000:6499 ?? .block 1
0000:649A ?? .block 1
0000:649B ?? .block 1
0000:649C ?? .block 1
0000:649D ?? .block 1
0000:649E ?? .block 1
0000:649F ?? .block 1
0000:64A0 ?? unk_0_64A0: ; DATA XREF: 0000:1166|o
0000:64A1 ?? .block 1
0000:64A2 ?? .block 1
0000:64A3 ?? unk_0_64A3: ; DATA XREF: 0000:1151|o
0000:64A4 ?? .block 1
0000:64A5 ?? .block 1
0000:64A6 ?? .block 1
0000:64A7 ?? unk_0_64A7: ; DATA XREF: 0000:115D|o
0000:64A8 ?? .block 1
0000:64A9 ?? .block 1
0000:64AA ?? .block 1
0000:64AB ?? .block 1
0000:64AC ?? .block 1
0000:64AD ?? .block 1
0000:64AE ?? .block 1
0000:64AF ?? .block 1
0000:64B0 ?? .block 1
0000:64B1 ?? .block 1
0000:64B2 ?? .block 1
0000:64B3 ?? .block 1
0000:64B4 ?? .block 1
0000:64B5 ?? .block 1
0000:64B6 ?? .block 1
0000:64B7 ?? .block 1
0000:64B8 ?? .block 1
0000:64B9 ?? .block 1
0000:64BA ?? .block 1
0000:64BB ?? .block 1
0000:64BC ?? .block 1
0000:64BD ?? .block 1
0000:64BE ?? .block 1
0000:64BF ?? .block 1
0000:64C0 ?? .block 1
0000:64C1 ?? .block 1
0000:64C2 ?? .block 1
0000:64C3 ?? .block 1
0000:64C4 ?? .block 1
0000:64C5 ?? .block 1
0000:64C6 ?? .block 1
0000:64C7 ?? .block 1
0000:64C8 ?? .block 1
0000:64C9 ?? .block 1
0000:64CA ?? .block 1
0000:64CB ?? .block 1
0000:64CC ?? .block 1
0000:64CD ?? .block 1
0000:64CE ?? .block 1
0000:64CF ?? .block 1
0000:64D0 ?? .block 1
0000:64D1 ?? .block 1
0000:64D2 ?? .block 1
0000:64D3 ?? .block 1
0000:64D4 ?? .block 1
0000:64D5 ?? .block 1
0000:64D6 ?? .block 1
0000:64D7 ?? .block 1
0000:64D8 ?? .block 1
0000:64D9 ?? .block 1
0000:64DA ?? .block 1
0000:64DB ?? .block 1
0000:64DC ?? .block 1
0000:64DD ?? .block 1
0000:64DE ?? .block 1
0000:64DF ?? .block 1
0000:64E0 ?? .block 1
0000:64E1 ?? .block 1
0000:64E2 ?? .block 1
0000:64E3 ?? .block 1
0000:64E4 ?? .block 1
0000:64E5 ?? .block 1
0000:64E6 ?? .block 1
0000:64E7 ?? .block 1
0000:64E8 ?? .block 1
0000:64E9 ?? .block 1
0000:64EA ?? .block 1
0000:64EB ?? .block 1
0000:64EC ?? .block 1
0000:64ED ?? .block 1
0000:64EE ?? .block 1
0000:64EF ?? .block 1
0000:64F0 ?? .block 1
0000:64F1 ?? .block 1
0000:64F2 ?? .block 1
0000:64F3 ?? .block 1
0000:64F4 ?? .block 1
0000:64F5 ?? .block 1
0000:64F6 ?? .block 1
0000:64F7 ?? .block 1
0000:64F8 ?? .block 1
0000:64F9 ?? .block 1
0000:64FA ?? .block 1
```



```
0000:64FB ?? .block 1
0000:64FC ?? .block 1
0000:64FD ?? .block 1
0000:64FE ?? .block 1
0000:64FF ?? .block 1
0000:6500 ?? unk_0_6500: .block 1
0000:6500 ; DATA XREF: sub_0_1186+C|o
0000:6501 ?? .block 1
0000:6502 ?? .block 1
0000:6503 ?? .block 1
0000:6504 ?? .block 1
0000:6505 ?? .block 1
0000:6506 ?? .block 1
0000:6507 ?? unk_0_6507: .block 1
0000:6508 ?? ; DATA XREF: sub_0_1186+3|o
0000:6509 ?? .block 1
0000:650A ?? .block 1
0000:650B ?? .block 1
0000:650C ?? .block 1
0000:650D ?? .block 1
0000:650E ?? .block 1
0000:650F ?? .block 1
0000:6510 ?? .block 1
0000:6511 ?? .block 1
0000:6512 ?? .block 1
0000:6513 ?? .block 1
0000:6514 ?? .block 1
0000:6515 ?? .block 1
0000:6516 ?? .block 1
0000:6517 ?? .block 1
0000:6518 ?? .block 1
0000:6519 ?? .block 1
0000:651A ?? .block 1
0000:651B ?? .block 1
0000:651C ?? .block 1
0000:651D ?? .block 1
0000:651E ?? .block 1
0000:651F ?? .block 1
0000:6520 ?? .block 1
0000:6521 ?? .block 1
0000:6522 ?? .block 1
0000:6523 ?? .block 1
0000:6524 ?? .block 1
0000:6525 ?? .block 1
0000:6526 ?? .block 1
0000:6527 ?? .block 1
0000:6528 ?? .block 1
0000:6529 ?? .block 1
0000:652A ?? .block 1
0000:652B ?? .block 1
0000:652C ?? .block 1
0000:652D ?? .block 1
0000:652E ?? .block 1
0000:652F ?? .block 1
0000:6530 ?? .block 1
0000:6531 ?? .block 1
0000:6532 ?? .block 1
0000:6533 ?? .block 1
0000:6534 ?? .block 1
0000:6535 ?? .block 1
0000:6536 ?? .block 1
0000:6537 ?? .block 1
0000:6538 ?? .block 1
0000:6539 ?? .block 1
0000:653A ?? .block 1
0000:653B ?? .block 1
0000:653C ?? .block 1
0000:653D ?? .block 1
0000:653E ?? .block 1
0000:653F ?? .block 1
0000:6540 ?? .block 1
0000:6541 ?? .block 1
0000:6542 ?? .block 1
0000:6543 ?? .block 1
0000:6544 ?? .block 1
0000:6545 ?? .block 1
0000:6546 ?? .block 1
0000:6547 ?? .block 1
0000:6548 ?? .block 1
0000:6549 ?? .block 1
0000:654A ?? .block 1
0000:654B ?? .block 1
0000:654C ?? .block 1
0000:654D ?? .block 1
0000:654E ?? .block 1
0000:654F ?? .block 1
0000:6550 ?? .block 1
0000:6551 ?? .block 1
0000:6552 ?? .block 1
0000:6553 ?? .block 1
0000:6554 ?? .block 1
0000:6555 ?? .block 1
0000:6556 ?? .block 1
0000:6557 ?? .block 1
0000:6558 ?? .block 1
0000:6559 ?? .block 1
0000:655A ?? .block 1
0000:655B ?? .block 1
0000:655C ?? .block 1
0000:655D ?? .block 1
0000:655E ?? .block 1
0000:655F ?? .block 1
0000:6560 ?? .block 1
0000:6561 ?? .block 1
0000:6562 ?? .block 1
0000:6563 ?? .block 1
0000:6564 ?? .block 1
0000:6565 ?? .block 1
0000:6566 ?? .block 1
0000:6567 ?? .block 1
0000:6568 ?? .block 1
0000:6569 ?? .block 1
0000:656A ?? .block 1
0000:656B ?? .block 1
0000:656C ?? .block 1
0000:656D ?? .block 1
```

```
0000:656E ?? .block 1
0000:656F ?? .block 1
0000:6570 ?? .block 1
0000:6571 ?? .block 1
0000:6572 ?? .block 1
0000:6573 ?? .block 1
0000:6574 ?? .block 1
0000:6575 ?? .block 1
0000:6576 ?? .block 1
0000:6577 ?? .block 1
0000:6578 ?? .block 1
0000:6579 ?? .block 1
0000:657A ?? .block 1
0000:657B ?? .block 1
0000:657C ?? .block 1
0000:657D ?? .block 1
0000:657E ?? .block 1
0000:657F ?? .block 1
0000:6580 ?? .block 1
0000:6581 ?? .block 1
0000:6582 ?? .block 1
0000:6583 ?? .block 1
0000:6584 ?? .block 1
0000:6585 ?? .block 1
0000:6586 ?? .block 1
0000:6587 ?? .block 1
0000:6588 ?? .block 1
0000:6589 ?? .block 1
0000:658A ?? .block 1
0000:658B ?? .block 1
0000:658C ?? .block 1
0000:658D ?? .block 1
0000:658E ?? .block 1
0000:658F ?? .block 1
0000:6590 ?? .block 1
0000:6591 ?? .block 1
0000:6592 ?? .block 1
0000:6593 ?? .block 1
0000:6594 ?? .block 1
0000:6595 ?? .block 1
0000:6596 ?? .block 1
0000:6597 ?? .block 1
0000:6598 ?? .block 1
0000:6599 ?? .block 1
0000:659A ?? .block 1
0000:659B ?? .block 1
0000:659C ?? .block 1
0000:659D ?? .block 1
0000:659E ?? .block 1
0000:659F ?? .block 1
0000:65A0 ?? unk_0_65A0: .block 1 ; DATA XREF: 0000:103A!o
0000:65A0 ; sub_0_24EA+9!o ...
