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0000:42C5 00      .db 0 ;
0000:42C6 00      .db 0 ;
0000:42C7 0D      .db 0Dh ;
0000:42C8 FF      .db 0FFh ;
0000:42C9 FF      .db 0FFh ;
0000:42CA FF      .db 0FFh ;
0000:42CB A5      .db 0A5h ; Ñ
0000:42CC 2B      .db 2Bh ; +
0000:42CD 36      .db 36h ; 6
0000:42CE 01      .db 1 ;
0000:42CF 00      .db 0 ;
0000:42D0 00      .db 0 ;
0000:42D1 00      .db 0 ;
0000:42D2 00      .db 0 ;
0000:42D3 00      .db 0 ;
0000:42D4 00      .db 0 ;
0000:42D5 00      .db 0 ;
0000:42D6 00      .db 0 ;
0000:42D7 00      .db 0 ;
0000:42D8 00      .db 0 ;
0000:42D9 FF      .db 0FFh ;
0000:42DA FF      .db 0FFh ;
0000:42DB A1      .db 0A1h ; í
0000:42DC 4C      .db 4Ch ; L
0000:42DD 00      .db 0 ;
0000:42DE 00      .db 0 ;
0000:42DF 00      .db 0 ;
0000:42E0 FF      .db 0FFh ;
0000:42E1 FF      .db 0FFh ;
0000:42E2 00      .db 0 ;
0000:42E3 00      .db 0 ;
0000:42E4 00      .db 0 ;
0000:42E5 3A      .db 3Ah ; :
0000:42E6 AE      .db 0AEh ; «
0000:42E7 00      .db 0 ;
0000:42E8 2F      .db 2Fh ; /
0000:42E9 00      .db 0 ;
0000:42EA 53      .db 53h ; S
0000:42EB 54      .db 54h ; T
0000:42EC 45      .db 45h ; E
0000:42ED 4D      .db 4Dh ; M
0000:42EE 00      .db 0 ;
0000:42EF FF      .db 0FFh ;
0000:42F0 00      .db 0 ;
0000:42F1 00      .db 0 ;
0000:42F2 00      .db 0 ;
0000:42F3 00      .db 0 ;
0000:42F4 00      .db 0 ;
0000:42F5 FF      .db 0FFh ;
0000:42F6 B2      .db 0B2h ;
0000:42F7 00      .db 0 ;
0000:42F8 00      .db 0 ;
0000:42F9 00      .db 0 ;
0000:42FA 00      .db 0 ;
0000:42FB 00      .db 0 ;
0000:42FC FF      .db 0FFh ;
0000:42FD FF      .db 0FFh ;
0000:42FE 00      .db 0 ;
0000:42FF 00      .db 0 ;
0000:4300*12      byte_0_4300: .db 12h ; DATA XREF: sub_0_46E5+5|r
0000:4300*          ; sub_0_46E5+C|w ...
0000:4301*CD        byte_0_4301: .db 0CDh ; DATA XREF: sub_0_471C+62|r
0000:4301*          ; sub_0_471C+69|w ...
0000:4302*54 2C      word_0_4302: .dw 2C54h ; DATA XREF: sub_0_45FC+2|r
0000:4302*          ; sub_0_484A+15|r ...
0000:4304*E5 28      word_0_4304: .dw 28E5h ; DATA XREF: sub_0_45FC+13|r
0000:4304*          ; sub_0_484A+E|r ...
0000:4306*31 36      word_0_4306: .dw 3631h ; DATA XREF: sub_0_45FC+19|r
0000:4306*          ; sub_0_484A+7|r ...
0000:4308*00 01      word_0_4308: .dw 100h ; DATA XREF: sub_0_45FC+1F|r
0000:4308*          ; sub_0_484A|r ...
0000:430A*11         byte_0_430A: .db 11h ; DATA XREF: 0000:49DC|w
0000:430A*          ; sub_0_4B48+3|r ...
0000:430B*2A         byte_0_430B: .db 2Ah ; DATA XREF: sub_0_48BF+16|w
0000:430B*          ; sub_0_48F6+35|r ...
0000:430C*07         byte_0_430C: .db 7 ; DATA XREF: sub_0_471C+C9|w
0000:430C*          ; sub_0_48BF|r ...
0000:430D*2A         byte_0_430D: .db 2Ah ; DATA XREF: sub_0_46E5+15|r
0000:430D*          ; sub_0_46E5+1A|w ...
0000:430E*0A         byte_0_430E: .db 0Ah ; DATA XREF: 0000:49CF|w
0000:430E*          ; 0000:49FC|r ...
0000:430F*02         byte_0_430F: .db 2 ; DATA XREF: sub_0_46BB+1D|r
0000:430F*          ; sub_0_46BB+21|w ...
0000:4310*00         byte_0_4310: .db 0 ; DATA XREF: sub_0_46E5+F|r
0000:4310*          ; sub_0_471C+C6|w ...
0000:4311*00         byte_0_4311: .db 0 ; DATA XREF: sub_0_46E5|r
0000:4311*          ; sub_0_46E5+1F|w ...
0000:4312*C9         byte_0_4312: .db 0C9h ; DATA XREF: 0000:49C9|w
0000:4312*          ; 0000:4AC1|w ...
0000:4313*B0 45      word_0_4313: .dw 45B0h ; DATA XREF: sub_0_46E5+23|r
0000:4313*          ; sub_0_4888+17|r ...
0000:4315*01         byte_0_4315: .db 1 ; DATA XREF: 0000:49C6|w
0000:4316 40         .db 40h ; @
0000:4317 3C         .db 3Ch ; <
0000:4318 C0         .db 0C0h ; L
0000:4319 3C         .db 3Ch ; <
0000:431A 40         .db 40h ; @
0000:431B 3D         .db 3Dh ; =
0000:431C C0         .db 0C0h ; L
0000:431D 3D         .db 3Dh ; =
0000:431E*53 3E      word_0_431E: .dw 3E53h ; DATA XREF: sub_0_46E5+2A|w
0000:431E*          ; sub_0_471C+1|r ...
0000:4320*60         byte_0_4320: .db 60h ; DATA XREF: 0000:4F02|w
0000:4320*          ; 0000:4F26|r ...
0000:4321*2B         byte_0_4321: .db 2Bh ; DATA XREF: 0000:4A98|w
0000:4321*          ; 0000:4F6C|r ...
0000:4322*00         byte_0_4322: .db 0 ; DATA XREF: 0000:49D8|w
0000:4322*          ; 0000:4F17|r ...
0000:4323 A0 B6 BF B9+invader_30pt: .db 0A0h, 0B6h, 0BFh, 0B9h, 90h, 1Ah, 1, 20h, 86h, 20h, 89h, 20h
0000:4323 90 1A 01 20+      .db 0 ; DATA XREF: 0000:4570|o
0000:4323 86 20 89 20+      .db 0
0000:4330 9C B7 BF BB+invader_20pt: .db 9Ch, 0B7h, 0BFh, 0BBh, 0ACh, 1Ah, 1, 8Ch, 83h, 20h, 83h, 8Ch
0000:4330 AC 1A 01 8C+      .db 0 ; DATA XREF: 0000:457C|o
0000:4330 83 20 83 8C+      .db 0
0000:433D BE BF B7+invader_10pt: .db 0BEh, 0BBh, 0BFh, 0B7h, 0BDh, 1Ah, 1, 8Ch, 83h, 20h, 83h, 8Ch
0000:433D BD 1A 01 8C+      .db 0 ; DATA XREF: 0000:4588|o

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0000:433D 83 20 83 8C+      .db 0
0000:434A 8C B7 B7 B7+ufo:  .db 8Ch, 0B7h, 0B7h, 0B7h, 0B7h, 8Ch, 0
0000:434A B7 8C 00          ; DATA XREF: 0000:4594|o
0000:4351 B8              .db 0B8h ; ©
0000:4352 BF              .db 0BFh ; 7
0000:4353 BF              .db 0BFh ; 7
0000:4354 BF              .db 0BFh ; 7
0000:4355 BF              .db 0BFh ; 7
0000:4356 BF              .db 0BFh ; 7
0000:4357 B4              .db 0B4h ; 4
0000:4358 1A              .db 1Ah ;
0000:4359 08              .db 8 ;
0000:435A 08              .db 8 ;
0000:435B 01              .db 1 ;
0000:435C 8F              .db 8Fh ; Å
0000:435D 8F              .db 8Fh ; Å
0000:435E 83              .db 83h ; ä
0000:435F 83              .db 83h ; ä
0000:4360 83              .db 83h ; ä
0000:4361 8F              .db 8Fh ; Å
0000:4362 8F              .db 8Fh ; Å
0000:4363 00              .db 0 ;
0000:4364 B8              .db 0B8h ; ©
0000:4365 BC              .db 0BCh ; ¢
0000:4366 BF              .db 0BFh ; 7
0000:4367 BC              .db 0BCh ; ¢
0000:4368 B4              .db 0B4h ; 4
0000:4369 00              .db 0 ;
0000:436A 82              .db 82h ; é
0000:436B 84              .db 84h ; ä
0000:436C 20              .db 20h ;
0000:436D 88              .db 88h ; è
0000:436E 81              .db 81h ; ù
0000:436F 1A              .db 1Ah ;
0000:4370 01              .db 1 ;
0000:4371 88              .db 88h ; è
0000:4372 81              .db 81h ; ù
0000:4373 20              .db 20h ;
0000:4374 82              .db 82h ; é
0000:4375 84              .db 84h ; ä
0000:4376 00              .db 0 ;
0000:4377 00              .db 0 ;
0000:4378 00              .db 0 ;
0000:4379 1B              .db 1Bh ;
0000:437A 01              .db 1 ;
0000:437B 20              .db 20h ;
0000:437C 20              .db 20h ;
0000:437D 20              .db 20h ;
0000:437E 20              .db 20h ;
0000:437F 20              .db 20h ;
0000:4380 1A              .db 1Ah ;
0000:4381 01              .db 1 ;
0000:4382 20              .db 20h ;
0000:4383 20              .db 20h ;
0000:4384 20              .db 20h ;
0000:4385 20              .db 20h ;
0000:4386 20              .db 20h ;
0000:4387 00              .db 0 ;
0000:4388 50 4C 41 59 aPlay: .text "PLAY"
0000:438C 09 D6 3C          .db 9, 0D6h, 3Ch
0000:438F 54 41 4E 44+aTandyInvaders:.text "TANDY INVADERS"
0000:43A3 09 54 3D          .db 9, 54h, 3Dh
0000:43A6 2A 20 53 43+aScoreAdvanceTa:.text "** SCORE ADVANCE TABLE *"
0000:43A6 4F 52 45 20+      .db 0
0000:43BE 2A 20 54 41+aTandyElectroni:.text "** TANDY ELECTRONICS *"
0000:43BE 4E 44 59 20+      .db 0
0000:43D4 3C 2D 2D 2D+a30Points:.text "<---- 30 POINTS"
0000:43E6 09 1E 3E          .db 9, 1Eh, 3Eh
0000:43E9 3C 2D 2D 2D+a20Points:.text "<---- 20 POINTS"
0000:43FB 09 9E 3E          .db 9, 9Eh, 3Eh
0000:43FE 3C 2D 2D 2D+a10Points:.text "<---- 10 POINTS"
0000:4410 09 1E 3F          .db 9, 1Eh, 3Fh
0000:4413 3C 2D 2D 2D+a_Mystery:.text "<---- ? MYSTERY"
0000:4413 2D 20 20 20+      .db 0
0000:4427 50 52 45 53+aPressZKeyToMov:.text "PRESS "
0000:4427 53 20 22 5A+      .db 22h
0000:4427 22 20 4B 45+      .text "Z"
0000:4427 59 20 54 4F+      .db 22h
0000:4427 20 4D 4F 56+      .text " KEY TO MOVE LEFT"
0000:4441 09 13 3D          .db 9, 13h, 3Dh
0000:4444 50 52 45 53+aPressXKeyToMov:.text "PRESS "
0000:4444 53 20 22 58+      .db 22h
0000:4444 22 20 4B 45+      .text "X"
0000:4444 59 20 54 4F+      .db 22h
0000:4444 20 4D 4F 56+      .text " KEY TO MOVE RIGHT"
0000:445F 09 93 3D          .db 9, 93h, 3Dh
0000:4462 50 52 45 53+aPressKeyToFire:.text "PRESS "
0000:4462 53 20 22 20+      .db 22h
0000:4462 22 20 4B 45+      .text " "
0000:4462 59 20 54 4F+      .db 22h
0000:4462 20 46 49 52+      .text " KEY TO FIRE !"
0000:4479 09 13 3E          .db 9, 13h, 3Eh
0000:447C 50 52 45 53+aPressRKeyToSta:.text "PRESS "
0000:447C 53 20 22 52+      .db 22h
0000:447C 22 20 4B 45+      .text "R"
0000:447C 59 20 54 4F+      .db 22h
0000:447C 20 53 54 41+      .text " KEY TO START"
0000:447C 52 54 00          .db 0
0000:4493 47 20 41 20+aGAMEOVER:.text "G A M E - O V E R"
0000:4493 4D 20 45 20+      .db 0
0000:44A5 20 20 53 43+aScore00000High:.text " SCORE 00000 HIGH-SCORE"
0000:44A5 4F 52 45 20+      .text " 00000"
0000:44A5 20 30 30 30+      .db 0
0000:44E5
0000:44E5 ; SUBROUTINE
0000:44E5
0000:44E5
0000:44E5 display_message: ; CODE XREF: 0000:4547|p
0000:44E5 C5 ; 0000:455B|p ...
0000:44E5 push bc
0000:44E6
0000:44E6 loc_0_44E6: ; CODE XREF: display_message+15|j
0000:44E6 7E ld a, (hl) ; get character
0000:44E7 B7 or a ; finished?
0000:44E8 28 19 jr z, loc_0_4503 ; yes, exit
0000:44EA FE 01 cp 1

