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// Maxx Steele robot demo cartridge
// located at $A000
// comments by R. wind    maxxbot@yahoo.com

00000000:        13A0                        entry jump vector to $A013

          copyright characters
00000002:       28632920        (c)
00000006:       3139383520      1985
0000000B:       43425320        CBS
0000000F:       546F7973        TOYS


          code executed in cartridge
00000013:       A902     LDA #$02          entry point
00000015:       8502     STA $02           SEr, Ebof
00000017:       A982     LDA #$82          PDon, Edof, SPof, UCon
00000019:       8503     STA $03
0000001B:       A200     LDX #$00
0000001D:       BD35A0   LDA $A035,X       copy cart program to RAM
00000020:       9D0002   STA $0200,X
00000023:       BD81A0   LDA $A081,X       copy cart phrases to RAM
00000026:       9D0005   STA $0500,X
00000029:       BDBBA0   LDA $A0BB,X       copy cart music to RAM
0000002C:       9D0004   STA $0400,X
0000002F:       E8       INX
00000030:       D0EB     BNE $EB           to $A01D
00000032:       4CB6E0   JMP $E0B6         jump back to ROM code


          program table copied to RAM @ $0200+
00000035:       83 10    "Hello, I am Maxx Steele"
00000037:       0C 02    delay 2 seconds
00000039:       83 00    "I am great, and you"
0000003B:       0C 0A    delay 10 seconds
0000003D:       83 16    "Good morning"
0000003F:       0C 01    delay 1 second
00000041:       83 17    "It is time to get up"
00000043:       0C 01    delay 1 second
00000045:       81 06    play tune: Revelee
00000047:       0C 0A    delay 10 seconds
00000049:       83 01    "I am ready when you are"
0000004B:       0C 01    delay 1 second
0000004D:       01 14    move forward
0000004F:       0C 04    delay 4 seconds
00000051:       06 28    raise arm
00000053:       05 23    rotate wrist down
00000055:       0C 03    delay 3 seconds
00000057:       08 15    rotate claw
00000059:       09 00    open claw
0000005B:       0C 02    delay 2 seconds
0000005D:       0A 01    turn light on
0000005F:       0C 07    delay 7 seconds
00000061:       0A 00    turn light off
00000063:       03 06    turn right
00000065:       0C 05    delay 5 seconds
00000067:       82 3F    "Ha ha ha ha ha"
00000069:       0C 04    delay 4 seconds
0000006B:       83 02    "I am a great match for humans"
0000006D:       0C 03    delay 3 seconds
0000006F:       83 03    "Goodbye for now, have a good day"
00000071:       0C 01    delay 1 second
00000073:       00 05    turn left
00000075:       0C 02    delay 2 seconds
00000077:       81 00    play tune: notes  (SONG 0)
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00000079:        0C 02    delay 2 seconds
0000007B:        0B 00    home
0000007D:        02 14    back up
0000007F:        FF FF    end

        phrase table copied to RAM @ $0500
00000081:        44193E8C       I am great (pause)
00000085:        1B8AFFFF       and you
00000089:        FFFFFFFF
0000008D:        FFFFFFFF
00000091:        44196883       I am ready when
00000095:        8A1EFFFF       you are
00000099:        FFFFFFFF
0000009D:        FFFFFFFF
000000A1:        4419133E       I am a great
000000A5:        5304436D       match for human sss
000000A9:        FFFFFFFF
000000AD:        FFFFFFFF
000000B1:        3D25045B       Good by for now
000000B5:        8C40133D       (pause) have a good
000000B9:        2EFF           day

        music table copied to RAM @ $0400
000000BB:        7012
000000BD:        7011
000000BF:        38OF
000000C1:        54OD
000000C3:        E00F
000000C5:        0000