0000:65A1 ?? .block 1
0000:65A2 ?? .block 1
0000:65A3 ?? .block 1
0000:65A4 ?? .block 1
0000:65A5 ?? .block 1
0000:65A6 ?? .block 1
0000:65A7 ?? unk_0_65A7: .block 1 ; DATA XREF: 0000:1031!o
0000:65A8 ?? .block 1
0000:65A9 ?? .block 1
0000:65AA ?? .block 1
0000:65AB ?? .block 1
0000:65AC ?? .block 1
0000:65AD ?? .block 1
0000:65AE ?? .block 1
0000:65AF ?? .block 1
0000:65B0 ?? .block 1
0000:65B1 ?? .block 1
0000:65B2 ?? .block 1
0000:65B3 ?? .block 1
0000:65B4 ?? .block 1
0000:65B5 ?? .block 1
0000:65B6 ?? .block 1
0000:65B7 ?? .block 1
0000:65B8 ?? .block 1
0000:65B9 ?? .block 1
0000:65BA ?? .block 1
0000:65BB ?? .block 1
0000:65BC ?? .block 1
0000:65BD ?? .block 1
0000:65BE ?? .block 1
0000:65BF ?? .block 1
0000:65C0 ?? .block 1
0000:65C1 ?? .block 1
0000:65C2 ?? .block 1
0000:65C3 ?? .block 1
0000:65C4 ?? .block 1
0000:65C5 ?? .block 1
0000:65C6 ?? .block 1
0000:65C7 ?? .block 1
0000:65C8 ?? .block 1
0000:65C9 ?? .block 1
0000:65CA ?? .block 1
0000:65CB ?? .block 1
0000:65CC ?? .block 1
0000:65CD ?? .block 1
0000:65CE ?? .block 1
0000:65CF ?? .block 1
0000:65D0 ?? .block 1
0000:65D1 ?? .block 1
0000:65D2 ?? .block 1
0000:65D3 ?? .block 1
0000:65D4 ?? .block 1
0000:65D5 ?? .block 1
0000:65D6 ?? .block 1
0000:65D7 ?? .block 1
0000:65D8 ?? .block 1
0000:65D9 ?? .block 1
0000:65DA ?? .block 1
0000:65DB ?? .block 1
0000:65DC ?? .block 1
0000:65DD ?? .block 1
0000:65DE ?? .block 1
0000:65DF ?? .block 1
0000:65E0 ?? .block 1
```

```
0000:65E1 ?? .block 1
0000:65E2 ?? .block 1
0000:65E3 ?? .block 1
0000:65E4 ?? .block 1
0000:65E5 ?? .block 1
0000:65E6 ?? .block 1
0000:65E7 ?? .block 1
0000:65E8 ?? .block 1
0000:65E9 ?? .block 1
0000:65EA ?? .block 1
0000:65EB ?? .block 1
0000:65EC ?? .block 1
0000:65ED ?? .block 1
0000:65EE ?? .block 1
0000:65EF ?? .block 1
0000:65F0 ?? .block 1
0000:65F1 ?? .block 1
0000:65F2 ?? .block 1
0000:65F3 ?? .block 1
0000:65F4 ?? .block 1
0000:65F5 ?? .block 1
0000:65F6 ?? .block 1
0000:65F7 ?? .block 1
0000:65F8 ?? .block 1
0000:65F9 ?? .block 1
0000:65FA ?? .block 1
0000:65FB ?? .block 1
0000:65FC ?? .block 1
0000:65FD ?? .block 1
0000:65FE ?? .block 1
0000:65FF ?? .block 1
0000:6600 ?? unk_0_6600: .block 1 ; DATA XREF: 0000:1096|o
; 0000:10CF|o ...
0000:6601 ?? .block 1
0000:6602 ?? .block 1
0000:6603 ?? unk_0_6603: .block 1 ; DATA XREF: 0000:10BA|o
0000:6604 ?? .block 1
0000:6605 ?? .block 1
0000:6606 ?? .block 1
0000:6607 ?? unk_0_6607: .block 1 ; DATA XREF: 0000:10C6|o
0000:6608 ?? .block 1
0000:6609 ?? .block 1
0000:660A ?? .block 1
0000:660B ?? .block 1
0000:660C ?? .block 1
0000:660D ?? unk_0_660D: .block 1 ; DATA XREF: 0000:10AA|o
0000:660E ?? .block 1
0000:660F ?? .block 1
0000:6610 ?? .block 1
0000:6611 ?? .block 1
0000:6612 ?? .block 1
0000:6613 ?? .block 1
0000:6614 ?? .block 1
0000:6615 ?? .block 1
0000:6616 ?? .block 1
0000:6617 ?? .block 1
0000:6618 ?? .block 1
0000:6619 ?? .block 1
0000:661A ?? .block 1
0000:661B ?? .block 1
0000:661C ?? .block 1
0000:661D ?? .block 1
0000:661E ?? .block 1
0000:661F ?? .block 1
0000:6620 ?? .block 1
0000:6621 ?? .block 1
0000:6622 ?? .block 1
0000:6623 ?? .block 1
0000:6624 ?? .block 1
0000:6625 ?? .block 1
0000:6626 ?? .block 1
0000:6627 ?? .block 1
0000:6628 ?? .block 1
0000:6629 ?? .block 1
0000:662A ?? .block 1
0000:662B ?? .block 1
0000:662C ?? .block 1
0000:662D ?? .block 1
0000:662E ?? .block 1
0000:662F ?? .block 1
0000:6630 ?? .block 1
0000:6631 ?? .block 1
0000:6632 ?? .block 1
0000:6633 ?? .block 1
0000:6634 ?? .block 1
0000:6635 ?? .block 1
0000:6636 ?? .block 1
0000:6637 ?? .block 1
0000:6638 ?? .block 1
0000:6639 ?? .block 1
0000:663A ?? .block 1
0000:663B ?? .block 1
0000:663C ?? .block 1
0000:663D ?? .block 1
0000:663E ?? .block 1
0000:663F ?? .block 1
0000:6640 ?? .block 1
0000:6641 ?? .block 1
0000:6642 ?? .block 1
0000:6643 ?? .block 1
0000:6644 ?? .block 1
0000:6645 ?? .block 1
0000:6646 ?? .block 1
0000:6647 ?? .block 1
0000:6648 ?? .block 1
0000:6649 ?? .block 1
0000:664A ?? .block 1
0000:664B ?? .block 1
0000:664C ?? .block 1
0000:664D ?? .block 1
0000:664E ?? .block 1
0000:664F ?? .block 1
0000:6650 ?? .block 1
0000:6651 ?? .block 1
0000:6652 ?? .block 1
0000:6653 ?? .block 1
```

```
0000:6654 ?? .block 1
0000:6655 ?? .block 1
0000:6656 ?? .block 1
0000:6657 ?? .block 1
0000:6658 ?? .block 1
0000:6659 ?? .block 1
0000:665A ?? .block 1
0000:665B ?? .block 1
0000:665C ?? .block 1
0000:665D ?? .block 1
0000:665E ?? .block 1
0000:665F ?? .block 1
0000:6660 ?? .block 1
0000:6661 ?? .block 1
0000:6662 ?? .block 1
0000:6663 ?? .block 1
0000:6664 ?? .block 1
0000:6665 ?? .block 1
0000:6666 ?? .block 1
0000:6667 ?? .block 1
0000:6668 ?? .block 1
0000:6669 ?? .block 1
0000:666A ?? .block 1
0000:666B ?? .block 1
0000:666C ?? .block 1
0000:666D ?? .block 1
0000:666E ?? .block 1
0000:666F ?? .block 1
0000:6670 ?? .block 1
0000:6671 ?? .block 1
0000:6672 ?? .block 1
0000:6673 ?? .block 1
0000:6674 ?? .block 1
0000:6675 ?? .block 1
0000:6676 ?? .block 1
0000:6677 ?? .block 1
0000:6678 ?? .block 1
0000:6679 ?? .block 1
0000:667A ?? .block 1
0000:667B ?? .block 1
0000:667C ?? .block 1
0000:667D ?? .block 1
0000:667E ?? .block 1
0000:667F ?? .block 1
0000:6680 ?? unk_0_6680: .block 1 ; DATA XREF: sub_0_11A6+15!o
; sub_0_281D+5!o ...