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0000:44EC 20 0E      jr      nz, loc_0_44FC
0000:44EE 06 05      ld      b, 5                ; 5 chars to print
0000:44F0 3E 08      ld      a, 8                ; backspace
0000:44F2                loc_0_44F2:                ; CODE XREF: display_message+12|j
0000:44F2 D5          push    de
0000:44F3 CD 33 00    call    33h                ; display character
0000:44F6 D1          pop     de
0000:44F7 10 F9      djnz    loc_0_44F2
0000:44F9                loc_0_44F9:                ; CODE XREF: display_message+1C|j
0000:44F9 23          inc     hl                  ; next character
0000:44FA 18 EA      jr      loc_0_44E6          ; loop
0000:44FC                ; -----
0000:44FC                loc_0_44FC:                ; CODE XREF: display_message+7|j
0000:44FC D5          push    de
0000:44FD CD 33 00    call    33h                ; display character
0000:4500 D1          pop     de
0000:4501 18 F6      jr      loc_0_44F9
0000:4503                ; -----
0000:4503                loc_0_4503:                ; CODE XREF: display_message+3|j
0000:4503 C1          pop     bc
0000:4504 C9          ret
0000:4504                ; End of function display_message
0000:4505                ; [REDACTED] SUBROUTINE [REDACTED]
0000:4505                sub_0_4505:                ; CODE XREF: sub_0_4505+11|j
0000:4505 7E          ld      a, (hl)            ; 0000:494E|p
0000:4505 B7          or      a
0000:4507 C8          ret     z
0000:4508 D5          push    de
0000:4509 C5          push    bc
0000:450A CD 33 00    call    33h
0000:450D 01 00 23    ld      bc, 2300h
0000:4510 CD 60 00    call    60h
0000:4513 C1          pop     bc
0000:4514 D1          pop     de
0000:4515 23          inc     hl
0000:4516 18 ED      jr      sub_0_4505
0000:4516                ; End of function sub_0_4505
0000:4518                ; [REDACTED] SUBROUTINE [REDACTED]
0000:4518                sub_0_4518:                ; CODE XREF: 0000:454F|p
0000:4518 D9          exx                                ; 0000:45AF|p ...
0000:4519 21 FF 3B    ld      hl, 3BFFh
0000:451C 06 40      ld      b, 40h ; '@'
0000:451E                loc_0_451E:                ; CODE XREF: sub_0_4518+19|j
0000:451E C5          push    bc
0000:451F 23          inc     hl
0000:4520 E5          push    hl
0000:4521 06 0F      ld      b, 0Fh
0000:4523 3E 20      ld      a, 20h ; ' '
0000:4525 11 40 00    ld      de, 40h ; '@'
0000:4528                loc_0_4528:                ; CODE XREF: sub_0_4518+12|j
0000:4528 77          ld      (hl), a
0000:4529 19          add     hl, de
0000:452A 10 FC      djnz    loc_0_4528
0000:452C CD 60 4E    call    sub_0_4E60
0000:452F E1          pop     hl
0000:4530 C1          pop     bc
0000:4531 10 EB      djnz    loc_0_451E
0000:4533 D9          exx
0000:4534 C9          ret
0000:4534                ; End of function sub_0_4518
0000:4535                ; -----
0000:4535                START:                ; CODE XREF: 0000:500C|j
0000:4535 F3          di
0000:4536 3E 0F      ld      a, 0Fh
0000:4538 CD 33 00    call    33h                ; display character
0000:453B 31 8A 42    ld      sp, 428Ah
0000:453E 21 C0 3F    ld      hl, 3FC0h          ; bottom line of screen
0000:4541 22 20 40    ld      (cursor_pos), hl
0000:4544 21 A5 44    ld      hl, 44A5h          ; "SCORE 00000 HIGH SCORE 00000"
0000:4547 CD E5 44    call    display_message
0000:454A 3E 20      ld      a, 20h ; ' '
0000:454C 32 FF 3F    ld      (3FFFh), a        ; space
0000:454F                loc_0_454F:                ; CODE XREF: 0000:45D6|j
0000:454F CD 18 45    ; 0000:4960|j
0000:454F          call    sub_0_4518
0000:4552 21 94 3F    ld      hl, 3F94h
0000:4555 22 20 40    ld      (cursor_pos), hl
0000:4558 21 BE 43    ld      hl, 43BEh          ; ** TANDY ELECTRONICS **
0000:455B CD E5 44    call    display_message
0000:455E 21 9E 3C    ld      hl, 3C9Eh
0000:4561 22 20 40    ld      (cursor_pos), hl
0000:4564 21 88 43    ld      hl, 4388h          ; "PLAY TANDY INVADERS..."
0000:4567 CD 66 4E    call    sub_0_4E66
0000:456A 21 92 3D    ld      hl, 3D92h
0000:456D 22 20 40    ld      (cursor_pos), hl
0000:4570 21 23 43    ld      hl, invader_30pt
0000:4573 CD E5 44    call    display_message
0000:4576 21 12 3E    ld      hl, 3E12h
0000:4579 22 20 40    ld      (cursor_pos), hl
0000:457C 21 30 43    ld      hl, invader_20pt
0000:457F CD E5 44    call    display_message
0000:4582 21 92 3E    ld      hl, 3E92h
0000:4585 22 20 40    ld      (cursor_pos), hl
0000:4588 21 3D 43    ld      hl, invader_10pt
0000:458B CD E5 44    call    display_message
0000:458E 21 12 3F    ld      hl, 3F12h
0000:4591 22 20 40    ld      (cursor_pos), hl

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0000:4594 21 4A 43      ld      hl, ufo
0000:4597 CD E5 44      call   display_message
0000:459A 21 9E 3D      ld      hl, 3D9Eh
0000:459D 22 20 40      ld      (cursor_pos), hl
0000:45A0 21 D4 43      ld      hl, 43D4h          ; score advance table
0000:45A3 CD 66 4E      call   sub_0_4E66
0000:45A6 01 FF FF      ld      bc, 0FFFFh
0000:45A9 CD 60 00      call   60h                ; delay ~1s
0000:45AC CD 60 00      call   60h                ; delay ~1s
0000:45AF CD 18 45      call   sub_0_4518
0000:45B2 CD D9 45      call   sub_0_45D9
0000:45B5 21 94 3F      ld      hl, 3F94h
0000:45B8 22 20 40      ld      (cursor_pos), hl
0000:45BB 21 BE 43      ld      hl, 43BEh          ; ** TANDY ELECTRONICS **
0000:45BE CD E5 44      call   display_message
0000:45C1 21 93 3C      ld      hl, 3C93h
0000:45C4 22 20 40      ld      (cursor_pos), hl
0000:45C7 21 27 44      ld      hl, 4427h          ; instructions
0000:45CA CD 66 4E      call   sub_0_4E66
0000:45CD 01 FF FF      ld      bc, 0FFFFh
0000:45D0 CD 60 00      call   60h                ; delay ~1s
0000:45D3 CD 60 00      call   60h                ; delay ~1s
0000:45D6 C3 4F 45      jp      loc_0_454F
0000:45D9
0000:45D9      ; ██████████ SUBROUTINE ██████████
0000:45D9
0000:45D9      sub_0_45D9:                ; CODE XREF: 0000:45B2↑p
0000:45D9      ; sub_0_4E66+23↑p
0000:45D9 3A 04 38      ld      a, (3804h)
0000:45DC FE 04      cp      4
0000:45DE CA C2 49      jp      z, loc_0_49C2
0000:45E1 C9      ret
0000:45E1      ; End of function sub_0_45D9
0000:45E2
0000:45E2      ; ██████████ SUBROUTINE ██████████
0000:45E2
0000:45E2      sub_0_45E2:                ; CODE XREF: sub_0_471C+26↑p
0000:45E2      ; sub_0_471C+36↑p ...
0000:45E2 E5      push    hl
0000:45E3 D5      push    de
0000:45E4 7C      ld      a, h
0000:45E5 BA      cp      d
0000:45E6 28 06      jr      z, loc_0_45EE
0000:45E8 30 0A      jr      nc, loc_0_45F4
0000:45EA
0000:45EA AF      loc_0_45EA:                ; CODE XREF: sub_0_45E2+10↑j
0000:45EA      xor     a
0000:45EB
0000:45EB D1      loc_0_45EB:                ; CODE XREF: sub_0_45E2+14↑j
0000:45EB      ; sub_0_45E2+18↑j
0000:45EB      pop     de
0000:45EC E1      pop     hl
0000:45ED C9      ret
0000:45EE
0000:45EE      ;
0000:45EE      loc_0_45EE:                ; CODE XREF: sub_0_45E2+4↑j
0000:45EE 7D      ld      a, 1
0000:45EF BB      cp      e
0000:45F0 28 06      jr      z, loc_0_45F8
0000:45F2 38 F6      jr      c, loc_0_45EA
0000:45F4
0000:45F4      loc_0_45F4:                ; CODE XREF: sub_0_45E2+6↑j
0000:45F4 3E FF      ld      a, 0FFh
0000:45F6 18 F3      jr      loc_0_45EB
0000:45F8
0000:45F8      ;
0000:45F8      loc_0_45F8:                ; CODE XREF: sub_0_45E2+E↑j
0000:45F8 3E 20      ld      a, 20h ; ' '
0000:45FA 18 EF      jr      loc_0_45EB
0000:45FA      ; End of function sub_0_45E2
0000:45FA
0000:45FA      ; ██████████ SUBROUTINE ██████████
0000:45FA
0000:45FA      sub_0_45FC:                ; CODE XREF: sub_0_4B48+2B↑p
0000:45FA      ; 0000:4B91↑p
0000:45FA E5      push    hl
0000:45FC C5      push    bc
0000:45FE 2A 02 43      ld      hl, (word_0_4302)
0000:4601 06 3F      ld      b, 3Fh ; '?'
0000:4603
0000:4603      loc_0_4603:                ; CODE XREF: sub_0_45FC+10↑j
0000:4603 7E      ld      a, (hl)
0000:4604 CB 7F      bit     7, a
0000:4606 28 03      jr      z, loc_0_460B
0000:4608 EE 0F      xor     0Fh
0000:460A 77      ld      (hl), a
0000:460B
0000:460B      loc_0_460B:                ; CODE XREF: sub_0_45FC+A↑j
0000:460B      inc     hl
0000:460C 10 F5      djnz    loc_0_4603
0000:460E D5      push    de
0000:460F 2A 04 43      ld      hl, (word_0_4304)
0000:4612 CD 25 46      call   sub_0_4625
0000:4615 2A 06 43      ld      hl, (word_0_4306)
0000:4618 CD 25 46      call   sub_0_4625
0000:461B 2A 08 43      ld      hl, (word_0_4308)
0000:461E CD 25 46      call   sub_0_4625
0000:4621 D1      pop     de
0000:4622 C1      pop     bc
0000:4623 E1      pop     hl
0000:4624 C9      ret
0000:4624      ; End of function sub_0_45FC
0000:4624
0000:4624      ; ██████████ SUBROUTINE ██████████
0000:4624
0000:4624      sub_0_4625:                ; CODE XREF: sub_0_45FC+16↑p
0000:4624      ; sub_0_45FC+1C↑p ...
0000:4625 E5      push    hl
0000:4626 06 40      ld      b, 40h ; '@'

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0000:4628
0000:4628
0000:4628 7E      loc_0_4628:                ; CODE XREF: sub_0_4625+15↑j
                        ld      a, (hl)
0000:4629 FE 8C      cp      8Ch ; 'i'
0000:462B 28 09      jr      z, loc_0_4636
0000:462D FE 83      cp      83h ; 'a'
0000:462F 20 08      jr      nz, loc_0_4639
0000:4631 3E 8C      ld      a, 8Ch ; 'i'
0000:4633 77      ld      (hl), a
0000:4634 18 03      jr      loc_0_4639
0000:4636
0000:4636
0000:4636
0000:4636 3E 83      loc_0_4636:                ; CODE XREF: sub_0_4625+6↑j
                        ld      a, 83h ; 'a'
0000:4638 77      ld      (hl), a
0000:4639
0000:4639      loc_0_4639:                ; CODE XREF: sub_0_4625+A↑j
                        ; sub_0_4625+F↑j
0000:4639 23      inc     hl
0000:463A 10 EC      djnz    loc_0_4628
0000:463C E1      pop     hl
0000:463D C9      ret
0000:463D      ; End of function sub_0_4625
0000:463D
0000:463E
0000:463E      ; ██████████ SUBROUTINE ██████████
0000:463E
0000:463E      sub_0_463E:                ; CODE XREF: sub_0_4888+14↑p
                        ; sub_0_48F6+2A↑p ...
0000:463E E5      push    hl
0000:463F 11 3E 00    ld      de, 3Eh ; '>'
0000:4642 19      add     hl, de
0000:4643 E5      push    hl
0000:4644 D1      pop     de
0000:4645 13      inc     de
0000:4646 06 3F      ld      b, 3Fh ; '?'
0000:4648 1A      ld      a, (de)
0000:4649 CB 7F      bit     7, a
0000:464B 28 03      jr      z, loc_0_4650
0000:464D 3E 20      ld      a, 20h ; ' '
0000:464F 12      ld      (de), a
0000:4650
0000:4650      loc_0_4650:                ; CODE XREF: sub_0_463E+D↑j
                        ; sub_0_463E+1C↑j
0000:4650 CB 7E      bit     7, (hl)
0000:4652 28 04      jr      z, loc_0_4658
0000:4654 7E      ld      a, (hl)
0000:4655 12      ld      (de), a
0000:4656 36 20      ld      (hl), 20h ; ' '
0000:4658
0000:4658      loc_0_4658:                ; CODE XREF: sub_0_463E+14↑j
0000:4658 2B      dec     hl
0000:4659 1B      dec     de
0000:465A 10 F4      djnz    loc_0_4650
0000:465C E1      pop     hl
0000:465D 36 20      ld      (hl), 20h ; ' '
0000:465F C9      ret
0000:465F      ; End of function sub_0_463E
0000:465F
0000:4660
0000:4660      ; ██████████ SUBROUTINE ██████████
0000:4660
0000:4660      sub_0_4660:                ; CODE XREF: sub_0_4888+2B↑p
                        ; sub_0_48F6+32↑p ...
0000:4660 E5      push    hl
0000:4661 E5      push    hl
0000:4662 D1      pop     de
0000:4663 23      inc     hl
0000:4664 06 3F      ld      b, 3Fh ; '?'
0000:4666 1A      ld      a, (de)
0000:4667 CB 7F      bit     7, a
0000:4669 28 03      jr      z, loc_0_466E
0000:466B 3E 20      ld      a, 20h ; ' '
0000:466D 12      ld      (de), a
0000:466E
0000:466E      loc_0_466E:                ; CODE XREF: sub_0_4660+9↑j
                        ; sub_0_4660+18↑j
0000:466E CB 7E      bit     7, (hl)
0000:4670 28 04      jr      z, loc_0_4676
0000:4672 7E      ld      a, (hl)
0000:4673 12      ld      (de), a
0000:4674 36 20      ld      (hl), 20h ; ' '
0000:4676
0000:4676      loc_0_4676:                ; CODE XREF: sub_0_4660+10↑j
0000:4676 23      inc     hl
0000:4677 13      inc     de
0000:4678 10 F4      djnz    loc_0_466E
0000:467A E1      pop     hl
0000:467B 11 3F 00    ld      de, 3Fh ; '?'
0000:467E 19      add     hl, de
0000:467F 36 20      ld      (hl), 20h ; ' '
0000:4681 C9      ret
0000:4681      ; End of function sub_0_4660
0000:4681
0000:4682
0000:4682      ; ██████████ SUBROUTINE ██████████
0000:4682
0000:4682      sub_0_4682:                ; CODE XREF: sub_0_46BB↑p
0000:4682 E5      push    hl
0000:4683 C5      push    bc
0000:4684 21 CC 3F    ld      hl, 3FCCh
0000:4687 CD A4 46    call    sub_0_46A4
0000:468A 20 15      jr      nz, loc_0_46A1
0000:468C 2B      dec     hl
0000:468D CD A4 46    call    sub_0_46A4
0000:4690 20 0F      jr      nz, loc_0_46A1
0000:4692 2B      dec     hl
0000:4693 CD A4 46    call    sub_0_46A4
0000:4696 20 09      jr      nz, loc_0_46A1
0000:4698 2B      dec     hl
0000:4699 CD A4 46    call    sub_0_46A4
0000:469C 20 03      jr      nz, loc_0_46A1
0000:469E CD B0 46    call    sub_0_46B0