000000C7:        14       INC  D         Begin 8080 code (not Maxx-related)
000000C8:        77       LD   (HL),E
000000C9:        E5       PUSH HL
000000CA:        3E02     LD   A,$02
000000CC:        CDFF61   CALL $61FF
000000CF:        7C       LD   A,H
000000D0:        B5       OR   L
000000D1:        CAD520   JP   Z,$20D5
000000D4:        C9       RET
000000D5:        218713   LD   HL,$1387
000000D8:        EB       EX   DE,HL
000000D9:        2A2314   LD   HL,$1423
000000DC:        EB       EX   DE,HL
000000DD:        73       LD   (HL),E
000000DE:        23       INC  HL
000000DF:        72       LD   (HL),D
000000E0:        C9       RET
000000E1:        3A4B14   LD   A,($144B)
000000E3:        14       INC  D
000000E4:        E601     AND  $01
000000E6:        A7       AND  A
000000E7:        CA172A   JP   Z,$2A17
000000E8:        17       RLA
000000E9:        212A21   LD   HL,$212A
000000EC:        14       INC  D
000000ED:        EB       EX   DE,HL
000000EE:        2A2314   LD   HL,$1423
000000F1:        EB       EX   DE,HL
000000F2:        CD5A6E   CALL $6E5A
000000F5:        D21721   JP   NC,$2117
000000F8:        219713   LD   HL,$1397
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```
000000FB:          E5        PUSH HL
000000FC:          2A2314    LD   HL,$1423
000000FF:          23        INC  HL
00000100:          22D614    LD   ($14D6),HL
00000103:          21D614    LD   HL,$14D6
00000106:          E53E      PUSH HL
00000107:          3E01      LD   A,$01
00000109:          CDB06B    CALL $6BB0
0000010C:          D1EB      POP  DE
0000010D: EB       EX   DE,HL
0000010E:          73        LD   (HL),E
0000010F:          23        INC  HL
00000110:          72        LD   (HL),D
00000111:          2A2314    LD   HL,$1423
00000112:          23        INC  HL
00000113:          14        INC  D
00000114:          222114    LD   ($1421),HL
00000117:          C9        RET
00000118: AF       XOR  A
00000119:          CD5621    CALL $2156
0000011C:          A7        AND  A
0000011D:          C25221    JP   NZ,$2152
00000120:          3A9513    LD   A,($1395)
00000123:          E680      AND  $80
00000125:          A7        AND  A
00000126:          C22E21    JP   NZ,$212E
00000129:          AF        XOR  A
0000012A:          CD112B    CALL $2B11
0000012D:          C9        RET
0000012E: 3A8A13             LD   A,($138A)
00000131:          32        .DB  $32
00000132:          E613      INC  $13
00000134:          AF        .DB  $AF
00000135:          CD592D    CMP  $2D59
00000138:          A7        .DB  $A7
00000139:          C2        .DB  $C2
0000013A:          52        .DB  $52
0000013B:          212A      AND  ($2A,X)
0000013D:          13        .DB  $13
0000013E:          14        .DB  $14
0000013F:          0114      ORA  ($14,X)
00000141:          00        BRK
00000142:          09E5      ORA  #$E5
00000144:          3E01CD    ROL  $CD01,X
00000147:          B06B      BCS  $6B
00000149:          22        .DB  $22
0000014A:          E913      SBC  #$13
0000014C:          3E00C9    ROL  $C900,X
0000014F:          C3        .DB  $C3
00000150:          18        CLC
00000151:          213E      AND  ($3E,X)
00000153:          FF        .DB  $FF
00000154:          C9C9      CMP  #$C9
00000156:          AF        .DB  $AF
00000157:          CD6021    CMP  $2160
0000015A:          AF        .DB  $AF
0000015B:          CD7222    CMP  $2272
0000015E:          C9C9      CMP  #$C9
00000160:          2100      AND  ($00,X)
00000162:          1122      ORA  ($22),Y
00000164:          4D3021    EOR  $2130
00000167:          00        BRK
00000168:          12        .DB  $12
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```
00000169:      22        .DB  $22
0000016A:      9D30CD    STA  $CD30,X
0000016D:      841C      STY  $1C
0000016F:      3A        .DB  $3A
00000170:      A42F      LDY  $2F
00000172:      E602      INC  $02
00000174:      C437      CPY  $37
00000176:      22        .DB  $22
00000177:      CD1522    CMP  $2215
0000017A:      CDA921    CMP  $21A9
0000017D:      DA        .DB  $DA
0000017E:      8C21C5    STY  $C521
00000181:      CD1B22    CMP  $221B
00000184:      C1CD      CMP  ($CD,X)
00000186:      CF        .DB  $CF
00000187:      21D8      AND  ($D8,X)
00000189:      C3        .DB  $C3
0000018A:      77        .DB  $77
0000018B:      21FE      AND  ($FE,X)
0000018D:      02        .DB  $02
0000018E:      CA        DEX
0000018F:      93        .DB  $93
00000190:      2137      AND  ($37,X)
00000192:      C979      CMP  #$79
00000194:      B7        .DB  $B7
00000195:      CA        DEX
00000196:      A121      LDA  ($21,X)
00000198:      C5CD      CMP  $CD
0000019A:      1B        .DB  $1B
0000019B:      22        .DB  $22
0000019C:      C1CD      CMP  ($CD,X)
0000019E:      CF        .DB  $CF
0000019F:      21D8      AND  ($D8,X)
000001A1:      CD841C    CMP  $1C84
000001A4:      AF        .DB  $AF
000001A5:      32        .DB  $32
000001A6:      A62F      LDX  $2F
000001A8:      C906      CMP  #$06
000001AA:      34        .DB  $34
000001AB:      0E0021    ASL  $2100
000001AE:      52        .DB  $52
000001AF:      3122      AND  ($22),Y
000001B1:      4F        .DB  $4F
000001B2:      30C5      BMI  $C5
000001B4:      CDF121    CMP  $21F1
000001B7:      214D      AND  ($4D,X)
000001B9:      30CD      BMI  $CD
000001BB:      FF        .DB  $FF
000001BC:      D1C1      CMP  ($C1),Y
000001BE:      D8        CLD
000001BF:      0C        .DB  $0C
000001C0:      05C8      ORA  $C8
000001C2:      2A        ROL  A
000001C3:      4F        .DB  $4F
000001C4:      3011      BMI  $11
000001C6:      80        .DB  $80
000001C7:      00        BRK
000001C8:      19224F    ORA  $4F22,Y
000001CB:      30C3      BMI  $C3
000001CD:      B3        .DB  $B3
000001CE:      2141      AND  ($41,X)
000001D0:      2152      AND  ($52,X)
000001D2:      3122      AND  ($22),Y
```