0000:6681 ?? .block 1
0000:6682 ?? .block 1
0000:6683 ?? unk_0_6683: .block 1 ; DATA XREF: sub_0_11A6!o
0000:6684 ?? .block 1
0000:6685 ?? .block 1
0000:6686 ?? .block 1
0000:6687 ?? unk_0_6687: .block 1 ; DATA XREF: sub_0_11A6+C!o
0000:6688 ?? .block 1
0000:6689 ?? .block 1
0000:668A ?? .block 1
0000:668B ?? .block 1
0000:668C ?? .block 1
0000:668D ?? .block 1
0000:668E ?? .block 1
0000:668F ?? .block 1
0000:6690 ?? unk_0_6690: .block 1 ; DATA XREF: sub_0_2ED4+15!o
0000:6691 ?? .block 1
0000:6692 ?? .block 1
0000:6693 ?? .block 1
0000:6694 ?? .block 1
0000:6695 ?? .block 1
0000:6696 ?? .block 1
0000:6697 ?? .block 1
0000:6698 ?? .block 1
0000:6699 ?? .block 1
0000:669A ?? .block 1
0000:669B ?? .block 1
0000:669C ?? .block 1
0000:669D ?? .block 1
0000:669E ?? .block 1
0000:669F ?? .block 1
0000:66A0 ?? unk_0_66A0: .block 1 ; DATA XREF: sub_0_3A2+1A!o
; sub_0_11FA!o ...
0000:66A1 ?? .block 1
0000:66A2 ?? .block 1
0000:66A3 ?? .block 1
0000:66A4 ?? .block 1
0000:66A5 ?? .block 1
0000:66A6 ?? .block 1
0000:66A7 ?? .block 1
0000:66A8 ?? .block 1
0000:66A9 ?? .block 1
0000:66AA ?? .block 1
0000:66AB ?? .block 1
0000:66AC ?? .block 1
0000:66AD ?? .block 1
0000:66AE ?? .block 1
0000:66AF ?? .block 1
0000:66B0 ?? .block 1
0000:66B1 ?? .block 1
0000:66B2 ?? .block 1
0000:66B3 ?? .block 1
0000:66B4 ?? .block 1
0000:66B5 ?? .block 1
0000:66B6 ?? .block 1
0000:66B7 ?? .block 1
0000:66B8 ?? .block 1
0000:66B9 ?? .block 1
0000:66BA ?? .block 1
0000:66BB ?? .block 1
0000:66BC ?? .block 1
0000:66BD ?? .block 1
0000:66BE ?? .block 1
0000:66BF ?? .block 1
0000:66C0 ?? .block 1
0000:66C1 ?? .block 1
0000:66C2 ?? .block 1
0000:66C3 ?? .block 1
0000:66C4 ?? .block 1
0000:66C5 ?? .block 1
```

```
0000:66C6 ?? .block 1
0000:66C7 ?? .block 1
0000:66C8 ?? .block 1
0000:66C9 ?? .block 1
0000:66CA ?? .block 1
0000:66CB ?? .block 1
0000:66CC ?? .block 1
0000:66CD ?? .block 1
0000:66CE ?? .block 1
0000:66CF ?? .block 1
0000:66D0 ?? .block 1
0000:66D1 ?? .block 1
0000:66D2 ?? .block 1
0000:66D3 ?? .block 1
0000:66D4 ?? .block 1
0000:66D5 ?? .block 1
0000:66D6 ?? .block 1
0000:66D7 ?? .block 1
0000:66D8 ?? .block 1
0000:66D9 ?? .block 1
0000:66DA ?? .block 1
0000:66DB ?? .block 1
0000:66DC ?? .block 1
0000:66DD ?? .block 1
0000:66DE ?? .block 1
0000:66DF ?? .block 1
0000:66E0 ?? .block 1
0000:66E1 ?? .block 1
0000:66E2 ?? .block 1
0000:66E3 ?? .block 1
0000:66E4 ?? .block 1
0000:66E5 ?? .block 1
0000:66E6 ?? .block 1
0000:66E7 ?? .block 1
0000:66E8 ?? .block 1
0000:66E9 ?? .block 1
0000:66EA ?? .block 1
0000:66EB ?? .block 1
0000:66EC ?? .block 1
0000:66ED ?? .block 1
0000:66EE ?? .block 1
0000:66EF ?? .block 1
0000:66F0 ?? .block 1
0000:66F1 ?? .block 1
0000:66F2 ?? .block 1
0000:66F3 ?? .block 1
0000:66F4 ?? .block 1
0000:66F5 ?? .block 1
0000:66F6 ?? .block 1
0000:66F7 ?? .block 1
0000:66F8 ?? .block 1
0000:66F9 ?? .block 1
0000:66FA ?? .block 1
0000:66FB ?? .block 1
0000:66FC ?? .block 1
0000:66FD ?? .block 1
0000:66FE ?? .block 1
0000:66FF ?? .block 1
0000:6700 ?? unk_0_6700: .block 1 ; DATA XREF: sub_0_1F72+5[o
0000:6701 ?? .block 1 ; sub_0_286F+1B[o ...