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0000:46A1
0000:46A1      loc_0_46A1:                ; CODE XREF: sub_0_4682+81j
0000:46A1 C1          pop      bc                ; sub_0_4682+E1j ...
0000:46A2      pop      hl
0000:46A3 C9          ret
0000:46A3      ; End of function sub_0_4682
0000:46A4
0000:46A4      ; SUBROUTINE
0000:46A4
0000:46A4      sub_0_46A4:                ; CODE XREF: sub_0_4682+51p
0000:46A4 7E          ld      a, (hl)            ; sub_0_4682+B1j ...
0000:46A5 FE 39      cp      39h ; '9'
0000:46A7 28 03      jr      z, loc_0_46AC
0000:46A9 3C          inc     a
0000:46AA 77          ld      (hl), a
0000:46AB C9          ret
0000:46AC
0000:46AC      loc_0_46AC:                ; CODE XREF: sub_0_46A4+31j
0000:46AC      ld      (hl), 30h ; '0'
0000:46AE AF          xor     a
0000:46AF C9          ret
0000:46AF      ; End of function sub_0_46A4
0000:46B0
0000:46B0      ; SUBROUTINE
0000:46B0
0000:46B0      sub_0_46B0:                ; CODE XREF: sub_0_4682+1C1p
0000:46B0      ld      hl, 3FC9h          ; 0000:49EF1p
0000:46B3      ld      b, 5
0000:46B5      loc_0_46B5:                ; CODE XREF: sub_0_46B0+81j
0000:46B5      ld      (hl), 30h ; '0'
0000:46B7 23          inc     hl
0000:46B8 10 FB      djnz    loc_0_46B5
0000:46BA C9          ret
0000:46BA      ; End of function sub_0_46B0
0000:46BB
0000:46BB      ; SUBROUTINE
0000:46BB
0000:46BB      sub_0_46BB:                ; CODE XREF: sub_0_46BB+271j
0000:46BB      cd 82 46      ; sub_0_471C+501p ...
0000:46BB      call    sub_0_4682
0000:46BE 21 CC 3F      ld      hl, 3FCCCh
0000:46C1 7E          ld      a, (hl)
0000:46C2 FE 30      cp      30h ; '0'
0000:46C4 20 1C      jr      nz, loc_0_46E2
0000:46C6 2B          dec     hl
0000:46C7 7E          ld      a, (hl)
0000:46C8 FE 35      cp      35h ; '5'
0000:46CA 20 16      jr      nz, loc_0_46E2
0000:46CC 2B          dec     hl
0000:46CD 7E          ld      a, (hl)
0000:46CE FE 31      cp      31h ; '1'
0000:46D0 20 10      jr      nz, loc_0_46E2
0000:46D2 2B          dec     hl
0000:46D3 7E          ld      a, (hl)
0000:46D4 FE 30      cp      30h ; '0'
0000:46D6 20 0A      jr      nz, loc_0_46E2
0000:46D8 3A 0F 43      ld      a, (byte_0_430F)
0000:46DB 3C          inc     a
0000:46DC 32 0F 43      ld      (byte_0_430F), a
0000:46DF CD 90 4E      call    sub_0_4E90
0000:46E2      loc_0_46E2:                ; CODE XREF: sub_0_46BB+91j
0000:46E2 10 D7      djnz    sub_0_46BB          ; sub_0_46BB+F1j ...
0000:46E4 C9          ret
0000:46E4      ; End of function sub_0_46BB
0000:46E5
0000:46E5      ; SUBROUTINE
0000:46E5
0000:46E5      sub_0_46E5:                ; CODE XREF: 0000:4F231p
0000:46E5      ld      a, (byte_0_4311)
0000:46E8 B7          or      a
0000:46E9 C0          ret      nz
0000:46EA 3A 00 43      ld      a, (byte_0_4300)
0000:46ED B7          or      a
0000:46EE C0          ret      nz
0000:46EF 3E 14      ld      a, 14h
0000:46F1 32 00 43      ld      (byte_0_4300), a
0000:46F4 3A 10 43      ld      a, (byte_0_4310)
0000:46F7 B7          or      a
0000:46F8 20 08      jr      nz, loc_0_4702
0000:46FA 3A 0D 43      ld      a, (byte_0_430D)
0000:46FD EE 01      xor     l
0000:46FF 32 0D 43      ld      (byte_0_430D), a
0000:4702      loc_0_4702:                ; CODE XREF: sub_0_46E5+131j
0000:4702      ld      a, 1
0000:4704 32 11 43      ld      (byte_0_4311), a
0000:4707 D9          exx
0000:4708 2A 13 43      ld      hl, (word_0_4313)
0000:470B 11 C0 FF      ld      de, 0FFC0h
0000:470E 19          add     hl, de
0000:470F 22 1E 43      ld      (word_0_431E), hl
0000:4712 7E          ld      a, (hl)
0000:4713 FE 20      cp      20h ; ' '
0000:4715 C2 07 48      jp      nz, loc_0_4807
0000:4718 36 5B      ld      (hl), 5Bh ; '['
0000:471A D9          exx
0000:471B C9          ret
0000:471B      ; End of function sub_0_46E5
0000:471C
0000:471C      ; SUBROUTINE

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0000:471C
0000:471C
0000:471C      sub_0_471C:                ; CODE XREF: sub_0_471C+EC↑j
0000:471C D9                ; 0000:4F39↑p
0000:471C      exx
0000:471D 2A 1E 43      ld      hl, (word_0_431E)
0000:4720 7E                ld      a, (hl)
0000:4721 FE 5B      cp      5Bh ; '['
0000:4723 20 1A      jr      nz, loc_0_473F
0000:4725 36 20      ld      (hl), 20h ; ' '
0000:4727 11 C0 FF      ld      de, 0FFC0h
0000:472A 19      add     hl, de
0000:472B CB 54      bit     2, h
0000:472D 28 61      jr      z, loc_0_4790
0000:472F 7E                ld      a, (hl)
0000:4730 FE 80      cp      80h ; 'Ç'
0000:4732 28 04      jr      z, loc_0_4738
0000:4734 FE 20      cp      20h ; ' '
0000:4736 20 07      jr      nz, loc_0_473F
0000:4738
0000:4738      loc_0_4738:                ; CODE XREF: sub_0_471C+16↑j
0000:4738 36 5B                ; sub_0_471C+E0↑j
0000:4738      ld      (hl), 5Bh ; '['
0000:473A
0000:473A      loc_0_473A:                ; CODE XREF: sub_0_471C+E8↑j
0000:473A 22 1E 43      ld      (word_0_431E), hl
0000:473D D9                exx
0000:473E C9                ret
0000:473F
0000:473F      ; -----
0000:473F      loc_0_473F:                ; CODE XREF: sub_0_471C+7↑j
0000:473F      ; sub_0_471C+1A↑j
0000:473F      ld      de, 3C40h
0000:4742 CD E2 45      call    sub_0_45E2
0000:4745 B7                or      a
0000:4746 28 54      jr      z, loc_0_479C
0000:4748 CB 7E      bit     7, (hl)
0000:474A CA EA 47      jp      z, loc_0_47EA
0000:474D E5      push    hl
0000:474E CD 4A 48      call    sub_0_484A
0000:4751 D1      pop     de
0000:4752 CD E2 45      call    sub_0_45E2
0000:4755 B7                or      a
0000:4756 D5      push    de
0000:4757 E1      pop     hl
0000:4758 CA 0B 48      jp      z, loc_0_480B
0000:475B CD 28 4D      call    sub_0_4D28
0000:475E 22 20 40      ld      (cursor_pos), hl
0000:4761 7E                ld      a, (hl)
0000:4762 06 03      ld      b, 3
0000:4764 FE A0      cp      0A0h ; 'Á'
0000:4766 28 04      jr      z, loc_0_476C
0000:4768 38 01      jr      c, loc_0_476B
0000:476A 05      dec     b
0000:476B
0000:476B      loc_0_476B:                ; CODE XREF: sub_0_471C+4C↑j
0000:476B 05      dec     b
0000:476C
0000:476C      loc_0_476C:                ; CODE XREF: sub_0_471C+4A↑j
0000:476C CD BB 46      call    sub_0_46BB
0000:476F 21 6A 43      ld      hl, 436Ah
0000:4772 CD E5 44      call    display_message
0000:4775 CD 5A 4E      call    sub_0_4E5A
0000:4778 21 79 43      ld      hl, 4379h
0000:477B CD E5 44      call    display_message
0000:477E 3A 01 43      ld      a, (byte_0_4301)
0000:4781 3D      dec     a
0000:4782 CA 74 48      jp      z, loc_0_4874
0000:4785 32 01 43      ld      (byte_0_4301), a
0000:4788 11 00 00      ld      de, 0
0000:478B CD 85 49      call    sub_0_4985
0000:478E 18 06      jr      loc_0_4796
0000:4790
0000:4790      ; -----
0000:4790      loc_0_4790:                ; CODE XREF: sub_0_471C+11↑j
0000:4790      ld      de, 40h ; '@'
0000:4793 19      add     hl, de
0000:4794 36 20      ld      (hl), 20h ; ' '
0000:4796
0000:4796      loc_0_4796:                ; CODE XREF: sub_0_471C+72↑j
0000:4796 AF                ; sub_0_471C+82↑j ...
0000:4796      xor     a
0000:4797 32 11 43      ld      (byte_0_4311), a
0000:479A D9                exx
0000:479B C9                ret
0000:479C
0000:479C      ; -----
0000:479C      loc_0_479C:                ; CODE XREF: sub_0_471C+2A↑j
0000:479C CB 7E      bit     7, (hl)
0000:479E 28 F6      jr      z, loc_0_4796
0000:47A0 21 00 3C      ld      hl, 3C00h
0000:47A3 06 40      ld      b, 40h ; '@'
0000:47A5
0000:47A5      loc_0_47A5:                ; CODE XREF: sub_0_471C+8E↑j
0000:47A5 CB 7E      bit     7, (hl)
0000:47A7 20 03      jr      nz, loc_0_47AC
0000:47A9 23      inc     hl
0000:47AA 10 F9      djnz    loc_0_47A5
0000:47AC
0000:47AC      loc_0_47AC:                ; CODE XREF: sub_0_471C+8B↑j
0000:47AC E5      push    hl
0000:47AD 21 00 3C      ld      hl, 3C00h
0000:47B0 CD 7E 4C      call    sub_0_4C7E
0000:47B3 21 06 00      ld      hl, 6
0000:47B6 CD 1D 4D      call    sub_0_4D1D
0000:47B9 45      ld      b, l
0000:47BA AF      xor     a
0000:47BB 0E 05      ld      c, 5
0000:47BD
0000:47BD      loc_0_47BD:                ; CODE XREF: sub_0_471C+A2↑j
0000:47BD 81      add     a, c
0000:47BE 10 FD      djnz    loc_0_47BD
0000:47C0 47      ld      b, a
0000:47C1 F5      push    af
0000:47C2 CD BB 46      call    sub_0_46BB
0000:47C5 F1      pop     af

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0000:47C6 E1          pop     hl
0000:47C7 22 20 40        ld      (cursor_pos), hl
0000:47CA 06 0A          ld      b, 0Ah
0000:47CC 5F          ld      e, a
0000:47CD 21 00 00        ld      hl, 0
0000:47D0 55          ld      d, l
0000:47D1
0000:47D1          loc_0_47D1:                ; CODE XREF: sub_0_471C+B6↑j
0000:47D1 19          add     hl, de
0000:47D2 10 FD          djnz   loc_0_47D1
0000:47D4 3E 3C          ld      a, 3Ch ; '<'
0000:47D6 CD 33 00        call    33h
0000:47D9 CD AF 0F        call    0FAPh
0000:47DC 3E 3E          ld      a, 3Eh ; '>'
0000:47DE CD 33 00        call    33h
0000:47E1 AF          xor     a
0000:47E2 32 10 43        ld      (byte_0_4310), a
0000:47E5 32 0C 43        ld      (byte_0_430C), a
0000:47E8 18 AC          jr      loc_0_4796
0000:47EA
0000:47EA          loc_0_47EA:                ; CODE XREF: sub_0_471C+2E↑j
0000:47EA E5          push    hl
0000:47EB 21 03 00        ld      hl, 3
0000:47EE CD 1D 4D        call    sub_0_4D1D
0000:47F1 7D          ld      a, l
0000:47F2 E1          pop     hl
0000:47F3 FE 03          cp      3
0000:47F5 F5          push    af
0000:47F6 C4 0A 4E        call    nz, sub_0_4E0A
0000:47F9 F1          pop     af
0000:47FA FE 02          cp      2
0000:47FC DA 38 47        jp      c, loc_0_4738
0000:47FF C2 96 47        jp      nz, loc_0_4796
0000:4802 36 20          ld      (hl), 20h ; ' '
0000:4804 C3 3A 47        jp      loc_0_473A
0000:4807
0000:4807          loc_0_4807:                ; CODE XREF: sub_0_46E5+30↑j
0000:4807 D9          exx
0000:4808 C3 1C 47        jp      sub_0_471C
0000:480B
0000:480B          loc_0_480B:                ; CODE XREF: sub_0_471C+3C↑j
0000:480B CD 2E 48        call    sub_0_482E
0000:480E 18 86          jr      loc_0_4796
0000:480E          ; End of function sub_0_471C
0000:4810
0000:4810          ; ██████████ SUBROUTINE ██████████
0000:4810
0000:4810          sub_0_4810:                ; CODE XREF: sub_0_4C8A+90↑j
0000:4810 E5          ; sub_0_4D5F+96↑p
0000:4810          push    hl
0000:4811 C5          push    bc
0000:4812 7E          ld      a, (hl)
0000:4813 4F          ld      c, a
0000:4814 3E BC        ld      a, 0BCh ; 'J'
0000:4816 A1          and     c
0000:4817 B9          cp      c
0000:4818 20 08        jr      nz, loc_0_4822
0000:481A 3E B0        ld      a, 0B0h ; '0'
0000:481C A1          and     c
0000:481D B9          cp      c
0000:481E 20 02        jr      nz, loc_0_4822
0000:4820 3E 20        ld      a, 20h ; ' '
0000:4822
0000:4822          loc_0_4822:                ; CODE XREF: sub_0_4810+8↑j
0000:4822 FE 80          ; sub_0_4810+E↑j
0000:4822          cp      80h ; 'Ç'
0000:4824 20 02        jr      nz, loc_0_4828
0000:4826 3E 20        ld      a, 20h ; ' '
0000:4828
0000:4828          loc_0_4828:                ; CODE XREF: sub_0_4810+14↑j
0000:4828 77          ld      (hl), a
0000:4829 C1          pop     bc
0000:482A E1          pop     hl
0000:482B C3 57 4D        jp      loc_0_4D57
0000:482B          ; End of function sub_0_4810
0000:482B
0000:482B          ; ██████████ SUBROUTINE ██████████
0000:482B
0000:482B          sub_0_482E:                ; CODE XREF: sub_0_471C+EF↑p
0000:482E E5          push    hl
0000:482F C5          push    bc
0000:4830 7E          ld      a, (hl)
0000:4831 4F          ld      c, a
0000:4832 3E 8F        ld      a, 8Fh ; 'À'
0000:4834 A1          and     c
0000:4835 B9          cp      c
0000:4836 20 08        jr      nz, loc_0_4840
0000:4838 3E 83        ld      a, 83h ; 'ã'
0000:483A A1          and     c
0000:483B B9          cp      c
0000:483C 20 02        jr      nz, loc_0_4840
0000:483E 3E 20        ld      a, 20h ; ' '
0000:4840
0000:4840          loc_0_4840:                ; CODE XREF: sub_0_482E+8↑j
0000:4840 FE 80          ; sub_0_482E+E↑j
0000:4840          cp      80h ; 'Ç'
0000:4842 20 02        jr      nz, loc_0_4846
0000:4844 3E 20        ld      a, 20h ; ' '
0000:4846
0000:4846          loc_0_4846:                ; CODE XREF: sub_0_482E+14↑j
0000:4846 77          ld      (hl), a
0000:4847 C1          pop     bc
0000:4848 E1          pop     hl
0000:4849 C9          ret
0000:4849          ; End of function sub_0_482E
0000:4849
0000:484A          ; ██████████ SUBROUTINE ██████████
0000:484A
0000:484A