```
000001D4:       9F       .DB $9F
000001D5:       30C5     BMI $C5
000001D7:       CDF121   CMP $21F1
000001DA:       219D     AND ($9D,X)
000001DC:       30CD     BMI $CD
000001DE:       FF       .DB $FF
000001DF:       D1C1     CMP ($C1),Y
000001E1:       D8       CLD
000001E2:       05C8     ORA $C8
000001E4:       2A       ROL A
000001E5:       9F       .DB $9F
000001E6:       3011     BMI $11
000001E8:       80       .DB $80
000001E9:       00       BRK
000001EA:       19229F   ORA $9F22,Y
000001ED:       30C3     BMI $C3
000001EF:       D621     DEC $21,X
000001F1:       78       SEI
000001F2:       E603     INC $03
000001F4:       C2       .DB $C2
000001F5:       FB       .DB $FB
000001F6:       21CD     AND ($CD,X)
000001F8:       28       PLP
000001F9:       22       .DB $22
000001FA:       C9FE     CMP #$FE
000001FC:       02       .DB $02
000001FD:       C0CD     CPY #$CD
000001FF:       28       PLP
00000200:       22       .DB $22
00000201:       C93A     CMP #$3A
00000203:       A42F     LDY $2F
00000205:       E602     INC $02
00000207:       C0E5     CPY #$E5
00000209:       2605     ROL $05
0000020B:       2E00CD   ROL $CD00
0000020E:       1F       .DB $1F
0000020F:       EEE1CD   INC $CDE1
00000212:       48       PHA
00000213:       EF       .DB $EF
00000214:       C921     CMP #$21
00000216:       3E22C3   ROL $C322,X
00000219:       1E2221   ASL $2122,X
0000021C:       5122     EOR ($22),Y
0000021E:       3A       .DB $3A
0000021F:       A42F     LDY $2F
00000221:       E602     INC $02
00000223:       C0CD     CPY #$CD
00000225:       48       PHA
00000226:       EF       .DB $EF
00000227:       C93A     CMP #$3A
00000229:       A42F     LDY $2F
0000022B:       E602     INC $02
0000022D:       C03A     CPY #$3A
0000022F:       92       .DB $92
00000230:       F9EE0A   SBC $0AEE,Y
00000233:       32       .DB $32
00000234:       92       .DB $92
00000235:       F9C921   SBC $21C9,Y
00000238:       64       .DB $64
00000239:       22       .DB $22
0000023A:       CD48EF   CMP $EF48
0000023D:       C920     CMP #$20
0000023F:       202A20   JSR $202A
```