0000:6702 ?? .block 1
0000:6703 ?? .block 1
0000:6704 ?? .block 1
0000:6705 ?? .block 1
0000:6706 ?? .block 1
0000:6707 ?? unk_0_6707: .block 1 ; DATA XREF: 0000:1009[o
0000:6708 ?? .block 1
0000:6709 ?? .block 1
0000:670A ?? .block 1
0000:670B ?? .block 1
0000:670C ?? .block 1
0000:670D ?? .block 1
0000:670E ?? .block 1
0000:670F ?? .block 1
0000:6710 ?? .block 1
0000:6711 ?? .block 1
0000:6712 ?? .block 1
0000:6713 ?? .block 1
0000:6714 ?? .block 1
0000:6715 ?? .block 1
0000:6716 ?? .block 1
0000:6717 ?? .block 1
0000:6718 ?? .block 1
0000:6719 ?? .block 1
0000:671A ?? .block 1
0000:671B ?? .block 1
0000:671C ?? .block 1
0000:671D ?? .block 1
0000:671E ?? .block 1
0000:671F ?? .block 1
0000:6720 ?? .block 1
0000:6721 ?? .block 1
0000:6722 ?? .block 1
0000:6723 ?? .block 1
0000:6724 ?? .block 1
0000:6725 ?? .block 1
0000:6726 ?? .block 1
0000:6727 ?? .block 1
0000:6728 ?? .block 1
0000:6729 ?? .block 1
0000:672A ?? .block 1
0000:672B ?? .block 1
0000:672C ?? .block 1
0000:672D ?? .block 1
0000:672E ?? .block 1
0000:672F ?? .block 1
0000:6730 ?? .block 1
0000:6731 ?? .block 1
0000:6732 ?? .block 1
0000:6733 ?? .block 1
0000:6734 ?? .block 1
0000:6735 ?? .block 1
0000:6736 ?? .block 1
0000:6737 ?? .block 1
0000:6738 ?? .block 1
```

|           |    |        |   |
|-----------|----|--------|---|
| 0000:6739 | ?? | .block | 1 |
| 0000:673A | ?? | .block | 1 |
| 0000:673B | ?? | .block | 1 |
| 0000:673C | ?? | .block | 1 |
| 0000:673D | ?? | .block | 1 |
| 0000:673E | ?? | .block | 1 |
| 0000:673F | ?? | .block | 1 |
| 0000:6740 | ?? | .block | 1 |
| 0000:6741 | ?? | .block | 1 |
| 0000:6742 | ?? | .block | 1 |
| 0000:6743 | ?? | .block | 1 |
| 0000:6744 | ?? | .block | 1 |
| 0000:6745 | ?? | .block | 1 |
| 0000:6746 | ?? | .block | 1 |
| 0000:6747 | ?? | .block | 1 |
| 0000:6748 | ?? | .block | 1 |
| 0000:6749 | ?? | .block | 1 |
| 0000:674A | ?? | .block | 1 |
| 0000:674B | ?? | .block | 1 |
| 0000:674C | ?? | .block | 1 |
| 0000:674D | ?? | .block | 1 |
| 0000:674E | ?? | .block | 1 |
| 0000:674F | ?? | .block | 1 |
| 0000:6750 | ?? | .block | 1 |
| 0000:6751 | ?? | .block | 1 |
| 0000:6752 | ?? | .block | 1 |
| 0000:6753 | ?? | .block | 1 |
| 0000:6754 | ?? | .block | 1 |
| 0000:6755 | ?? | .block | 1 |
| 0000:6756 | ?? | .block | 1 |
| 0000:6757 | ?? | .block | 1 |
| 0000:6758 | ?? | .block | 1 |
| 0000:6759 | ?? | .block | 1 |
| 0000:675A | ?? | .block | 1 |
| 0000:675B | ?? | .block | 1 |
| 0000:675C | ?? | .block | 1 |
| 0000:675D | ?? | .block | 1 |
| 0000:675E | ?? | .block | 1 |
| 0000:675F | ?? | .block | 1 |
| 0000:6760 | ?? | .block | 1 |
| 0000:6761 | ?? | .block | 1 |
| 0000:6762 | ?? | .block | 1 |
| 0000:6763 | ?? | .block | 1 |
| 0000:6764 | ?? | .block | 1 |
| 0000:6765 | ?? | .block | 1 |
| 0000:6766 | ?? | .block | 1 |
| 0000:6767 | ?? | .block | 1 |
| 0000:6768 | ?? | .block | 1 |
| 0000:6769 | ?? | .block | 1 |
| 0000:676A | ?? | .block | 1 |
| 0000:676B | ?? | .block | 1 |
| 0000:676C | ?? | .block | 1 |
| 0000:676D | ?? | .block | 1 |
| 0000:676E | ?? | .block | 1 |
| 0000:676F | ?? | .block | 1 |
| 0000:6770 | ?? | .block | 1 |
| 0000:6771 | ?? | .block | 1 |
| 0000:6772 | ?? | .block | 1 |
| 0000:6773 | ?? | .block | 1 |
| 0000:6774 | ?? | .block | 1 |
| 0000:6775 | ?? | .block | 1 |
| 0000:6776 | ?? | .block | 1 |
| 0000:6777 | ?? | .block | 1 |
| 0000:6778 | ?? | .block | 1 |
| 0000:6779 | ?? | .block | 1 |
| 0000:677A | ?? | .block | 1 |
| 0000:677B | ?? | .block | 1 |
| 0000:677C | ?? | .block | 1 |
| 0000:677D | ?? | .block | 1 |
| 0000:677E | ?? | .block | 1 |
| 0000:677F | ?? | .block | 1 |
| 0000:6780 | ?? | .block | 1 |
| 0000:6781 | ?? | .block | 1 |
| 0000:6782 | ?? | .block | 1 |
| 0000:6783 | ?? | .block | 1 |
| 0000:6784 | ?? | .block | 1 |
| 0000:6785 | ?? | .block | 1 |
| 0000:6786 | ?? | .block | 1 |
| 0000:6787 | ?? | .block | 1 |
| 0000:6788 | ?? | .block | 1 |
| 0000:6789 | ?? | .block | 1 |
| 0000:678A | ?? | .block | 1 |
| 0000:678B | ?? | .block | 1 |
| 0000:678C | ?? | .block | 1 |
| 0000:678D | ?? | .block | 1 |
| 0000:678E | ?? | .block | 1 |
| 0000:678F | ?? | .block | 1 |
| 0000:6790 | ?? | .block | 1 |
| 0000:6791 | ?? | .block | 1 |
| 0000:6792 | ?? | .block | 1 |
| 0000:6793 | ?? | .block | 1 |
| 0000:6794 | ?? | .block | 1 |
| 0000:6795 | ?? | .block | 1 |
| 0000:6796 | ?? | .block | 1 |
| 0000:6797 | ?? | .block | 1 |
| 0000:6798 | ?? | .block | 1 |
| 0000:6799 | ?? | .block | 1 |
| 0000:679A | ?? | .block | 1 |
| 0000:679B | ?? | .block | 1 |
| 0000:679C | ?? | .block | 1 |
| 0000:679D | ?? | .block | 1 |
| 0000:679E | ?? | .block | 1 |
| 0000:679F | ?? | .block | 1 |
| 0000:67A0 | ?? | .block | 1 |
| 0000:67A1 | ?? | .block | 1 |
| 0000:67A2 | ?? | .block | 1 |
| 0000:67A3 | ?? | .block | 1 |
| 0000:67A4 | ?? | .block | 1 |
| 0000:67A5 | ?? | .block | 1 |
| 0000:67A6 | ?? | .block | 1 |
| 0000:67A7 | ?? | .block | 1 |
| 0000:67A8 | ?? | .block | 1 |
| 0000:67A9 | ?? | .block | 1 |
| 0000:67AA | ?? | .block | 1 |
| 0000:67AB | ?? | .block | 1 |
| 0000:67AC | ?? | .block | 1 |

|           |             |        |   |
|-----------|-------------|--------|---|
| 0000:67AD | ??          | .block | 1 |
| 0000:67AE | ??          | .block | 1 |
| 0000:67AF | ??          | .block | 1 |
| 0000:67B0 | ??          | .block | 1 |
| 0000:67B1 | ??          | .block | 1 |
| 0000:67B2 | ??          | .block | 1 |
| 0000:67B3 | ??          | .block | 1 |
| 0000:67B4 | ??          | .block | 1 |
| 0000:67B5 | ??          | .block | 1 |
| 0000:67B6 | ??          | .block | 1 |
| 0000:67B7 | ??          | .block | 1 |
| 0000:67B8 | ??          | .block | 1 |
| 0000:67B9 | ??          | .block | 1 |
| 0000:67BA | ??          | .block | 1 |