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0000:484A
0000:484A      sub_0_484A:                                ; CODE XREF: sub_0_471C+32|p
0000:484A 2A 08 43      ld      hl, (word_0_4308)                ; sub_0_4D5F+7D|p
0000:484A      ld      a, h
0000:484E B7      or      a
0000:484F 20 11      jr      nz, loc_0_4862
0000:4851 2A 06 43      ld      hl, (word_0_4306)
0000:4854 7C      ld      a, h
0000:4855 B7      or      a
0000:4856 20 0A      jr      nz, loc_0_4862
0000:4858 2A 04 43      ld      hl, (word_0_4304)
0000:485B 7C      ld      a, h
0000:485C B7      or      a
0000:485D 20 03      jr      nz, loc_0_4862
0000:485F 2A 02 43      ld      hl, (word_0_4302)
0000:4862
0000:4862      loc_0_4862:                                ; CODE XREF: sub_0_484A+5|j
0000:4862      ; sub_0_484A+C|j ...
0000:4862      push    de
0000:4863 C5      push    bc
0000:4864 11 3F 00      ld      de, 3Fh ; '?'
0000:4867 19      add     hl, de
0000:4868 06 3F      ld      b, 3Fh ; '?'
0000:486A
0000:486A      loc_0_486A:                                ; CODE XREF: sub_0_484A+25|j
0000:486A CB 7E      bit     7, (hl)
0000:486C 20 03      jr      nz, loc_0_4871
0000:486E 2B      dec     hl
0000:486F 10 F9      djnz    loc_0_486A
0000:4871
0000:4871      loc_0_4871:                                ; CODE XREF: sub_0_484A+22|j
0000:4871 C1      pop     bc
0000:4872 D1      pop     de
0000:4873 C9      ret
0000:4873      ; End of function sub_0_484A
0000:4873
0000:4874
0000:4874
0000:4874      loc_0_4874:                                ; CODE XREF: sub_0_471C+66|j
0000:4874 C3 F5 49      jp      loc_0_49F5
0000:4877
0000:4877      ; SUBROUTINE
0000:4877
0000:4877      sub_0_4877:                                ; CODE XREF: sub_0_4B48+C|p
0000:4877      ; 0000:4B8B|p
0000:4877      ld      de, 40h ; '@'
0000:487A 06 0D      ld      b, 0Dh
0000:487C
0000:487C      loc_0_487C:                                ; CODE XREF: sub_0_4877+A|j
0000:487C CB 7E      bit     7, (hl)
0000:487E 20 06      jr      nz, loc_0_4886
0000:4880 19      add     hl, de
0000:4881 10 F9      djnz    loc_0_487C
0000:4883 3E 20      ld      a, 20h ; ' '
0000:4885 C9      ret
0000:4886
0000:4886
0000:4886      loc_0_4886:                                ; CODE XREF: sub_0_4877+7|j
0000:4886 AF      xor     a
0000:4887 C9      ret
0000:4887      ; End of function sub_0_4877
0000:4887
0000:4888
0000:4888      ; SUBROUTINE
0000:4888
0000:4888
0000:4888      sub_0_4888:                                ; CODE XREF: 0000:4F2B|p
0000:4888 3A 08 38      ld      a, (3808h)
0000:488B E6 05      and     5
0000:488D C8      ret     z
0000:488E FE 04      cp      4
0000:4890 30 16      jr      nc, loc_0_48A8
0000:4892 3A BB 3F      ld      a, (3FBBh)
0000:4895 CB 7F      bit     7, a
0000:4897 C0      ret     nz
0000:4898 D9      exx
0000:4899 21 80 3F      ld      hl, 3F80h
0000:489C CD 3E 46      call    sub_0_463E
0000:489F 2A 13 43      ld      hl, (word_0_4313)
0000:48A2 23      inc     hl
0000:48A3 22 13 43      ld      (word_0_4313), hl
0000:48A6
0000:48A6      loc_0_48A6:                                ; CODE XREF: sub_0_4888+35|j
0000:48A6 D9      exx
0000:48A7 C9      ret
0000:48A8
0000:48A8
0000:48A8      loc_0_48A8:                                ; CODE XREF: sub_0_4888+8|j
0000:48A8 C0      ret     nz
0000:48A9 3A 84 3F      ld      a, (3F84h)
0000:48AC CB 7F      bit     7, a
0000:48AE C0      ret     nz
0000:48AF D9      exx
0000:48B0 21 80 3F      ld      hl, 3F80h
0000:48B3 CD 60 46      call    sub_0_4660
0000:48B6 2A 13 43      ld      hl, (word_0_4313)
0000:48B9 2B      dec     hl
0000:48BA 22 13 43      ld      (word_0_4313), hl
0000:48BD 18 E7      jr      loc_0_48A6
0000:48BD      ; End of function sub_0_4888
0000:48BD
0000:48BF
0000:48BF      ; SUBROUTINE
0000:48BF
0000:48BF
0000:48BF      sub_0_48BF:                                ; CODE XREF: 0000:4F44|p
0000:48BF 3A 0C 43      ld      a, (byte_0_430C)
0000:48C2 3C      inc     a
0000:48C3 32 0C 43      ld      (byte_0_430C), a
0000:48C6 C0      ret     nz
0000:48C7 3A 01 43      ld      a, (byte_0_4301)
0000:48CA FE 08      cp      8
0000:48CC D8      ret     c
0000:48CD 3A 10 43      ld      a, (byte_0_4310)

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0000:48D0 B7      or      a
0000:48D1 C0      ret
0000:48D2 D9      exx    nz
0000:48D3 3E 41    ld      a, 41h ; 'A'
0000:48D5 32 0B 43 ld      (byte_0_430B), a
0000:48D8 3A 0D 43 ld      a, (byte_0_430D)
0000:48DB B7      or      a
0000:48DC 28 05    jr      z, loc_0_48E3
0000:48DE 21 00 3C ld      hl, 3C00h
0000:48E1 18 03    jr      loc_0_48E6
0000:48E3
0000:48E3
0000:48E3      loc_0_48E3:                ; CODE XREF: sub_0_48BF+1D↑j
0000:48E3 21 3A 3C    ld      hl, 3C3Ah
0000:48E6      loc_0_48E6:                ; CODE XREF: sub_0_48BF+22↑j
0000:48E6 22 20 40    ld      (cursor_pos), hl
0000:48E9 21 4A 43    ld      hl, 434Ah
0000:48EC CD E5 44    call    display_message
0000:48EF 3E 01    ld      a, 1
0000:48F1 32 10 43    ld      (byte_0_4310), a
0000:48F4 D9      exx
0000:48F5 C9      ret
0000:48F5      ; End of function sub_0_48BF
0000:48F6
0000:48F6      ; ██████████ SUBROUTINE ██████████
0000:48F6
0000:48F6      sub_0_48F6:                ; CODE XREF: 0000:4F41↑p
0000:48F6 3A 10 43    ld      a, (byte_0_4310)
0000:48F9 B7      or      a
0000:48FA C8      ret      z
0000:48FB D9      exx
0000:48FC 21 00 3C    ld      hl, 3C00h
0000:48FF 06 3F    ld      b, 3Fh ; '?'
0000:4901
0000:4901      loc_0_4901:                ; CODE XREF: sub_0_48F6+15↑j
0000:4901 7E      ld      a, (hl)
0000:4902 FE BB    cp      0BBh ; 'η'
0000:4904 28 09    jr      z, loc_0_490F
0000:4906 FE B7    cp      0B7h ; 'À'
0000:4908 28 09    jr      z, loc_0_4913
0000:490A
0000:490A      loc_0_490A:                ; CODE XREF: sub_0_48F6+1B↑j
0000:490A 23                ; sub_0_48F6+1F↑j
0000:490A      inc      hl
0000:490B 10 F4    djnz    loc_0_4901
0000:490D 18 08    jr      loc_0_4917
0000:490F
0000:490F      loc_0_490F:                ; CODE XREF: sub_0_48F6+E↑j
0000:490F 36 B7    ld      (hl), 0B7h ; 'À'
0000:4911 18 F7    jr      loc_0_490A
0000:4913
0000:4913      loc_0_4913:                ; CODE XREF: sub_0_48F6+12↑j
0000:4913 36 BB    ld      (hl), 0BBh ; 'η'
0000:4915 18 F3    jr      loc_0_490A
0000:4917
0000:4917      loc_0_4917:                ; CODE XREF: sub_0_48F6+17↑j
0000:4917 3A 0D 43    ld      a, (byte_0_430D)
0000:491A B7      or      a
0000:491B 28 08    jr      z, loc_0_4925
0000:491D 21 00 3C    ld      hl, 3C00h
0000:4920 CD 3E 46    call    sub_0_463E
0000:4923 18 06    jr      loc_0_492B
0000:4925
0000:4925      loc_0_4925:                ; CODE XREF: sub_0_48F6+25↑j
0000:4925 21 00 3C    ld      hl, 3C00h
0000:4928 CD 60 46    call    sub_0_4660
0000:492B
0000:492B      loc_0_492B:                ; CODE XREF: sub_0_48F6+2D↑j
0000:492B 3A 0B 43    ld      a, (byte_0_430B)
0000:492E 3D      dec      a
0000:492F 32 0B 43    ld      (byte_0_430B), a
0000:4932 28 02    jr      z, loc_0_4936
0000:4934
0000:4934      loc_0_4934:                ; CODE XREF: sub_0_48F6+44↑j
0000:4934 D9      exx
0000:4935 C9      ret
0000:4936
0000:4936      loc_0_4936:                ; CODE XREF: sub_0_48F6+3C↑j
0000:4936 AF      xor      a
0000:4937 32 10 43    ld      (byte_0_4310), a
0000:493A 18 F8    jr      loc_0_4934
0000:493A      ; End of function sub_0_48F6
0000:493A
0000:493C
0000:493C      loc_0_493C:                ; CODE XREF: 0000:4AB4↑j
0000:493C      ; 0000:4B45↑j
0000:493C 31 8A 42    ld      sp, 428Ah
0000:493F 21 19 3C    ld      hl, 3C19h
0000:4942 22 20 40    ld      (cursor_pos), hl
0000:4945 21 00 3C    ld      hl, 3C00h
0000:4948 CD 7E 4C    call    sub_0_4C7E
0000:494B 21 93 44    ld      hl, 4493h
0000:494E CD 05 45    call    sub_0_4505
0000:4951 CD 5F 4C    call    sub_0_4C5F
0000:4954 01 FF FF    ld      bc, 0FFFFh
0000:4957 CD 60 00    call    60h
0000:495A CD 60 00    call    60h
0000:495D CD 60 00    call    60h
0000:4960 C3 4F 45    jp      loc_0_454F
0000:4963
0000:4963      ; ██████████ SUBROUTINE ██████████
0000:4963
0000:4963      sub_0_4963:                ; CODE XREF: 0000:4A78↑p
0000:4963 E5                ; 0000:4A81↑p ...
0000:4963      push     hl
0000:4964 D5      push     de

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0000:4965 C5          push    bc
0000:4966 06 0A          ld      b, 0Ah
0000:4968 D5          push    de
0000:4969 11 40 00        ld      de, 40h ; '@'
0000:496C ED 52          sbc     hl, de
0000:496E D1          pop     de
0000:496F 23          inc     hl
0000:4970
0000:4970          loc_0_4970:                ; CODE XREF: sub_0_4963+1C|j
0000:4970 22 20 40          ld      (cursor_pos), hl
0000:4973 D5          push    de
0000:4974 E5          push    hl
0000:4975 EB          ex      de, hl
0000:4976 CD E5 44      call    display_message
0000:4979 E1          pop     hl
0000:497A 11 06 00        ld      de, 6
0000:497D 19          add     hl, de
0000:497E D1          pop     de
0000:497F 10 EF          djnz    loc_0_4970
0000:4981 C1          pop     bc
0000:4982 D1          pop     de
0000:4983 E1          pop     hl
0000:4984 C9          ret
0000:4984          ; End of function sub_0_4963
0000:4985
0000:4985          ; SUBROUTINE
0000:4985
0000:4985          sub_0_4985:                ; CODE XREF: sub_0_471C+6F|p
0000:4985 E5          push    hl
0000:4986 D5          push    de
0000:4987 C5          push    bc
0000:4988 2A 02 43      ld      hl, (word_0_4302)
0000:498B CD B0 49      call    sub_0_49B0
0000:498E 22 02 43      ld      (word_0_4302), hl
0000:4991 2A 04 43      ld      hl, (word_0_4304)
0000:4994 CD B0 49      call    sub_0_49B0
0000:4997 22 04 43      ld      (word_0_4304), hl
0000:499A 2A 06 43      ld      hl, (word_0_4306)
0000:499D CD B0 49      call    sub_0_49B0
0000:49A0 22 06 43      ld      (word_0_4306), hl
0000:49A3 2A 08 43      ld      hl, (word_0_4308)
0000:49A6 CD B0 49      call    sub_0_49B0
0000:49A9 22 08 43      ld      (word_0_4308), hl
0000:49AC C1          pop     bc
0000:49AD D1          pop     de
0000:49AE E1          pop     hl
0000:49AF C9          ret
0000:49AF          ; End of function sub_0_4985
0000:49AF
0000:49B0          ; SUBROUTINE
0000:49B0
0000:49B0          sub_0_49B0:                ; CODE XREF: sub_0_4985+6|p
0000:49B0 E5          push    hl                ; sub_0_4985+F|p ...
0000:49B0          push    hl
0000:49B1 06 3F          ld      b, 3Fh ; '?'
0000:49B3
0000:49B3          loc_0_49B3:                ; CODE XREF: sub_0_49B0+9|j
0000:49B3 7E          ld      a, (hl)
0000:49B4 CB 7F          bit     7, a
0000:49B6 23          inc     hl
0000:49B7 20 06          jr      nz, loc_0_49BF
0000:49B9 10 F8          djnz    loc_0_49B3
0000:49BB E1          pop     hl
0000:49BC 26 00          ld      h, 0
0000:49BE C9          ret
0000:49BF
0000:49BF          ;
0000:49BF          loc_0_49BF:                ; CODE XREF: sub_0_49B0+7|j
0000:49BF E1          pop     hl
0000:49C0 19          add     hl, de
0000:49C1 C9          ret
0000:49C1          ; End of function sub_0_49B0
0000:49C1
0000:49C2          ;
0000:49C2          loc_0_49C2:                ; CODE XREF: sub_0_45D9+5|j
0000:49C2 AF          xor     a
0000:49C3 32 0C 43      ld      (byte_0_430C), a
0000:49C6 32 15 43      ld      (byte_0_4315), a
0000:49C9 32 12 43      ld      (byte_0_4312), a
0000:49CC 32 0D 43      ld      (byte_0_430D), a
0000:49CF 32 0E 43      ld      (byte_0_430E), a
0000:49D2 32 10 43      ld      (byte_0_4310), a
0000:49D5 32 11 43      ld      (byte_0_4311), a
0000:49D8 32 22 43      ld      (byte_0_4322), a
0000:49DB 3C          inc     a
0000:49DC 32 0A 43      ld      (byte_0_430A), a
0000:49DF 3E 05          ld      a, 5
0000:49E1 32 0C 43      ld      (byte_0_430C), a
0000:49E4 3E 03          ld      a, 3
0000:49E6 32 0F 43      ld      (byte_0_430F), a
0000:49E9 CD 90 4E      call    sub_0_4E90
0000:49EC 31 8A 42      ld      sp, 428Ah
0000:49EF CD B0 46      call    sub_0_46B0
0000:49F2 CD 31 4E      call    sub_0_4E31
0000:49F5
0000:49F5          loc_0_49F5:                ; CODE XREF: 0000:4874|j
0000:49F5 31 8A 42      ld      sp, 428Ah
0000:49F8 AF          xor     a
0000:49F9 32 11 43      ld      (byte_0_4311), a
0000:49FC 3A 0E 43      ld      a, (byte_0_430E)
0000:49FF 3C          inc     a
0000:4A00 FE 07          cp      7
0000:4A02 20 02          jr      nz, loc_0_4A06
0000:4A04 3E 01          ld      a, 1
0000:4A06
0000:4A06          loc_0_4A06:                ; CODE XREF: 0000:4A02|j
0000:4A06 32 0E 43      ld      (byte_0_430E), a
0000:4A09 E6 06          and     6
0000:4A0B 11 40 00        ld      de, 40h ; '@'
0000:4A0E 62          ld      h, d
0000:4A0F 6B          ld      l, e