| 0000:67BB | ??          | .block | 1 |
| 0000:67BC | ??          | .block | 1 |
| 0000:67BD | ??          | .block | 1 |
| 0000:67BE | ??          | .block | 1 |
| 0000:67BF | ??          | .block | 1 |
| 0000:67C0 | ??          | .block | 1 |
| 0000:67C1 | ??          | .block | 1 |
| 0000:67C2 | ??          | .block | 1 |
| 0000:67C3 | ??          | .block | 1 |
| 0000:67C4 | ??          | .block | 1 |
| 0000:67C5 | ??          | .block | 1 |
| 0000:67C6 | ??          | .block | 1 |
| 0000:67C7 | ??          | .block | 1 |
| 0000:67C8 | ??          | .block | 1 |
| 0000:67C9 | ??          | .block | 1 |
| 0000:67CA | ??          | .block | 1 |
| 0000:67CB | ??          | .block | 1 |
| 0000:67CC | ??          | .block | 1 |
| 0000:67CD | ??          | .block | 1 |
| 0000:67CE | ??          | .block | 1 |
| 0000:67CF | ??          | .block | 1 |
| 0000:67D0 | ??          | .block | 1 |
| 0000:67D1 | ??          | .block | 1 |
| 0000:67D2 | ??          | .block | 1 |
| 0000:67D3 | ??          | .block | 1 |
| 0000:67D4 | ??          | .block | 1 |
| 0000:67D5 | ??          | .block | 1 |
| 0000:67D6 | ??          | .block | 1 |
| 0000:67D7 | ??          | .block | 1 |
| 0000:67D8 | ??          | .block | 1 |
| 0000:67D9 | ??          | .block | 1 |
| 0000:67DA | ??          | .block | 1 |
| 0000:67DB | ??          | .block | 1 |
| 0000:67DC | ??          | .block | 1 |
| 0000:67DD | ??          | .block | 1 |
| 0000:67DE | ??          | .block | 1 |
| 0000:67DF | ??          | .block | 1 |
| 0000:67E0 | ??          | .block | 1 |
| 0000:67E1 | ??          | .block | 1 |
| 0000:67E2 | ??          | .block | 1 |
| 0000:67E3 | ??          | .block | 1 |
| 0000:67E4 | ??          | .block | 1 |
| 0000:67E5 | ??          | .block | 1 |
| 0000:67E6 | ??          | .block | 1 |
| 0000:67E7 | ??          | .block | 1 |
| 0000:67E8 | ??          | .block | 1 |
| 0000:67E9 | ??          | .block | 1 |
| 0000:67EA | ??          | .block | 1 |
| 0000:67EB | ??          | .block | 1 |
| 0000:67EC | ??          | .block | 1 |
| 0000:67ED | ??          | .block | 1 |
| 0000:67EE | ??          | .block | 1 |
| 0000:67EF | ??          | .block | 1 |
| 0000:67F0 | ??          | .block | 1 |
| 0000:67F1 | ??          | .block | 1 |
| 0000:67F2 | ??          | .block | 1 |
| 0000:67F3 | ??          | .block | 1 |
| 0000:67F4 | ??          | .block | 1 |
| 0000:67F5 | ??          | .block | 1 |
| 0000:67F6 | ??          | .block | 1 |
| 0000:67F7 | ??          | .block | 1 |
| 0000:67F8 | ??          | .block | 1 |
| 0000:67F9 | ??          | .block | 1 |
| 0000:67FA | ??          | .block | 1 |
| 0000:67FB | ??          | .block | 1 |
| 0000:67FC | ??          | .block | 1 |
| 0000:67FD | ??          | .block | 1 |
| 0000:67FE | ??          | .block | 1 |
| 0000:67FF | ??          | .block | 1 |
| 0000:6800 | ??          | .block | 1 |
| 0000:6801 | ??          | .block | 1 |
| 0000:6802 | ??          | .block | 1 |
| 0000:6803 | ??          | .block | 1 |
| 0000:6804 | ??          | .block | 1 |
| 0000:6805 | ??          | .block | 1 |
| 0000:6806 | ??          | .block | 1 |
| 0000:6807 | unk_0_6807: | .block | 1 |
| 0000:6808 | ??          | .block | 1 |
| 0000:6809 | ??          | .block | 1 |
| 0000:680A | ??          | .block | 1 |
| 0000:680B | ??          | .block | 1 |
| 0000:680C | ??          | .block | 1 |
| 0000:680D | ??          | .block | 1 |
| 0000:680E | ??          | .block | 1 |
| 0000:680F | ??          | .block | 1 |
| 0000:6810 | ??          | .block | 1 |
| 0000:6811 | ??          | .block | 1 |
| 0000:6812 | ??          | .block | 1 |
| 0000:6813 | ??          | .block | 1 |
| 0000:6814 | ??          | .block | 1 |
| 0000:6815 | ??          | .block | 1 |
| 0000:6816 | ??          | .block | 1 |
| 0000:6817 | ??          | .block | 1 |
| 0000:6818 | ??          | .block | 1 |
| 0000:6819 | ??          | .block | 1 |
| 0000:681A | ??          | .block | 1 |
| 0000:681B | ??          | .block | 1 |
| 0000:681C | ??          | .block | 1 |
| 0000:681D | ??          | .block | 1 |
| 0000:681E | ??          | .block | 1 |
| 0000:681F | ??          | .block | 1 |
| 0000:6820 | ??          | .block | 1 |

; DATA XREF: 0000:1012|o

```
0000:6821 ?? .block 1
0000:6822 ?? .block 1
0000:6823 ?? .block 1
0000:6824 ?? .block 1
0000:6825 ?? .block 1
0000:6826 ?? .block 1
0000:6827 ?? .block 1
0000:6828 ?? .block 1
0000:6829 ?? .block 1
0000:682A ?? .block 1
0000:682B ?? .block 1
0000:682C ?? .block 1
0000:682D ?? .block 1
0000:682E ?? .block 1
0000:682F ?? .block 1
0000:6830 ?? .block 1
0000:6831 ?? .block 1
0000:6832 ?? .block 1
0000:6833 ?? .block 1
0000:6834 ?? .block 1
0000:6835 ?? .block 1
0000:6836 ?? .block 1
0000:6837 ?? .block 1
0000:6838 ?? .block 1
0000:6839 ?? .block 1
0000:683A ?? .block 1
0000:683B ?? .block 1
0000:683C ?? .block 1
0000:683D ?? .block 1
0000:683E ?? .block 1
0000:683F ?? .block 1
0000:6840 ?? .block 1
0000:6841 ?? .block 1
0000:6842 ?? .block 1
0000:6843 ?? .block 1
0000:6844 ?? .block 1
0000:6845 ?? .block 1
0000:6846 ?? .block 1
0000:6847 ?? .block 1
0000:6848 ?? .block 1
0000:6849 ?? .block 1
0000:684A ?? .block 1
0000:684B ?? .block 1
0000:684C ?? .block 1
0000:684D ?? .block 1
0000:684E ?? .block 1
0000:684F ?? .block 1
0000:6850 ?? .block 1
0000:6851 ?? .block 1
0000:6852 ?? .block 1
0000:6853 ?? .block 1
0000:6854 ?? .block 1
0000:6855 ?? .block 1
0000:6856 ?? .block 1
0000:6857 ?? .block 1
0000:6858 ?? .block 1
0000:6859 ?? .block 1
0000:685A ?? .block 1
0000:685B ?? .block 1
0000:685C ?? .block 1
0000:685D ?? .block 1
0000:685E ?? .block 1
0000:685F ?? .block 1
0000:6860 ?? .block 1
0000:6861 ?? .block 1
0000:6862 ?? .block 1
0000:6863 ?? .block 1
0000:6864 ?? .block 1
0000:6865 ?? .block 1
0000:6866 ?? .block 1
0000:6867 ?? .block 1
0000:6868 ?? .block 1
0000:6869 ?? .block 1
0000:686A ?? .block 1
0000:686B ?? .block 1
0000:686C ?? .block 1
0000:686D ?? .block 1
0000:686E ?? .block 1
0000:686F ?? .block 1
0000:6870 ?? .block 1
0000:6871 ?? .block 1
0000:6872 ?? .block 1
0000:6873 ?? .block 1
0000:6874 ?? .block 1
0000:6875 ?? .block 1
0000:6876 ?? .block 1
0000:6877 ?? .block 1
0000:6878 ?? .block 1
0000:6879 ?? .block 1
0000:687A ?? .block 1
0000:687B ?? .block 1
0000:687C ?? .block 1
0000:687D ?? .block 1
0000:687E ?? .block 1
0000:687F ?? .block 1
0000:6880 ?? .block 1
0000:6881 ?? .block 1
0000:6882 ?? .block 1
0000:6883 ?? .block 1
0000:6884 ?? .block 1
0000:6885 ?? .block 1
0000:6886 ?? .block 1
0000:6887 ?? .block 1
0000:6888 ?? .block 1
0000:6889 ?? .block 1
0000:688A ?? .block 1
0000:688B ?? .block 1
0000:688C ?? .block 1
0000:688D ?? .block 1
0000:688E ?? .block 1
0000:688F ?? .block 1
0000:6890 ?? .block 1
0000:6891 ?? .block 1
0000:6892 ?? .block 1
0000:6893 ?? .block 1
0000:6894 ?? .block 1
```



```

0000:6895 ?? .block 1
0000:6896 ?? .block 1
0000:6897 ?? .block 1
0000:6898 ?? .block 1
0000:6899 ?? .block 1
0000:689A ?? .block 1
0000:689B ?? .block 1
0000:689C ?? .block 1
0000:689D ?? .block 1
0000:689E ?? .block 1
0000:689F ?? .block 1
0000:68A0 ?? .block 1
0000:68A1 ?? .block 1
0000:68A2 ?? .block 1
0000:68A3 ?? .block 1
0000:68A4 ?? .block 1
0000:68A5 ?? .block 1
0000:68A6 ?? .block 1
0000:68A7 ?? .block 1
0000:68A8 ?? .block 1
0000:68A9 ?? .block 1
0000:68AA ?? .block 1
0000:68AB ?? .block 1
0000:68AC ?? .block 1
0000:68AD ?? .block 1
0000:68AE ?? .block 1
0000:68AF ?? .block 1
0000:68B0 ?? .block 1
0000:68B1 ?? .block 1
0000:68B2 ?? .block 1
0000:68B3 ?? .block 1
0000:68B4 ?? .block 1
0000:68B5 ?? .block 1
0000:68B6 ?? .block 1
0000:68B7 ?? .block 1
0000:68B8 ?? .block 1
0000:68B9 ?? .block 1
0000:68BA ?? .block 1
0000:68BB ?? .block 1
0000:68BC ?? .block 1
0000:68BD ?? .block 1
0000:68BE ?? .block 1
0000:68BF ?? .block 1
0000:68C0 ?? .block 1
0000:68C1 ?? .block 1
0000:68C2 ?? .block 1
0000:68C3 ?? .block 1
0000:68C4 ?? .block 1
0000:68C5 ?? .block 1
0000:68C6 ?? .block 1
0000:68C7 ?? .block 1
0000:68C8 ?? .block 1
0000:68C9 ?? .block 1
0000:68CA ?? .block 1
0000:68CB ?? .block 1
0000:68CC ?? .block 1
0000:68CD ?? .block 1
0000:68CE ?? .block 1
0000:68CF ?? .block 1
0000:68D0 ?? .block 1
0000:68D1 ?? .block 1
0000:68D2 ?? .block 1
0000:68D3 ?? .block 1
0000:68D4 ?? .block 1
0000:68D5 ?? .block 1
0000:68D6 ?? .block 1
0000:68D7 ?? .block 1
0000:68D8 ?? .block 1
0000:68D9 ?? .block 1
0000:68DA ?? .block 1
0000:68DB ?? .block 1
0000:68DC ?? .block 1
0000:68DD ?? .block 1
0000:68DE ?? .block 1
0000:68DF ?? .block 1
0000:68E0 ?? .block 1
0000:68E1 ?? .block 1
0000:68E2 ?? .block 1
0000:68E3 ?? .block 1
0000:68E4 ?? .block 1
0000:68E5 ?? .block 1
0000:68E6 ?? .block 1
0000:68E7 ?? .block 1
0000:68E8 ?? .block 1
0000:68E9 ?? .block 1
0000:68EA ?? .block 1
0000:68EB ?? .block 1
0000:68EC ?? .block 1
0000:68ED ?? .block 1
0000:68EE ?? .block 1
0000:68EF ?? .block 1
0000:68F0 ?? .block 1
0000:68F1 ?? .block 1
0000:68F2 ?? .block 1
0000:68F3 ?? .block 1
0000:68F4 ?? .block 1
0000:68F5 ?? .block 1
0000:68F6 ?? .block 1
0000:68F7 ?? .block 1
0000:68F8 ?? .block 1
0000:68F9 ?? .block 1
0000:68FA ?? .block 1
0000:68FB ?? .block 1
0000:68FC ?? .block 1
0000:68FD ?? .block 1
0000:68FE ?? .block 1
0000:68FF ?? .block 1
0000:6900 ?? ?? ?? ??+soft_sprite_ram:.block 180h
0000:6900 ?? ?? ?? ??+ ; DATA XREF: 0000:0139!o
0000:6900 ?? ?? ?? ??+ ; clear_tiles_and_sprites+11!o ...
0000:6900 ?? ?? ?? ??+ ; 0-1 = pauline
0000:6900 ?? ?? ?? ??+ ; 2-11 = kong
0000:6900 ?? ?? ?? ??+ ; 12-
0000:6A80 ?? .block 1
0000:6A81 ?? .block 1
0000:6A82 ?? .block 1
0000:6A83 ?? .block 1

```

|           |    |        |   |
|-----------|----|--------|---|
| 0000:6A84 | ?? | .block | 1 |
| 0000:6A85 | ?? | .block | 1 |
| 0000:6A86 | ?? | .block | 1 |
| 0000:6A87 | ?? | .block | 1 |
| 0000:6A88 | ?? | .block | 1 |
| 0000:6A89 | ?? | .block | 1 |
| 0000:6A8A | ?? | .block | 1 |
| 0000:6A8B | ?? | .block | 1 |
| 0000:6A8C | ?? | .block | 1 |
| 0000:6A8D | ?? | .block | 1 |
| 0000:6A8E | ?? | .block | 1 |
| 0000:6A8F | ?? | .block | 1 |
| 0000:6A90 | ?? | .block | 1 |
| 0000:6A91 | ?? | .block | 1 |
| 0000:6A92 | ?? | .block | 1 |
| 0000:6A93 | ?? | .block | 1 |
| 0000:6A94 | ?? | .block | 1 |
| 0000:6A95 | ?? | .block | 1 |
| 0000:6A96 | ?? | .block | 1 |
| 0000:6A97 | ?? | .block | 1 |
| 0000:6A98 | ?? | .block | 1 |
| 0000:6A99 | ?? | .block | 1 |
| 0000:6A9A | ?? | .block | 1 |
| 0000:6A9B | ?? | .block | 1 |
| 0000:6A9C | ?? | .block | 1 |
| 0000:6A9D | ?? | .block | 1 |
| 0000:6A9E | ?? | .block | 1 |
| 0000:6A9F | ?? | .block | 1 |
| 0000:6AA0 | ?? | .block | 1 |
| 0000:6AA1 | ?? | .block | 1 |
| 0000:6AA2 | ?? | .block | 1 |
| 0000:6AA3 | ?? | .block | 1 |
| 0000:6AA4 | ?? | .block | 1 |
| 0000:6AA5 | ?? | .block | 1 |
| 0000:6AA6 | ?? | .block | 1 |
| 0000:6AA7 | ?? | .block | 1 |
| 0000:6AA8 | ?? | .block | 1 |
| 0000:6AA9 | ?? | .block | 1 |
| 0000:6AAA | ?? | .block | 1 |
| 0000:6AAB | ?? | .block | 1 |
| 0000:6AAC | ?? | .block | 1 |
| 0000:6AAD | ?? | .block | 1 |
| 0000:6AAE | ?? | .block | 1 |
| 0000:6AAF | ?? | .block | 1 |
| 0000:6AB0 | ?? | .block | 1 |
| 0000:6AB1 | ?? | .block | 1 |
| 0000:6AB2 | ?? | .block | 1 |
| 0000:6AB3 | ?? | .block | 1 |
| 0000:6AB4 | ?? | .block | 1 |
| 0000:6AB5 | ?? | .block | 1 |
| 0000:6AB6 | ?? | .block | 1 |
| 0000:6AB7 | ?? | .block | 1 |
| 0000:6AB8 | ?? | .block | 1 |
| 0000:6AB9 | ?? | .block | 1 |
| 0000:6ABA | ?? | .block | 1 |
| 0000:6ABB | ?? | .block | 1 |