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0000:4A10 06 01      ld      b, 1
0000:4A12 FE 02      cp      2
0000:4A14 38 06      jr      c, loc_0_4A1C
0000:4A16 28 02      jr      z, loc_0_4A1A
0000:4A18 04        inc     b
0000:4A19 19        add     hl, de
0000:4A1A
0000:4A1A      loc_0_4A1A:                ; CODE XREF: 0000:4A16|j
0000:4A1A 04        inc     b
0000:4A1B 19        add     hl, de
0000:4A1C
0000:4A1C      loc_0_4A1C:                ; CODE XREF: 0000:4A14|j
0000:4A1C EB        ex      de, hl
0000:4A1D
0000:4A1D      loc_0_4A1D:                ; CODE XREF: 0000:4A40|j
0000:4A1D C5        push    bc
0000:4A1E DD 21 16 43      ld      ix, 4316h
0000:4A22 FD 21 02 43      ld      iy, 4302h
0000:4A26 06 04        ld      b, 4
0000:4A28
0000:4A28      loc_0_4A28:                ; CODE XREF: 0000:4A3D|j
0000:4A28 DD 6E 00      ld      l, (ix+0)
0000:4A2B DD 66 01      ld      h, (ix+1)
0000:4A2E 19        add     hl, de
0000:4A2F FD 75 00      ld      (iy+0), l
0000:4A32 FD 74 01      ld      (iy+1), h
0000:4A35 DD 23        inc     ix
0000:4A37 DD 23        inc     ix
0000:4A39 FD 23        inc     iy
0000:4A3B FD 23        inc     iy
0000:4A3D 10 E9      djnz    loc_0_4A28
0000:4A3F C1        pop     bc
0000:4A40 10 DB      djnz    loc_0_4A1D
0000:4A42 CD 18 45      call    sub_0_4518
0000:4A45 21 09 3F      ld      hl, 3F09h
0000:4A48 22 20 40      ld      (cursor_pos), hl
0000:4A4B 21 51 43      ld      hl, 4351h
0000:4A4E E5        push    hl
0000:4A4F CD E5 44      call    display_message
0000:4A52 21 17 3F      ld      hl, 3F17h
0000:4A55 22 20 40      ld      (cursor_pos), hl
0000:4A58 E1        pop     hl
0000:4A59 E5        push    hl
0000:4A5A CD E5 44      call    display_message
0000:4A5D 21 24 3F      ld      hl, 3F24h
0000:4A60 22 20 40      ld      (cursor_pos), hl
0000:4A63 E1        pop     hl
0000:4A64 E5        push    hl
0000:4A65 CD E5 44      call    display_message
0000:4A68 21 31 3F      ld      hl, 3F31h
0000:4A6B 22 20 40      ld      (cursor_pos), hl
0000:4A6E E1        pop     hl
0000:4A6F CD E5 44      call    display_message
0000:4A72 11 23 43      ld      de, 4323h
0000:4A75 2A 02 43      ld      hl, (word_0_4302)
0000:4A78 CD 63 49      call    sub_0_4963
0000:4A7B 11 30 43      ld      de, 4330h
0000:4A7E 2A 04 43      ld      hl, (word_0_4304)
0000:4A81 CD 63 49      call    sub_0_4963
0000:4A84 11 3D 43      ld      de, 433Dh
0000:4A87 2A 06 43      ld      hl, (word_0_4306)
0000:4A8A CD 63 49      call    sub_0_4963
0000:4A8D 2A 08 43      ld      hl, (word_0_4308)
0000:4A90 CD 63 49      call    sub_0_4963
0000:4A93 3E 28        ld      a, 28h ; '('
0000:4A95 32 01 43      ld      (byte_0_4301), a
0000:4A98 32 21 43      ld      (byte_0_4321), a
0000:4A9B
0000:4A9B      loc_0_4A9B:                ; CODE XREF: 0000:4AD9|j
0000:4A9B 21 84 3F      ld      hl, 3F84h
0000:4A9E 22 20 40      ld      (cursor_pos), hl
0000:4AA1 21 64 43      ld      hl, 4364h
0000:4AA4 CD E5 44      call    display_message
0000:4AA7 21 86 3F      ld      hl, 3F86h
0000:4AAA 22 13 43      ld      (word_0_4313), hl
0000:4AAD C3 FB 4E      jp      loc_0_4EFB
0000:4AB0
0000:4AB0
0000:4AB0      loc_0_4AB0:                ; CODE XREF: 0000:4B2A|j
0000:4AB0 3A 0F 43      ld      a, (byte_0_430F)
0000:4AB3 3D        dec     a
0000:4AB4 CA 3C 49      jp      z, loc_0_493C
0000:4AB7 32 0F 43      ld      (byte_0_430F), a
0000:4ABA CD 90 4E      call    sub_0_4E90
0000:4ABD AF        xor     a
0000:4ABE 32 11 43      ld      (byte_0_4311), a
0000:4AC1 32 12 43      ld      (byte_0_4312), a
0000:4AC4 CD 3B 4D      call    sub_0_4D3B
0000:4AC7 21 80 3F      ld      hl, 3F80h
0000:4ACA CD 7E 4C      call    sub_0_4C7E
0000:4ACD 01 FF FF      ld      bc, 0FFFFh
0000:4AD0 CD 60 00      call    60h
0000:4AD3 CD 60 00      call    60h
0000:4AD6 31 8A 42      ld      sp, 428Ah
0000:4AD9 C3 9B 4A      jp      loc_0_4A9B
0000:4ADC
0000:4ADC      ; SUBROUTINE
0000:4ADC
0000:4ADC
0000:4ADC      sub_0_4ADC:                ; CODE XREF: sub_0_4B1A+4|p
                                ; sub_0_4B1A+B|j ...
0000:4ADC 21 00 3C      ld      hl, 3C00h
0000:4ADC        ld      bc, 400h
0000:4AE2
0000:4AE2      loc_0_4AE2:                ; CODE XREF: sub_0_4ADC+1C|j
0000:4AE2 7E        ld      a, (hl)
0000:4AE3 FE 20      cp      20h ; ' '
0000:4AE5 20 02      jr      nz, loc_0_4AE9
0000:4AE7 36 80      ld      (hl), 80h ; 'C'
0000:4AE9
0000:4AE9      loc_0_4AE9:                ; CODE XREF: sub_0_4ADC+9|j
0000:4AE9 CB 7E        bit     7, (hl)
0000:4AEB 28 07      jr      z, loc_0_4AF4
0000:4AED 7E        ld      a, (hl)
0000:4AEE 2F      cpl
0000:4AEF CB FF      set     7, a

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0000:4AF1 CB B7      res      6, a
0000:4AF3 77          ld      (hl), a
0000:4AF4
0000:4AF4      loc_0_4AF4:      ; CODE XREF: sub_0_4ADC+F|j
0000:4AF4 23          inc      hl
0000:4AF5 0B          dec      bc
0000:4AF6 78          ld      a, b
0000:4AF7 B1          or      c
0000:4AF8 20 E8      jr      nz, loc_0_4AE2
0000:4AFA C9          ret
0000:4AFA      ; End of function sub_0_4ADC
0000:4AFA
0000:4AFB      ; ██████████ SUBROUTINE ██████████
0000:4AFB
0000:4AFB      sub_0_4AFB:      ; CODE XREF: sub_0_4B1A|p
0000:4AFB 2A 13 43    ld      hl, (word_0_4313)
0000:4AFE 2B          dec      hl
0000:4AFF 2B          dec      hl
0000:4B00 C9          ret
0000:4B00      ; End of function sub_0_4AFB
0000:4B00
0000:4B01      ; ██████████ SUBROUTINE ██████████
0000:4B01
0000:4B01      sub_0_4B01:      ; CODE XREF: sub_0_4B1A+8|p
0000:4B01 3E A6      ld      a, 0A6h ; 'A'
0000:4B03 06 00      ld      b, 0
0000:4B05
0000:4B05      loc_0_4B05:      ; CODE XREF: sub_0_4B01+16|j
0000:4B05 C5          push     bc
0000:4B06 E5          push     hl
0000:4B07 06 05      ld      b, 5
0000:4B09 EE 3F      xor     3Fh ; '?'
0000:4B0B
0000:4B0B      loc_0_4B0B:      ; CODE XREF: sub_0_4B01+C|j
0000:4B0B 77          ld      (hl), a
0000:4B0C 23          inc      hl
0000:4B0D 10 FC      djnz    loc_0_4B0B
0000:4B0F
0000:4B0F      loc_0_4B0F:      ; CODE XREF: sub_0_4B01+12|j
0000:4B0F E3          ex       (sp), hl
0000:4B10 E3          ex       (sp), hl
0000:4B11 E3          ex       (sp), hl
0000:4B12 E3          ex       (sp), hl
0000:4B13 10 FA      djnz    loc_0_4B0F
0000:4B15 E1          pop      hl
0000:4B16 C1          pop      bc
0000:4B17 10 EC      djnz    loc_0_4B05
0000:4B19 C9          ret
0000:4B19      ; End of function sub_0_4B01
0000:4B19
0000:4B1A      ; ██████████ SUBROUTINE ██████████
0000:4B1A
0000:4B1A      sub_0_4B1A:      ; CODE XREF: 0000:4B27|p
0000:4B1A CD FB 4A    call    sub_0_4AFB
0000:4B1D E5          push     hl
0000:4B1E CD DC 4A    call    sub_0_4ADC
0000:4B21 E1          pop      hl
0000:4B22 CD 01 4B    call    sub_0_4B01
0000:4B25 18 B5      jr      sub_0_4ADC
0000:4B25      ; End of function sub_0_4B1A
0000:4B25
0000:4B27      ; -----
0000:4B27
0000:4B27      loc_0_4B27:      ; CODE XREF: sub_0_4D5F+93|j
0000:4B27 CD 1A 4B    call    sub_0_4B1A
0000:4B2A C3 B0 4A    jp      loc_0_4AB0
0000:4B2D      ; -----
0000:4B2D
0000:4B2D      loc_0_4B2D:      ; CODE XREF: 0000:4C02|j
0000:4B2D 06 0A      ld      b, 0Ah
0000:4B2F
0000:4B2F      loc_0_4B2F:      ; CODE XREF: 0000:4B43|j
0000:4B2F C5          push     bc
0000:4B30 CD DC 4A    call    sub_0_4ADC
0000:4B33 01 10 27    ld      bc, 2710h
0000:4B36 CD 60 00    call    60h
0000:4B39 CD DC 4A    call    sub_0_4ADC
0000:4B3C 01 10 27    ld      bc, 2710h
0000:4B3F CD 60 00    call    60h
0000:4B42 C1          pop      bc
0000:4B43 10 EA      djnz    loc_0_4B2F
0000:4B45 C3 3C 49    jp      loc_0_493C
0000:4B48
0000:4B48      ; ██████████ SUBROUTINE ██████████
0000:4B48
0000:4B48      sub_0_4B48:      ; CODE XREF: 0000:4F71|p
0000:4B48 E5          push     hl
0000:4B49 D5          push     de
0000:4B4A C5          push     bc
0000:4B4B 3A 0A 43    ld      a, (byte_0_430A)
0000:4B4E B7          or      a
0000:4B4F 28 37      jr      z, loc_0_4B88
0000:4B51 21 7F 3C    ld      hl, 3C7Fh
0000:4B54 CD 77 48    call    sub_0_4877
0000:4B57 B7          or      a
0000:4B58 CA BE 4B    jp      z, loc_0_4BBE
0000:4B5B 2A 08 43    ld      hl, (word_0_4308)
0000:4B5E CD 7A 4B    call    sub_0_4B7A
0000:4B61 2A 06 43    ld      hl, (word_0_4306)
0000:4B64 CD 7A 4B    call    sub_0_4B7A
0000:4B67 2A 04 43    ld      hl, (word_0_4304)
0000:4B6A CD 7A 4B    call    sub_0_4B7A
0000:4B6D 2A 02 43    ld      hl, (word_0_4302)
0000:4B70 CD 7A 4B    call    sub_0_4B7A
0000:4B73 CD FC 45    call    sub_0_45FC
0000:4B76
0000:4B76      loc_0_4B76:      ; CODE XREF: 0000:4BAC|j
0000:4B76 C1          ; 0000:4C1D|j ...
0000:4B76          pop      bc