| 0000:6ABC | ?? | .block | 1 |
| 0000:6ABD | ?? | .block | 1 |
| 0000:6ABE | ?? | .block | 1 |
| 0000:6ABF | ?? | .block | 1 |
| 0000:6AC0 | ?? | .block | 1 |
| 0000:6AC1 | ?? | .block | 1 |
| 0000:6AC2 | ?? | .block | 1 |
| 0000:6AC3 | ?? | .block | 1 |
| 0000:6AC4 | ?? | .block | 1 |
| 0000:6AC5 | ?? | .block | 1 |
| 0000:6AC6 | ?? | .block | 1 |
| 0000:6AC7 | ?? | .block | 1 |
| 0000:6AC8 | ?? | .block | 1 |
| 0000:6AC9 | ?? | .block | 1 |
| 0000:6ACA | ?? | .block | 1 |
| 0000:6ACB | ?? | .block | 1 |
| 0000:6ACC | ?? | .block | 1 |
| 0000:6ACD | ?? | .block | 1 |
| 0000:6ACE | ?? | .block | 1 |
| 0000:6ACF | ?? | .block | 1 |
| 0000:6AD0 | ?? | .block | 1 |
| 0000:6AD1 | ?? | .block | 1 |
| 0000:6AD2 | ?? | .block | 1 |
| 0000:6AD3 | ?? | .block | 1 |
| 0000:6AD4 | ?? | .block | 1 |
| 0000:6AD5 | ?? | .block | 1 |
| 0000:6AD6 | ?? | .block | 1 |
| 0000:6AD7 | ?? | .block | 1 |
| 0000:6AD8 | ?? | .block | 1 |
| 0000:6AD9 | ?? | .block | 1 |
| 0000:6ADA | ?? | .block | 1 |
| 0000:6ADB | ?? | .block | 1 |
| 0000:6ADC | ?? | .block | 1 |
| 0000:6ADD | ?? | .block | 1 |
| 0000:6ADE | ?? | .block | 1 |
| 0000:6ADF | ?? | .block | 1 |
| 0000:6AE0 | ?? | .block | 1 |
| 0000:6AE1 | ?? | .block | 1 |
| 0000:6AE2 | ?? | .block | 1 |
| 0000:6AE3 | ?? | .block | 1 |
| 0000:6AE4 | ?? | .block | 1 |
| 0000:6AE5 | ?? | .block | 1 |
| 0000:6AE6 | ?? | .block | 1 |
| 0000:6AE7 | ?? | .block | 1 |
| 0000:6AE8 | ?? | .block | 1 |
| 0000:6AE9 | ?? | .block | 1 |
| 0000:6AEA | ?? | .block | 1 |
| 0000:6AEB | ?? | .block | 1 |
| 0000:6AEC | ?? | .block | 1 |
| 0000:6AED | ?? | .block | 1 |
| 0000:6AEE | ?? | .block | 1 |
| 0000:6AEF | ?? | .block | 1 |
| 0000:6AF0 | ?? | .block | 1 |
| 0000:6AF1 | ?? | .block | 1 |
| 0000:6AF2 | ?? | .block | 1 |
| 0000:6AF3 | ?? | .block | 1 |
| 0000:6AF4 | ?? | .block | 1 |
| 0000:6AF5 | ?? | .block | 1 |
| 0000:6AF6 | ?? | .block | 1 |
| 0000:6AF7 | ?? | .block | 1 |

```
0000:6AF8 ?? .block 1
0000:6AF9 ?? .block 1
0000:6AFA ?? .block 1
0000:6AFB ?? .block 1
0000:6AFC ?? .block 1
0000:6AFD ?? .block 1
0000:6AFE ?? .block 1
0000:6AFF ?? .block 1
0000:6B00 ?? .block 1
0000:6B01 ?? .block 1
0000:6B02 ?? .block 1
0000:6B03 ?? .block 1
0000:6B04 ?? .block 1
0000:6B05 ?? .block 1
0000:6B06 ?? .block 1
0000:6B07 ?? .block 1
0000:6B08 ?? .block 1
0000:6B09 ?? .block 1
0000:6B0A ?? .block 1
0000:6B0B ?? .block 1
0000:6B0C ?? .block 1
0000:6B0D ?? .block 1
0000:6B0E ?? .block 1
0000:6B0F ?? .block 1
0000:6B10 ?? .block 1
0000:6B11 ?? .block 1
0000:6B12 ?? .block 1
0000:6B13 ?? .block 1
0000:6B14 ?? .block 1
0000:6B15 ?? .block 1
0000:6B16 ?? .block 1
0000:6B17 ?? .block 1
0000:6B18 ?? .block 1
0000:6B19 ?? .block 1
0000:6B1A ?? .block 1
0000:6B1B ?? .block 1
0000:6B1C ?? .block 1
0000:6B1D ?? .block 1
0000:6B1E ?? .block 1
0000:6B1F ?? .block 1
0000:6B20 ?? .block 1
0000:6B21 ?? .block 1
0000:6B22 ?? .block 1
0000:6B23 ?? .block 1
0000:6B24 ?? .block 1
0000:6B25 ?? .block 1
0000:6B26 ?? .block 1
0000:6B27 ?? .block 1
0000:6B28 ?? .block 1
0000:6B29 ?? .block 1
0000:6B2A ?? .block 1
0000:6B2B ?? .block 1
0000:6B2C ?? .block 1
0000:6B2D ?? .block 1
0000:6B2E ?? .block 1
0000:6B2F ?? .block 1
0000:6B30 ?? .block 1
0000:6B31 ?? .block 1
0000:6B32 ?? .block 1
0000:6B33 ?? .block 1
0000:6B34 ?? .block 1
0000:6B35 ?? .block 1
0000:6B36 ?? .block 1
0000:6B37 ?? .block 1
0000:6B38 ?? .block 1
0000:6B39 ?? .block 1
0000:6B3A ?? .block 1
0000:6B3B ?? .block 1
0000:6B3C ?? .block 1
0000:6B3D ?? .block 1
0000:6B3E ?? .block 1
0000:6B3F ?? .block 1
0000:6B40 ?? .block 1
0000:6B41 ?? .block 1
0000:6B42 ?? .block 1
0000:6B43 ?? .block 1
0000:6B44 ?? .block 1
0000:6B45 ?? .block 1
0000:6B46 ?? .block 1
0000:6B47 ?? .block 1
0000:6B48 ?? .block 1
0000:6B49 ?? .block 1
0000:6B4A ?? .block 1
0000:6B4B ?? .block 1
0000:6B4C ?? .block 1
0000:6B4D ?? .block 1
0000:6B4E ?? .block 1
0000:6B4F ?? .block 1
0000:6B50 ?? .block 1
0000:6B51 ?? .block 1
0000:6B52 ?? .block 1
0000:6B53 ?? .block 1
0000:6B54 ?? .block 1
0000:6B55 ?? .block 1
0000:6B56 ?? .block 1
0000:6B57 ?? .block 1
0000:6B58 ?? .block 1
0000:6B59 ?? .block 1
0000:6B5A ?? .block 1
0000:6B5B ?? .block 1
0000:6B5C ?? .block 1
0000:6B5D ?? .block 1
0000:6B5E ?? .block 1
0000:6B5F ?? .block 1
0000:6B60 ?? .block 1
0000:6B61 ?? .block 1
0000:6B62 ?? .block 1
0000:6B63 ?? .block 1
0000:6B64 ?? .block 1
0000:6B65 ?? .block 1
0000:6B66 ?? .block 1
0000:6B67 ?? .block 1
0000:6B68 ?? .block 1
0000:6B69 ?? .block 1
0000:6B6A ?? .block 1
0000:6B6B ?? .block 1
```

```
0000:6B6C ?? .block 1
0000:6B6D ?? .block 1
0000:6B6E ?? .block 1
0000:6B6F ?? .block 1
0000:6B70 ?? .block 1
0000:6B71 ?? .block 1
0000:6B72 ?? .block 1
0000:6B73 ?? .block 1
0000:6B74 ?? .block 1
0000:6B75 ?? .block 1
0000:6B76 ?? .block 1
0000:6B77 ?? .block 1
0000:6B78 ?? .block 1
0000:6B79 ?? .block 1
0000:6B7A ?? .block 1
0000:6B7B ?? .block 1
0000:6B7C ?? .block 1
0000:6B7D ?? .block 1
0000:6B7E ?? .block 1
0000:6B7F ?? .block 1
0000:6B80 ?? .block 1
0000:6B81 ?? .block 1
0000:6B82 ?? .block 1
0000:6B83 ?? .block 1
0000:6B84 ?? .block 1
0000:6B85 ?? .block 1
0000:6B86 ?? .block 1
0000:6B87 ?? .block 1
0000:6B88 ?? .block 1
0000:6B89 ?? .block 1
0000:6B8A ?? .block 1
0000:6B8B ?? .block 1
0000:6B8C ?? .block 1
0000:6B8D ?? .block 1
0000:6B8E ?? .block 1
0000:6B8F ?? .block 1
0000:6B90 ?? .block 1
0000:6B91 ?? .block 1
0000:6B92 ?? .block 1
0000:6B93 ?? .block 1
0000:6B94 ?? .block 1
0000:6B95 ?? .block 1
0000:6B96 ?? .block 1
0000:6B97 ?? .block 1
0000:6B98 ?? .block 1
0000:6B99 ?? .block 1
0000:6B9A ?? .block 1
0000:6B9B ?? .block 1
0000:6B9C ?? .block 1
0000:6B9D ?? .block 1
0000:6B9E ?? .block 1
0000:6B9F ?? .block 1
0000:6BA0 ?? .block 1
0000:6BA1 ?? .block 1