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0000:4B77 D1          pop     de
0000:4B78 E1          pop     hl
0000:4B79 C9          ret
0000:4B79          ; End of function sub_0_4B48
0000:4B79
0000:4B7A          ; ██████████ SUBROUTINE ██████████
0000:4B7A
0000:4B7A          sub_0_4B7A:          ; CODE XREF: sub_0_4B48+16↑p
0000:4B7A 7C          ; sub_0_4B48+1C↑p ...
0000:4B7A          ld      a, h
0000:4B7B B7          or      a
0000:4B7C C8          ret     z
0000:4B7D CD 3E 46  call    sub_0_463E
0000:4B80 11 40 00  ld      de, 40h ; '@'
0000:4B83 ED 52  sbc     hl, de
0000:4B85 C3 3E 46  jp      sub_0_463E
0000:4B85          ; End of function sub_0_4B7A
0000:4B85
0000:4B88          ;
0000:4B88
0000:4B88          loc_0_4B88:          ; CODE XREF: sub_0_4B48+7↑j
0000:4B88          ld      hl, 3C40h
0000:4B8B CD 77 48  call    sub_0_4877
0000:4B8E B7          or      a
0000:4B8F 28 38  jr      z, loc_0_4BC9
0000:4B91 CD FC 45  call    sub_0_45FC
0000:4B94          loc_0_4B94:          ; CODE XREF: 0000:4BC6↑j
0000:4B94 2A 08 43  ld      hl, (word_0_4308)
0000:4B97 CD AE 4B  call    sub_0_4BAE
0000:4B9A 2A 06 43  ld      hl, (word_0_4306)
0000:4B9D CD AE 4B  call    sub_0_4BAE
0000:4BA0 2A 04 43  ld      hl, (word_0_4304)
0000:4BA3 CD AE 4B  call    sub_0_4BAE
0000:4BA6 2A 02 43  ld      hl, (word_0_4302)
0000:4BA9 CD AE 4B  call    sub_0_4BAE
0000:4BAC 18 C8  jr      loc_0_4B76
0000:4BAE          ; ██████████ SUBROUTINE ██████████
0000:4BAE
0000:4BAE          sub_0_4BAE:          ; CODE XREF: 0000:4B97↑p
0000:4BAE 7C          ; 0000:4B9D↑p ...
0000:4BAE          ld      a, h
0000:4BAF B7          or      a
0000:4BB0 C8          ret     z
0000:4BB1 E5          push    hl
0000:4BB2 CD 60 46  call    sub_0_4660
0000:4BB5 E1          pop     hl
0000:4BB6 11 40 00  ld      de, 40h ; '@'
0000:4BB9 ED 52  sbc     hl, de
0000:4BBB C3 60 46  jp      sub_0_4660
0000:4BBB          ; End of function sub_0_4BAE
0000:4BBB
0000:4BBE          ;
0000:4BBE
0000:4BBE          loc_0_4BBE:          ; CODE XREF: sub_0_4B48+10↑j
0000:4BBE          ld      a, (byte_0_430A)
0000:4BC1 EE 01  xor     l
0000:4BC3 32 0A 43  ld      (byte_0_430A), a
0000:4BC6 C3 94 4B  jp      loc_0_4B94
0000:4BC9          ;
0000:4BC9
0000:4BC9          loc_0_4BC9:          ; CODE XREF: 0000:4B8F↑j
0000:4BC9          ld      a, (byte_0_4311)
0000:4BCC B7          or      a
0000:4BCD 28 05  jr      z, loc_0_4BD4
0000:4BCF 2A 1E 43  ld      hl, (word_0_431E)
0000:4BD2 36 20  ld      (hl), 20h ; ' '
0000:4BD4          loc_0_4BD4:          ; CODE XREF: 0000:4BCD↑j
0000:4BD4          ld      ix, 4308h
0000:4BD8 06 04  ld      b, 4
0000:4BDA          loc_0_4BDA:          ; CODE XREF: 0000:4BE9↑j
0000:4BDA          ld      l, (ix+0)
0000:4BDD DD 66 01  ld      h, (ix+1)
0000:4BE0 7C          ld      a, h
0000:4BE1 B7          or      a
0000:4BE2 C4 2E 4C  call    nz, sub_0_4C2E
0000:4BE5 DD 2B  dec     ix
0000:4BE7 DD 2B  dec     ix
0000:4BE9 10 EF  djnz   loc_0_4BDA
0000:4BEB DD 21 08 43  ld      ix, 4308h
0000:4BEF 06 04  ld      b, 4
0000:4BF1 11 80 3F  ld      de, 3F80h
0000:4BF4          loc_0_4BF4:          ; CODE XREF: 0000:4C0F↑j
0000:4BF4          ld      l, (ix+0)
0000:4BF7 DD 66 01  ld      h, (ix+1)
0000:4BFA CD 55 4C  call    sub_0_4C55
0000:4BFD CD E2 45  call    sub_0_45E2
0000:4C00 FE 20  cp      20h ; ' '
0000:4C02 CA 2D 4B  jp      z, loc_0_4B2D
0000:4C05 DD 75 00  ld      (ix+0), l
0000:4C08 DD 74 01  ld      (ix+1), h
0000:4C0B DD 2B  dec     ix
0000:4C0D DD 2B  dec     ix
0000:4C0F 10 E3  djnz   loc_0_4BF4
0000:4C11 3A 0A 43  ld      a, (byte_0_430A)
0000:4C14 EE 01  xor     l
0000:4C16 32 0A 43  ld      (byte_0_430A), a
0000:4C19 3A 11 43  ld      a, (byte_0_4311)
0000:4C1C B7          or      a
0000:4C1D CA 76 4B  jp      z, loc_0_4B76
0000:4C20 2A 1E 43  ld      hl, (word_0_431E)
0000:4C23 7E          ld      a, (hl)
0000:4C24 FE 20  cp      20h ; ' '
0000:4C26 C2 76 4B  jp      nz, loc_0_4B76
0000:4C29 36 5B  ld      (hl), 5Bh ; '['
0000:4C2B C3 76 4B  jp      loc_0_4B76
0000:4C2E          ; ██████████ SUBROUTINE ██████████
0000:4C2E
0000:4C2E

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0000:4C2E
0000:4C2E      sub_0_4C2E:                                ; CODE XREF: 0000:4BE2↑p
0000:4C2E C5      push    bc
0000:4C2F E5      push    hl
0000:4C30 11 3F 00  ld      de, 3Fh ; '?'
0000:4C33 19      add     hl, de
0000:4C34 E5      push    hl
0000:4C35 13      inc     de
0000:4C36 19      add     hl, de
0000:4C37 EB      ex      de, hl
0000:4C38 E1      pop     hl
0000:4C39 06 80  ld      b, 80h ; 'Ç'
0000:4C3B
0000:4C3B      loc_0_4C3B:                                ; CODE XREF: sub_0_4C2E+1A↑j
0000:4C3B 1A      ld      a, (de)
0000:4C3C FE 80  cp      80h ; 'Ç'
0000:4C3E 7E      ld      a, (hl)
0000:4C3F 30 04  jr      nc, loc_0_4C45
0000:4C41 FE 80  cp      80h ; 'Ç'
0000:4C43 38 01  jr      c, loc_0_4C46
0000:4C45
0000:4C45      loc_0_4C45:                                ; CODE XREF: sub_0_4C2E+11↑j
0000:4C45 12      ld      (de), a
0000:4C46
0000:4C46      loc_0_4C46:                                ; CODE XREF: sub_0_4C2E+15↑j
0000:4C46 1B      dec     de
0000:4C47 2B      dec     hl
0000:4C48 10 F1  djnz    loc_0_4C3B
0000:4C4A E1      pop     hl
0000:4C4B 11 40 00  ld      de, 40h ; '@'
0000:4C4E ED 52  sbc     hl, de
0000:4C50 CD 7E 4C  call    sub_0_4C7E
0000:4C53 C1      pop     bc
0000:4C54 C9      ret
; End of function sub_0_4C2E
0000:4C54
0000:4C55
0000:4C55      ; ██████████ SUBROUTINE ██████████
0000:4C55
0000:4C55      sub_0_4C55:                                ; CODE XREF: 0000:4BFA↑p
0000:4C55 7C      ld      a, h
0000:4C56 B7      or      a
0000:4C57 C8      ret     z
0000:4C58 D5      push    de
0000:4C59 11 40 00  ld      de, 40h ; '@'
0000:4C5C 19      add     hl, de
0000:4C5D D1      pop     de
0000:4C5E C9      ret
; End of function sub_0_4C55
0000:4C5E
0000:4C5F
0000:4C5F      ; ██████████ SUBROUTINE ██████████
0000:4C5F
0000:4C5F      sub_0_4C5F:                                ; CODE XREF: 0000:4951↑p
0000:4C5F 21 C9 3F  ld      hl, 3FC9h
0000:4C62 11 FA 3F  ld      de, 3FFAh
0000:4C65 06 04  ld      b, 4
0000:4C67
0000:4C67      loc_0_4C67:                                ; CODE XREF: sub_0_4C5F+10↑j
0000:4C67 1D      ld      c, (hl)
0000:4C68 1A      ld      a, (de)
0000:4C69 B9      cp      c
0000:4C6A 38 06  jr      c, loc_0_4C72
0000:4C6C C0      ret     nz
0000:4C6D 23      inc     hl
0000:4C6E 13      inc     de
0000:4C6F 10 F6  djnz    loc_0_4C67
0000:4C71 C9      ret
;
0000:4C72
0000:4C72      loc_0_4C72:                                ; CODE XREF: sub_0_4C5F+B↑j
0000:4C72 21 C9 3F  ld      hl, 3FC9h
0000:4C75 11 FA 3F  ld      de, 3FFAh
0000:4C78 01 05 00  ld      bc, 5
0000:4C7B ED B0  ldir
0000:4C7D C9      ret
; End of function sub_0_4C5F
0000:4C7D
0000:4C7E
0000:4C7E      ; ██████████ SUBROUTINE ██████████
0000:4C7E
0000:4C7E      sub_0_4C7E:                                ; CODE XREF: sub_0_471C+94↑p
0000:4C7E C5                                ; 0000:4948↑p ...
0000:4C7E      push    bc
0000:4C7F D5      push    de
0000:4C80 06 40  ld      b, 40h ; '@'
0000:4C82
0000:4C82      loc_0_4C82:                                ; CODE XREF: sub_0_4C7E+7↑j
0000:4C82 1D      ld      (hl), 20h ; ' '
0000:4C84 23      inc     hl
0000:4C85 10 FB  djnz    loc_0_4C82
0000:4C87 D1      pop     de
0000:4C88 C1      pop     bc
0000:4C89 C9      ret
; End of function sub_0_4C7E
0000:4C89
0000:4C8A
0000:4C8A      ; ██████████ SUBROUTINE ██████████
0000:4C8A
0000:4C8A      sub_0_4C8A:                                ; CODE XREF: 0000:4F65↑p
0000:4C8A D9      exx
0000:4C8B 06 04  ld      b, 4
0000:4C8D DD 21 08 43 ld      ix, 4308h
0000:4C91
0000:4C91      loc_0_4C91:                                ; CODE XREF: sub_0_4C8A+11↑j
0000:4C91 DD 7E 01  ld      a, (ix+1)
0000:4C94 B7      or      a
0000:4C95 20 08  jr      nz, loc_0_4C9F
0000:4C97 DD 2B  dec     ix
0000:4C99 DD 2B  dec     ix
0000:4C9B 10 F4  djnz    loc_0_4C91
0000:4C9D

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0000:4C9D          loc_0_4C9D:                ; CODE XREF: sub_0_4C8A+3B↑j
0000:4C9D D9                ld     de, sub_0_4C8A+4E↑j ...
0000:4C9D          exx
0000:4C9E C9                ret
0000:4C9F          ;
0000:4C9F          loc_0_4C9F:                ; CODE XREF: sub_0_4C8A+B↑j
0000:4C9F 2A 13 43          ld     hl, (word_0_4313)
0000:4CA2 11 80 C0          ld     de, 0C080h
0000:4CA5 19                add     hl, de
0000:4CA6 EB                ex      de, hl
0000:4CA7 DD 6E 00          ld     l, (ix+0)
0000:4CAA DD 66 01          ld     h, (ix+1)
0000:4CAD E5                push    hl
0000:4CAE 21 03 00          ld     hl, 3
0000:4CB1 CD 1D 4D          call    sub_0_4D1D
0000:4CB4 7D                ld     a, l
0000:4CB5 E1                pop     hl
0000:4CB6 FE 01          cp      1
0000:4CB8 20 4B          jr      nz, loc_0_4D05
0000:4CBA          loc_0_4CBA:                ; CODE XREF: sub_0_4C8A+84↑j
0000:4CBA 19                add     hl, de
0000:4CBB 11 80 FF          ld     de, 0FF80h
0000:4CBE          loc_0_4CBE:                ; CODE XREF: sub_0_4C8A+39↑j
0000:4CBE CB 7E                bit     7, (hl)
0000:4CC0 20 05          jr      nz, loc_0_4CC7
0000:4CC2 19                add     hl, de
0000:4CC3 10 F9          djnz    loc_0_4CBE
0000:4CC5 18 D6          jr      loc_0_4C9D
0000:4CC7          ;
0000:4CC7          loc_0_4CC7:                ; CODE XREF: sub_0_4C8A+36↑j
0000:4CC7 DD 21 EA 4E          ld     ix, 4EEAh
0000:4CCB 06 04          ld     b, 4
0000:4CCD          loc_0_4CCD:                ; CODE XREF: sub_0_4C8A+4C↑j
0000:4CCD DD 7E 01          ld     a, (ix+1)
0000:4CD0 B7                or      a
0000:4CD1 28 08          jr      z, loc_0_4CDB
0000:4CD3 CD 2A 4E          call    sub_0_4E2A
0000:4CD6 10 F5          djnz    loc_0_4CCD
0000:4CD8 C3 9D 4C          jp      loc_0_4C9D
0000:4CDB          ;
0000:4CDB          loc_0_4CDB:                ; CODE XREF: sub_0_4C8A+47↑j
0000:4CDB CD 28 4D          call    sub_0_4D28
0000:4CDE 11 82 00          ld     de, 82h ; 'é'
0000:4CE1 19                add     hl, de
0000:4CE2 E5                push    hl
0000:4CE3 21 03 00          ld     hl, 3
0000:4CE6 CD 1D 4D          call    sub_0_4D1D
0000:4CE9 11 D2 4E          ld     de, 4ED2h
0000:4CEC 19                add     hl, de
0000:4CED D1                pop     de
0000:4CEE CB 7B                bit     7, e
0000:4CF0 28 1E          jr      z, loc_0_4D10
0000:4CF2          loc_0_4CF2:                ; CODE XREF: sub_0_4C8A+8A↑j
0000:4CF2 1A                ld     a, (de)
0000:4CF3 FE 20          cp      20h ; ' '
0000:4CF5 20 A6          jr      nz, loc_0_4C9D
0000:4CF7 7E                ld     a, (hl)
0000:4CF8 12                ld     (de), a
0000:4CF9 DD 73 00          ld     (ix+0), e
0000:4CFC DD 72 01          ld     (ix+1), d
0000:4CFF DD 77 02          ld     (ix+2), a
0000:4D02 C3 9D 4C          jp      loc_0_4C9D
0000:4D05          ;
0000:4D05          loc_0_4D05:                ; CODE XREF: sub_0_4C8A+2E↑j
0000:4D05 E5                push    hl
0000:4D06 21 40 00          ld     hl, 40h ; '@'
0000:4D09 CD 1D 4D          call    sub_0_4D1D
0000:4D0C EB                ex      de, hl
0000:4D0D E1                pop     hl
0000:4D0E 18 AA          jr      loc_0_4CBA
0000:4D10          ;
0000:4D10          loc_0_4D10:                ; CODE XREF: sub_0_4C8A+66↑j
0000:4D10 EB                ex      de, hl
0000:4D11 CB 7E                bit     7, (hl)
0000:4D13 EB                ex      de, hl
0000:4D14 28 DC          jr      z, loc_0_4CF2
0000:4D16 EB                ex      de, hl
0000:4D17 E5                push    hl
0000:4D18 D9                exx
0000:4D19 F1                pop     hl
0000:4D1A C3 10 48          jp      sub_0_4810
0000:4D1A          ; End of function sub_0_4C8A
0000:4D1A          ;
0000:4D1D          ; SUBROUTINE
0000:4D1D          ;
0000:4D1D          sub_0_4D1D:                ; CODE XREF: sub_0_471C+9A↑p
0000:4D1D D5                ; sub_0_471C+D2↑p ...
0000:4D1D          push    de
0000:4D1E C5                push    bc
0000:4D1F CD CC 14          call    14CCh
0000:4D22 CD 7F 0A          call    0A7Fh
0000:4D25 C1                pop     bc
0000:4D26 D1                pop     de
0000:4D27 C9                ret
0000:4D27          ; End of function sub_0_4D1D
0000:4D27          ;
0000:4D28          ; SUBROUTINE
0000:4D28          ;
0000:4D28          sub_0_4D28:                ; CODE XREF: sub_0_471C+3F↑p
0000:4D28 D5                ; sub_0_4C8A+51↑p
0000:4D28          push    de
0000:4D29 7E                ld     a, (hl)
0000:4D2A E6 30          and     30h ; '0'