0000:6BA2 ?? .block 1
0000:6BA3 ?? .block 1
0000:6BA4 ?? .block 1
0000:6BA5 ?? .block 1
0000:6BA6 ?? .block 1
0000:6BA7 ?? .block 1
0000:6BA8 ?? .block 1
0000:6BA9 ?? .block 1
0000:6BAA ?? .block 1
0000:6BAB ?? .block 1
0000:6BAC ?? .block 1
0000:6BAD ?? .block 1
0000:6BAE ?? .block 1
0000:6BAF ?? .block 1
0000:6BB0 ?? .block 1
0000:6BB1 ?? .block 1
0000:6BB2 ?? .block 1
0000:6BB3 ?? .block 1
0000:6BB4 ?? .block 1
0000:6BB5 ?? .block 1
0000:6BB6 ?? .block 1
0000:6BB7 ?? .block 1
0000:6BB8 ?? .block 1
0000:6BB9 ?? .block 1
0000:6BBA ?? .block 1
0000:6BBB ?? .block 1
0000:6BBC ?? .block 1
0000:6BBD ?? .block 1
0000:6BBE ?? .block 1
0000:6BBF ?? .block 1
0000:6BC0 ?? .block 1
0000:6BC1 ?? .block 1
0000:6BC2 ?? .block 1
0000:6BC3 ?? .block 1
0000:6BC4 ?? .block 1
0000:6BC5 ?? .block 1
0000:6BC6 ?? .block 1
0000:6BC7 ?? .block 1
0000:6BC8 ?? .block 1
0000:6BC9 ?? .block 1
0000:6BCA ?? .block 1
0000:6BCB ?? .block 1
0000:6BCC ?? .block 1
0000:6BCD ?? .block 1
0000:6BCE ?? .block 1
0000:6BCF ?? .block 1
0000:6BD0 ?? .block 1
0000:6BD1 ?? .block 1
0000:6BD2 ?? .block 1
0000:6BD3 ?? .block 1
0000:6BD4 ?? .block 1
0000:6BD5 ?? .block 1
0000:6BD6 ?? .block 1
0000:6BD7 ?? .block 1
0000:6BD8 ?? .block 1
0000:6BD9 ?? .block 1
0000:6BDA ?? .block 1
0000:6BDB ?? .block 1
0000:6BDC ?? .block 1
0000:6BDD ?? .block 1
0000:6BDE ?? .block 1
0000:6BDF ?? .block 1
```

```

0000:6BE0 ??                .block 1
0000:6BE1 ??                .block 1
0000:6BE2 ??                .block 1
0000:6BE3 ??                .block 1
0000:6BE4 ??                .block 1
0000:6BE5 ??                .block 1
0000:6BE6 ??                .block 1
0000:6BE7 ??                .block 1
0000:6BE8 ??                .block 1
0000:6BE9 ??                .block 1
0000:6BEA ??                .block 1
0000:6BEB ??                .block 1
0000:6BEC ??                .block 1
0000:6BED ??                .block 1
0000:6BEE ??                .block 1
0000:6BEF ??                .block 1
0000:6BF0 ??                .block 1
0000:6BF1 ??                .block 1
0000:6BF2 ??                .block 1
0000:6BF3 ??                .block 1
0000:6BF4 ??                .block 1
0000:6BF5 ??                .block 1
0000:6BF6 ??                .block 1
0000:6BF7 ??                .block 1
0000:6BF8 ??                .block 1
0000:6BF9 ??                .block 1
0000:6BFA ??                .block 1
0000:6BFB ??                .block 1
0000:6BFC ??                .block 1
0000:6BFD ??                .block 1
0000:6BFE ??                .block 1
0000:6BFF ??                .block 1
0000:6BFF                ; end of 'RAM'
0000:6BFF
0000:7000                ;
0000:7000
0000:7000                ; Segment type: Regular
0000:7000                ; segment 'SPRAM'
0000:7000                .org 7000h
0000:7000 ?? ?? ?? ??+SPRAM_start: .block 400h
0000:7000 ?? ?? ?? ??+                ; DATA XREF: 0000:013D|o
0000:7000 ?? ?? ?? ??+                ; 0000:0276|o
0000:7000 ?? ?? ?? ??+; end of 'SPRAM'                ; 2 banks of 128 sprites
0000:7000 ?? ?? ?? ??+                ; - only 16 displayed per scanline
0000:7000 ?? ?? ?? ??+                ; @0 7:0=y
0000:7000 ?? ?? ?? ??+                ; @1 7=flipy,6:0=code
0000:7000 ?? ?? ?? ??+                ; @2 7=flipx,3:0=colour
0000:7000 ?? ?? ?? ??+                ; @3 7:0=x
0000:7400                ;
0000:7400
0000:7400                ; Segment type: Regular
0000:7400                ; segment 'VRAM'
0000:7400                .org 7400h
0000:7400 ?? ?? ?? ??+VRAM_start: .block 400h
0000:7400 ?? ?? ?? ??+                ; DATA XREF: 0000:0285|o
0000:7400 ?? ?? ?? ??+; end of 'VRAM'                ; clear_tiles_and_sprites|o ...
0000:7800                ;
0000:7800
0000:7800                ; Segment type: Regular
0000:7800                ; segment 'I8257'
0000:7800                .org 7800h
0000:7800 ?? ?? ?? ??+i8257_io: .block 10h
0000:7800 ?? ?? ?? ??+; end of 'I8257'
0000:7800 ?? ?? ?? ??+
0000:7C00                ;
0000:7C00
0000:7C00                ; Segment type: Regular
0000:7C00                ; segment 'IN0'
0000:7C00                .org 7C00h
0000:7C00 ??            in0: .block 1
0000:7C00                ; end of 'IN0'
0000:7C00                ;
0000:7C80                ;
0000:7C80
0000:7C80                ; Segment type: Regular
0000:7C80                ; segment 'IN1'
0000:7C80                .org 7C80h
0000:7C80 ??            in1: .block 1
0000:7C80                ; end of 'IN1'
0000:7D00                ;
0000:7D00
0000:7D00                ; Segment type: Regular
0000:7D00                ; segment 'IO'
0000:7D00                .org 7D00h
0000:7D00 ??            in2_snd_latch: .block 1
0000:7D00                ; DATA XREF: 0000:0072|r
0000:7D01 ??                .block 1                ; update_sounds+3|o ...
0000:7D02 ??                .block 1
0000:7D03 ??                .block 1
0000:7D04 ??                .block 1
0000:7D05 ??                .block 1
0000:7D06 ??                .block 1
0000:7D07 ??                .block 1
0000:7D08 ?? ?? ?? ??+    .block 78h
0000:7D80 ??            dsw_audio_irq: .block 1
0000:7D81 ??            .block 1
0000:7D82 ??            flipscreen: .block 1
0000:7D82                ; DATA XREF: 0000:01E4|w
0000:7D83 ??            spritebank: .block 1                ; 0000:02AF|w ...
0000:7D84 ??            nmi_mask: .block 1
0000:7D85 ??            p8257_drq: .block 1
0000:7D86 ?? ??        palette_bank: .block 2
0000:7D86                ; DATA XREF: 0000:02A8|w
0000:7D88 ?? ?? ?? ??+    .block 78h                ; 0000:0779|o ...
0000:7D88 ?? ?? ?? ??+; end of 'IO'
0000:7D88 ?? ?? ?? ??+
0000:7D88 ?? ?? ?? ??+
0000:7D88 ?? ?? ?? ??+
0000:7D88 ?? ?? ?? ??+    .end

```