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0000:4D2C 11 C0 FF      ld      de, 0FFC0h
0000:4D2F 20 01      jr      nz, loc_0_4D32
0000:4D31 19      add     hl, de
0000:4D32      loc_0_4D32:                                ; CODE XREF: sub_0_4D28+7|j
0000:4D32 CB 7E      bit     7, (hl)                                ; sub_0_4D28+D|j
0000:4D34 2B      dec     hl
0000:4D35 20 FB      jr      nz, loc_0_4D32
0000:4D37 23      inc     hl
0000:4D38 23      inc     hl
0000:4D39 D1      pop     de
0000:4D3A C9      ret
0000:4D3A      ; End of function sub_0_4D28
0000:4D3A
0000:4D3B      ; SUBROUTINE
0000:4D3B
0000:4D3B
0000:4D3B      sub_0_4D3B:                                ; CODE XREF: 0000:4AC4|p
0000:4D3B 21 00 3C      ld      hl, 3C00h
0000:4D3E 01 C0 03      ld      bc, 3C0h
0000:4D41      loc_0_4D41:                                ; CODE XREF: sub_0_4D3B+16|j
0000:4D41 CB 7E      bit     7, (hl)
0000:4D43 28 05      jr      z, loc_0_4D4A
0000:4D45 7E      ld      a, (hl)
0000:4D46 FE 80      cp      80h ; 'Ç'
0000:4D48 20 02      jr      nz, loc_0_4D4C
0000:4D4A      loc_0_4D4A:                                ; CODE XREF: sub_0_4D3B+8|j
0000:4D4A 36 20      ld      (hl), 20h ; ' '
0000:4D4C      loc_0_4D4C:                                ; CODE XREF: sub_0_4D3B+D|j
0000:4D4C 23      inc     hl
0000:4D4D 0B      dec     bc
0000:4D4E 78      ld      a, b
0000:4D4F B1      or      c
0000:4D50 C8      ret     z
0000:4D51 18 EE      jr      loc_0_4D41
0000:4D51      ; End of function sub_0_4D3B
0000:4D51
0000:4D53      ; SUBROUTINE
0000:4D53
0000:4D53      sub_0_4D53:                                ; CODE XREF: sub_0_4D5F+20|p
0000:4D53 AF      xor     a                                ; sub_0_4D5F+60|p ...
0000:4D53      ld      (ix+1), a
0000:4D54 DD 77 01
0000:4D57      loc_0_4D57:                                ; CODE XREF: sub_0_4810+1B|j
0000:4D57 3A 12 43      ld      a, (byte_0_4312)
0000:4D5A 3D      dec     a
0000:4D5B 32 12 43      ld      (byte_0_4312), a
0000:4D5E C9      ret
0000:4D5E      ; End of function sub_0_4D53
0000:4D5E
0000:4D5F      ; SUBROUTINE
0000:4D5F
0000:4D5F      sub_0_4D5F:                                ; CODE XREF: 0000:4F61|p
0000:4D5F D9      exx
0000:4D60 DD 21 EA 4E      ld      ix, 4EEAh
0000:4D64 06 04      ld      b, 4
0000:4D66      loc_0_4D66:                                ; CODE XREF: sub_0_4D5F+10|j
0000:4D66 DD 7E 01      ld      a, (ix+1)
0000:4D69 B7      or      a
0000:4D6A 20 07      jr      nz, loc_0_4D73
0000:4D6C      loc_0_4D6C:                                ; CODE XREF: sub_0_4D5F+23|j
0000:4D6C CD 2A 4E      call    sub_0_4E2A                                ; sub_0_4D5F+4B|j ...
0000:4D6C      call    sub_0_4E2A
0000:4D6F 10 F5      djnz    loc_0_4D66
0000:4D71 D9      exx
0000:4D72 C9      ret
0000:4D73
0000:4D73      loc_0_4D73:                                ; CODE XREF: sub_0_4D5F+B|j
0000:4D73 DD 6E 00      ld      l, (ix+0)
0000:4D76 DD 66 01      ld      h, (ix+1)
0000:4D79 DD 7E 02      ld      a, (ix+2)
0000:4D7C BE      cp      (hl)
0000:4D7D 28 05      jr      z, loc_0_4D84
0000:4D7F CD 53 4D      call    sub_0_4D53
0000:4D82 18 E8      jr      loc_0_4D6C
0000:4D84
0000:4D84      loc_0_4D84:                                ; CODE XREF: sub_0_4D5F+1E|j
0000:4D84 36 20      ld      (hl), 20h ; ' '
0000:4D86 11 40 00      ld      de, 40h ; '@'
0000:4D89 19      add     hl, de
0000:4D8A DD 75 00      ld      (ix+0), l
0000:4D8D DD 74 01      ld      (ix+1), h
0000:4D90 E5      push    hl
0000:4D91 11 C0 3F      ld      de, 3FC0h
0000:4D94 CD E2 45      call    sub_0_45E2
0000:4D97 B7      or      a
0000:4D98 F5      push    af
0000:4D99 20 2D      jr      nz, loc_0_4DC8
0000:4D9B F1      pop     af
0000:4D9C E1      pop     hl
0000:4D9D 7E      ld      a, (hl)
0000:4D9E FE 5B      cp      5Bh ; '['
0000:4DA0 28 0A      jr      z, loc_0_4DAC
0000:4DA2 FE 81      cp      81h ; 'ü'
0000:4DA4 30 35      jr      nc, loc_0_4DDB
0000:4DA6 DD 7E 02      ld      a, (ix+2)
0000:4DA9 77      ld      (hl), a
0000:4DAA 18 C0      jr      loc_0_4D6C
0000:4DAC
0000:4DAC      loc_0_4DAC:                                ; CODE XREF: sub_0_4D5F+41|j
0000:4DAC E5      push    hl

```

```

0000:4DAD F5          push    af
0000:4DAE 21 03 00      ld      hl, 3
0000:4DB1 CD 1D 4D      call   sub_0_4D1D
0000:4DB4 7D          ld      a, 1
0000:4DB5 FE 02          cp      2
0000:4DB7 38 0F      jr      c, loc_0_4DC8
0000:4DB9 20 14      jr      nz, loc_0_4DCF
0000:4DBB AF          xor     a
0000:4DBC 32 11 43      ld      (byte_0_4311), a
0000:4DBF CD 53 4D      call   sub_0_4D53
0000:4DC2 F1          pop     af
0000:4DC3 E1          pop     hl
0000:4DC4 36 20      ld      (hl), 20h ; ' '
0000:4DC6 18 A4      jr      loc_0_4D6C
0000:4DC8
;
0000:4DC8
loc_0_4DC8:
; CODE XREF: sub_0_4D5F+3A↑j
; sub_0_4D5F+58↑j ...
0000:4DC8 CD 53 4D      call   sub_0_4D53
0000:4DCB F1          pop     af
0000:4DCC E1          pop     hl
0000:4DCD 18 9D      jr      loc_0_4D6C
0000:4DCF
;
0000:4DCF
loc_0_4DCF:
; CODE XREF: sub_0_4D5F+5A↑j
0000:4DCF AF          xor     a
0000:4DD0 32 11 43      ld      (byte_0_4311), a
0000:4DD3 F1          pop     af
0000:4DD4 E1          pop     hl
0000:4DD5 DD 7E 02      ld      a, (ix+2)
0000:4DD8 77          ld      (hl), a
0000:4DD9 18 91      jr      loc_0_4D6C
0000:4ddb
;
0000:4ddb
loc_0_4ddb:
; CODE XREF: sub_0_4D5F+45↑j
0000:4ddb EB          ex      de, hl
0000:4ddc CD 4A 48      call   sub_0_484A
0000:4ddf CD E2 45      call   sub_0_45E2
0000:4de2 EB          ex      de, hl
0000:4de3 E5          push    hl
0000:4de4 F5          push    af
0000:4de5 FE FF      cp      0FFh
0000:4de7 28 DF      jr      z, loc_0_4DC8
0000:4de9 F1          pop     af
0000:4dea E1          pop     hl
0000:4deb 11 80 3F      ld      de, 3F80h
0000:4dee CD E2 45      call   sub_0_45E2
0000:4df1 B7          or      a
0000:4df2 C2 27 4B      jp      nz, loc_0_4B27
0000:4df5 CD 10 48      call   sub_0_4810
0000:4df8 E5          push    hl
0000:4df9 F5          push    af
0000:4dfa 18 CC      jr      loc_0_4DC8
0000:4dfa ; End of function sub_0_4D5F
0000:4dfa
;
0000:4dfc
; SUBROUTINE
0000:4dfc
;
0000:4dfc
sub_0_4dfc:
; CODE XREF: 0000:4EFB↑p
0000:4dfc 21 EA 4E      ld      hl, 4EEAh
0000:4dff 11 EB 4E      ld      de, 4EEBh
0000:4e02 01 0C 00      ld      bc, 0Ch
0000:4e05 36 00      ld      (hl), 0
0000:4e07 ED B0      ldir
0000:4e09 C9          ret
0000:4e09 ; End of function sub_0_4DFC
0000:4e09
;
0000:4e0a
; SUBROUTINE
0000:4e0a
;
0000:4e0a
sub_0_4e0a:
; CODE XREF: sub_0_471C+DA↑p
0000:4e0a E5          push    hl
0000:4e0b D9          exx
0000:4e0c D1          pop     de
0000:4e0d DD 21 EA 4E      ld      ix, 4EEAh
0000:4e11 06 04      ld      b, 4
0000:4e13
;
0000:4e13
loc_0_4e13:
; CODE XREF: sub_0_4E0A+1A↑j
0000:4e13 DD 6E 00      ld      l, (ix+0)
0000:4e16 DD 66 01      ld      h, (ix+1)
0000:4e19 CD E2 45      call   sub_0_45E2
0000:4e1c FE 20      cp      20h ; ' '
0000:4e1e CA 26 4E      jp      z, loc_0_4E26
0000:4e21 CD 2A 4E      call   sub_0_4E2A
0000:4e24 10 ED      djnz   loc_0_4E13
0000:4e26
;
0000:4e26
loc_0_4e26:
; CODE XREF: sub_0_4E0A+14↑j
0000:4e26 D9          exx
0000:4e27 C3 53 4D      jp      sub_0_4D53
0000:4e27 ; End of function sub_0_4E0A
0000:4e27
;
0000:4e2a
; SUBROUTINE
0000:4e2a
;
0000:4e2a
sub_0_4e2a:
; CODE XREF: sub_0_4C8A+49↑p
; sub_0_4D5F+D↑p ...
0000:4e2a DD 23          inc     ix
0000:4e2a DD 23          inc     ix
0000:4e2e DD 23          inc     ix
0000:4e30 C9          ret
0000:4e30 ; End of function sub_0_4E2A
0000:4e30
;
0000:4e31
; SUBROUTINE
0000:4e31
;
0000:4e31
sub_0_4e31:
; CODE XREF: 0000:49F2↑p
0000:4e31 CD 18 45      call   sub_0_4518
0000:4e34 21 19 3E      ld      hl, 3E19h
0000:4e37 06 32      ld      b, 32h ; '2'
0000:4e39
;
0000:4e39
loc_0_4e39:
; CODE XREF: sub_0_4E31+26↑j
0000:4e39 C5          push    bc

```

```

0000:4E3A 22 20 40      ld      (cursor_pos), hl
0000:4E3D E5            push    hl
0000:4E3E 21 D6 4E        ld      hl, 4ED6h
0000:4E41 CD E5 44      call    display_message
0000:4E44 CD 5A 4E      call    sub_0_4E5A
0000:4E47 E1            pop      hl
0000:4E48 22 20 40      ld      (cursor_pos), hl
0000:4E4B E5            push    hl
0000:4E4C 21 E0 4E      ld      hl, 4EE0h
0000:4E4F CD E5 44      call    display_message
0000:4E52 CD 5A 4E      call    sub_0_4E5A
0000:4E55 E1            pop      hl
0000:4E56 C1            pop      bc
0000:4E57 10 E0        djnz    loc_0_4E39
0000:4E59 C9            ret
0000:4E59                ; End of function sub_0_4E31
0000:4E59
0000:4E5A
0000:4E5A                ; SUBROUTINE
0000:4E5A
0000:4E5A
sub_0_4E5A:                ; CODE XREF: sub_0_471C+59|p
0000:4E5A 01 E8 03                ; sub_0_4E31+13|p ...
0000:4E5A                ld      bc, 3E8h
0000:4E5D C3 60 00        jp      60h
0000:4E5D                ; End of function sub_0_4E5A
0000:4E60
0000:4E60                ; SUBROUTINE
0000:4E60
0000:4E60
sub_0_4E60:                ; CODE XREF: sub_0_4518+14|p
0000:4E60 01 64 00                ; 0000:4F76|p
0000:4E60                ld      bc, 64h ; 'd'
0000:4E63 C3 60 00        jp      60h
0000:4E63                ; End of function sub_0_4E60
0000:4E63
0000:4E66
0000:4E66                ; SUBROUTINE
0000:4E66
0000:4E66
sub_0_4E66:                ; CODE XREF: 0000:4567|p
0000:4E66 E5                ; 0000:45A3|p ...
0000:4E66                push    hl
0000:4E67 DD E1            pop      ix
0000:4E69
0000:4E69                loc_0_4E69:                ; CODE XREF: sub_0_4E66+18|j
0000:4E69 DD 7E 00                ; sub_0_4E66+28|j
0000:4E69                ld      a, (ix+0)
0000:4E6C B7                or      a
0000:4E6D C8                ret     z
0000:4E6E FE 09        cp      9
0000:4E70 20 0E        jr     nz, loc_0_4E80
0000:4E72 DD 6E 01        ld      l, (ix+1)
0000:4E75 DD 66 02        ld      h, (ix+2)
0000:4E78 22 20 40      ld      (cursor_pos), hl
0000:4E7B CD 2A 4E      call    sub_0_4E2A
0000:4E7E 18 E9        jr     loc_0_4E69
0000:4E80
0000:4E80
0000:4E80                ;
0000:4E80
loc_0_4E80:                ; CODE XREF: sub_0_4E66+A|j
0000:4E80 CD 33 00        call    33h
0000:4E83 01 00 05        ld      bc, 500h
0000:4E86 CD 60 00        call    60h
0000:4E89 CD D9 45        call    sub_0_45D9
0000:4E8C DD 23            inc     ix
0000:4E8E 18 D9        jr     loc_0_4E69
0000:4E8E                ; End of function sub_0_4E66
0000:4E90
0000:4E90                ; SUBROUTINE
0000:4E90
0000:4E90
sub_0_4E90:                ; CODE XREF: sub_0_46BB+24|p
0000:4E90 E5                ; 0000:49E9|p ...
0000:4E90                push    hl
0000:4E91 D5            push    de
0000:4E92 C5            push    bc
0000:4E93 F5            push    af
0000:4E94 2A 20 40      ld      hl, (cursor_pos)
0000:4E97 E5            push    hl
0000:4E98 21 D0 3F        ld      hl, 3FD0h
0000:4E9B 22 20 40      ld      (cursor_pos), hl
0000:4E9E 3A 0F 43        ld      a, (byte_0_430F)
0000:4EA1 3D            dec     a
0000:4EA2 28 14        jr     z, loc_0_4EB8
0000:4EA4 47            ld      b, a
0000:4EA5
0000:4EA5                loc_0_4EA5:                ; CODE XREF: sub_0_4E90+1B|j
0000:4EA5 21 CF 4E        ld      hl, 4ECFh
0000:4EA8 CD E5 44      call    display_message
0000:4EAB 10 F8        djnz    loc_0_4EA5
0000:4EAD 3A 0F 43        ld      a, (byte_0_430F)
0000:4EB0 47            ld      b, a
0000:4EB1 3E 04        ld      a, 4
0000:4EB3 90            sub     b
0000:4EB4 28 0C        jr     z, loc_0_4EC2
0000:4EB6 18 02        jr     loc_0_4EBA
0000:4EB8
0000:4EB8                ;
0000:4EB8
loc_0_4EB8:                ; CODE XREF: sub_0_4E90+12|j
0000:4EB8                ld      b, 3
0000:4EBA
0000:4EBA                loc_0_4EBA:                ; CODE XREF: sub_0_4E90+26|j
0000:4EBA 21 CB 4E        ; sub_0_4E90+30|j
0000:4EBA                ld      hl, 4ECBh
0000:4EBD CD E5 44      call    display_message
0000:4EC0 10 F8        djnz    loc_0_4EBA
0000:4EC2
0000:4EC2                loc_0_4EC2:                ; CODE XREF: sub_0_4E90+24|j
0000:4EC2 E1            pop      hl
0000:4EC3 22 20 40      ld      (cursor_pos), hl
0000:4EC6 F1            pop      af
0000:4EC7 C1            pop      bc
0000:4EC8 D1            pop      de
0000:4EC9 E1            pop      hl

```

```

0000:4ECA C9          ret
0000:4ECA          ; End of function sub_0_4E90
0000:4ECA          ;
0000:4ECB 20          .db 20h ;
0000:4ECC 20          .db 20h ;
0000:4ECD 20          .db 20h ;
0000:4ECE 00          .db 0 ;
0000:4ECF 88          .db 88h ; 8
0000:4ED0 8E          .db 8Eh ; A
0000:4ED1 8C          .db 8Ch ; i
0000:4ED2 00          .db 0 ;
0000:4ED3 5C          .db 5Ch ; \
0000:4ED4 56          .db 56h ; V
0000:4ED5 2A          .db 2Ah ; *
0000:4ED6 47          .db 47h ; G
0000:4ED7 4F          .db 4Fh ; O
0000:4ED8 4F          .db 4Fh ; O
0000:4ED9 44          .db 44h ; D
0000:4EDA 20          .db 20h ;
0000:4EDB 4C          .db 4Ch ; L
0000:4EDC 55          .db 55h ; U
0000:4EDD 43          .db 43h ; C
0000:4EDE 4B          .db 4Bh ; K
0000:4EDF 00          .db 0 ;
0000:4EE0 20          .db 20h ;
0000:4EE1 20          .db 20h ;
0000:4EE2 20          .db 20h ;
0000:4EE3 20          .db 20h ;
0000:4EE4 20          .db 20h ;
0000:4EE5 20          .db 20h ;
0000:4EE6 20          .db 20h ;
0000:4EE7 20          .db 20h ;
0000:4EE8 20          .db 20h ;
0000:4EE9 00          .db 0 ;
0000:4EEA D1          .db 0D1h ; B
0000:4EEB 3E          .db 3Eh ; >
0000:4EEC 56          .db 56h ; V
0000:4EED DF          .db 0DFh ; 
0000:4EEE 00          .db 0 ;
0000:4EEF 56          .db 56h ; V
0000:4EF0 92          .db 92h ; E
0000:4EF1 3F          .db 3Fh ; ?
0000:4EF2 56          .db 56h ; V
0000:4EF3 00          .db 0 ;
0000:4EF4 00          .db 0 ;
0000:4EF5 00          .db 0 ;
0000:4EF6 00          .db 0 ;
0000:4EF7 00          .db 0 ;
0000:4EF8 00          .db 0 ;
0000:4EF9 00          .db 0 ;
0000:4EFA 00          .db 0 ;
0000:4EFB          ;
0000:4EFB          loc_0_4EFB:          ; CODE XREF: 0000:4AAD|j
0000:4EFB CD FC 4D      call sub_0_4DFC
0000:4EFE AF            xor a
0000:4EFF 32 12 43      ld (byte_0_4312), a
0000:4F02 32 20 43      ld (byte_0_4320), a
0000:4F05          loc_0_4F05:          ; CODE XREF: 0000:4F95|j
0000:4F05 3A 40 38      ld a, (3840h)
0000:4F08 57            ld d, a
0000:4F09 01 00 02      ld bc, 200h
0000:4F0C CD 60 00      call 60h
0000:4F0F 3A 40 38      ld a, (3840h)
0000:4F12 AA            xor d
0000:4F13 E6 80        and 80h ; 'C'
0000:4F15 20 0F        jr nz, loc_0_4F26
0000:4F17 3A 22 43      ld a, (byte_0_4322)
0000:4F1A 5F            ld e, a
0000:4F1B AA            xor d
0000:4F1C A2            and d
0000:4F1D E6 80        and 80h ; 'C'
0000:4F1F 7A            ld a, d
0000:4F20 32 22 43      ld (byte_0_4322), a
0000:4F23 C4 E5 46      call nz, sub_0_46E5
0000:4F26          loc_0_4F26:          ; CODE XREF: 0000:4F15|j
0000:4F26            ld a, (byte_0_4320)
0000:4F29 E6 03        and 3
0000:4F2B CC 88 48      call z, sub_0_4888
0000:4F2E 3A 11 43      ld a, (byte_0_4311)
0000:4F31 B7            or a
0000:4F32 28 08        jr z, loc_0_4F3C
0000:4F34 3A 20 43      ld a, (byte_0_4320)
0000:4F37 E6 03        and 3
0000:4F39 CC 1C 47      call z, sub_0_471C
0000:4F3C          loc_0_4F3C:          ; CODE XREF: 0000:4F32|j
0000:4F3C            ld a, (byte_0_4320)
0000:4F3F E6 07        and 7
0000:4F41 CC F6 48      call z, sub_0_48F6
0000:4F44 CD BF 48      call sub_0_48BF
0000:4F47 3A 10 43      ld a, (byte_0_4310)
0000:4F4A B7            or a
0000:4F4B 20 0D        jr nz, loc_0_4F5A
0000:4F4D 3A 0C 43      ld a, (byte_0_430C)
0000:4F50 FE 80        cp 80h ; 'C'
0000:4F52 20 06        jr nz, loc_0_4F5A
0000:4F54 21 00 3C      ld hl, 3C00h
0000:4F57 CD 7E 4C      call sub_0_4C7E
0000:4F5A          loc_0_4F5A:          ; CODE XREF: 0000:4F4B|j
0000:4F5A            ; 0000:4F52|j
0000:4F5A            nop
0000:4F5B 3A 20 43      ld a, (byte_0_4320)
0000:4F5E E6 0F        and 0Fh
0000:4F60 F5            push af
0000:4F61 CC 5F 4D      call z, sub_0_4D5F
0000:4F64 F1            pop af
0000:4F65 CC 8A 4C      call z, sub_0_4C8A
0000:4F68 21 20 43      ld hl, 4320h
0000:4F6B 34            inc (hl)
0000:4F6C 3A 21 43      ld a, (byte_0_4321)
0000:4F6F 3D            dec a

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0000:4F70 F5          push    af
0000:4F71 CC 48 4B      call    z, sub_0_4B48
0000:4F74 F1          pop     af
0000:4F75 F5          push    af
0000:4F76 C4 60 4E      call    nz, sub_0_4E60
0000:4F79 F1          pop     af
0000:4F7A 20 06      jr      nz, loc_0_4F82
0000:4F7C 3A 01 43      ld      a, (byte_0_4301)
0000:4F7F 87          add     a, a
0000:4F80 D6 01      sub     1
0000:4F82
0000:4F82          loc_0_4F82:          ; CODE XREF: 0000:4F7A↑j
0000:4F82 32 21 43      ld      (byte_0_4321), a
0000:4F85 3A 11 43      ld      a, (byte_0_4311)
0000:4F88 B7          or      a
0000:4F89 20 0A      jr      nz, loc_0_4F95
0000:4F8B 3A 00 43      ld      a, (byte_0_4300)
0000:4F8E B7          or      a
0000:4F8F 28 04      jr      z, loc_0_4F95
0000:4F91 3D          dec     a
0000:4F92 32 00 43      ld      (byte_0_4300), a
0000:4F95
0000:4F95          loc_0_4F95:          ; CODE XREF: 0000:4F89↑j
0000:4F95 C3 05 4F      ; 0000:4F8F↑j
0000:4F95          jp      loc_0_4F05
0000:4F95          ;
0000:4F98 43          .db     43h ; C
0000:4F99 4F          .db     4Fh ; O
0000:4FA0 50          .db     50h ; P
0000:4F9B 59          .db     59h ; Y
0000:4F9C 52          .db     52h ; R
0000:4F9D 49          .db     49h ; I
0000:4F9E 47          .db     47h ; G
0000:4F9F 48          .db     48h ; H
0000:4FA0 54          .db     54h ; T
0000:4FA1 20          .db     20h ;
0000:4FA2 28          .db     28h ; (
0000:4FA3 43          .db     43h ; C
0000:4FA4 29          .db     29h ; )
0000:4FA5 20          .db     20h ;
0000:4FA6 31          .db     31h ; l
0000:4FA7 39          .db     39h ; 9
0000:4FA8 37          .db     37h ; 7
0000:4FA9 39          .db     39h ; 9
0000:4FAA 2C          .db     2Ch ; ,
0000:4FAB 20          .db     20h ;
0000:4FAC B0          .db     0B0h ;
0000:4FAD 37          .db     37h ; 7
0000:4FAE 2F          .db     2Fh ; /
0000:4FAF 31          .db     31h ; l
0000:4FB0 33          .db     33h ; 3
0000:4FB1 42          .db     42h ; B
0000:4FB2 59          .db     59h ; Y
0000:4FB3 20          .db     20h ;
0000:4FB4 54          .db     54h ; T
0000:4FB5 52          .db     52h ; R
0000:4FB6 53          .db     53h ; S
0000:4FB7 2D          .db     2Dh ; -
0000:4FB8 42          .db     42h ; B
0000:4FB9 4D          .db     4Dh ; M
0000:4FBA 20          .db     20h ;
0000:4FBB 4B          .db     4Bh ; K
0000:4FBC 4F          .db     4Fh ; O
0000:4FBD 47          .db     47h ; G
0000:4FBE 41          .db     41h ; A
0000:4FBF 4E          .db     4Eh ; N
0000:4FC0 45          .db     45h ; E
0000:4FC1 49          .db     49h ; I
0000:4FC2 00          .db     0 ;
0000:4FC3 81          .db     81h ; ũ
0000:4FC4 5F          .db     5Fh ; _
0000:4FC5 7A          .db     7Ah ; z
0000:4FC6 FE          .db     0FEh ; ■
0000:4FC7 30          .db     30h ; 0
0000:4FC8 28          .db     28h ; (
0000:4FC9 02          .db     2 ;
0000:4FCA 77          .db     77h ; w
0000:4FCB 23          .db     23h ; #
0000:4FCC 7B          .db     7Bh ; {
0000:4FCD 0E          .db     0Eh ;
0000:4FCE 0A          .db     0Ah ;
0000:4FCF 10          .db     10h ;
0000:4FD0 EC          .db     0ECh ; ý
0000:4FD1 C6          .db     0C6h ; ā
0000:4FD2 30          .db     30h ; 0
0000:4FD3 77          .db     77h ; w
0000:4FD4 23          .db     23h ; #
0000:4FD5 36          .db     36h ; 6
0000:4FD6 03          .db     3 ;
0000:4FD7 E1          .db     0E1h ; ß
0000:4FD8 06          .db     6 ;
0000:4FD9 20          .db     20h ;
0000:4FDA 3E          .db     3Eh ; >
0000:4FDB 00          .db     0 ;
0000:4FDC 3D          .db     3Dh ; =
0000:4FDD 20          .db     20h ;
0000:4FDE 04          .db     4 ;
0000:4FDF 77          .db     77h ; w
0000:4FE0 23          .db     23h ; #
0000:4FE1 10          .db     10h ;
0000:4FE2 FC          .db     0FCh ; ¸
0000:4FE3 AF          .db     0AFh ; »
0000:4FE4 C9          .db     0C9h ; ¶
0000:4FE5 3A          .db     3Ah ; :
0000:4FE6 C4          .db     0C4h ; −
0000:4FE7 4E          .db     4Eh ; N
0000:4FE8 6F          .db     6Fh ; o
0000:4FE9 CB          .db     0CBh ; ¯
0000:4FEA A6          .db     0A6h ; ¨
0000:4FEB 5A          .db     5Ah ; Z
0000:4FEC 23          .db     23h ; #
0000:4FED 56          .db     56h ; V
0000:4FEE CD          .db     0CDh ; =
0000:4FEF 82          .db     82h ; é
0000:4FF0 4E          .db     4Eh ; N
0000:4FF1 7B          .db     7Bh ; {

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0000:4FF2 0F      .db  0Fh ;
0000:4FF3 0F      .db  0Fh ;
0000:4FF4 0F      .db  0Fh ;
0000:4FF5 E6      .db  0E6h ; µ
0000:4FF6 1F      .db  1Fh ;
0000:4FF7 C5      .db  0C5h ; †
0000:4FF8 21      .db  21h ; !
0000:4FF9 C0      .db  0C0h ; L
0000:4FFA 4D      .db  4Dh ; M
0000:4FFB 4F      .db  4Fh ; O
0000:4FFC 06      .db   6 ;
0000:4FFD 00      .db   0 ;
0000:4FFE 09      .db   9 ;
0000:4FFF 7B      .db  7Bh ; {
0000:5000
;
0000:5000 F3      di
0000:5001 21 00 80    ld     hl, 8000h
0000:5004 11 00 40    ld     de, 4000h
0000:5007 01 00 15    ld     bc, 1500h
0000:500A ED B0    ldir
0000:500C C3 35 45    jp     START
0000:500C
;
0000:500F 86      .db  86h ; à
; end of 'seg000'
0000:500F
0000:500F
0000:500F      .end

```