```
00000242:      52         .DB $52           R
00000243:      6561       ADC $61           ea
00000245:      64         .DB $64           d
00000246:      696E       ADC #$6E                      in
00000248:      67         .DB $67           g
00000249:      206461     JSR $6164                     da
0000024C:      74         .DB $74           t
0000024D:      612E       ADC ($2E,X)       a
0000024F:      0D0020     ORA $2000
00000252:      202A20     JSR $202A
00000255:      57         .DB $57           W
00000256:      72         .DB $72           r
00000257:      6974       ADC #$74                      it
00000259:      696E       ADC #$6E                      in
0000025B:      67         .DB $67           g
0000025C:      206461     JSR $6164                      da
0000025F:      74         .DB $74           t
00000260:      612E       ADC ($2E,X)       a
00000262:      0D000D     ORA $0D00
00000265:      0A         ASL A
00000266:      00         BRK
00000267:      11B6       ORA ($B6),Y
00000269:      22         .DB $22
0000026A:      CD7E1D     CMP $1D7E
0000026D:      D8         CLD
0000026E:      CA         DEX
0000026F:      8622       STX $22
00000271:      214D       AND ($4D,X)
00000273:      3011       BMI $11
00000275:      08         PHP
00000276:      00         BRK
00000277:      197EE6     ORA $E67E,Y
0000027A:      80         .DB $80
0000027B:      CA         DEX
0000027C:      8E22CD     STX $CD22
0000027F:      4669       LSR $69
00000281:      D8         CLD
00000282:      CD9822     CMP $2298
00000285:      D8         CLD
00000286:      CD711C     CMP $1C71
00000289:      AF         .DB $AF
0000028A:      32         .DB $32
0000028B:      A62F       LDX $2F
0000028D:      C921       CMP #$21
0000028F:      A122       LDA ($22,X)
00000291:      3E0132     ROL $3201,X
00000294:      A62F       LDX $2F
00000296:      37         .DB $37
00000297:      C93E       CMP #$3E
00000299:      03         .DB $03
0000029A:      214D       AND ($4D,X)
0000029C:      30CD       BMI $CD
0000029E:      D8         CLD
0000029F:      DEC946     DEC $46C9,X       F
000002A2:      696C       ADC #$6C                      il
000002A4:      6520       ADC $20           e
000002A6:      6E6F74     ROR $746F                     not
000002A9:      206F6E     JSR $6E6F                      on
000002AC:      206E65     JSR $656E                      ne
000002AF:      74         .DB $74           t
000002B0:      77         .DB $77           w
000002B1:      6F         .DB $6F           o
000002B2:      72         .DB $72           r
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```
000002B3:    6B       .DB $6B            k
000002B4:    2E0020   ROL $2000
000002B7:    5175     EOR ($75),Y        Qu
000002B9:    6575     ADC $75            eu
000002BB:    6520     ADC $20            e
000002BD:    6669     ROR $69            fi
000002BF:    6C6520   JMP ($2065)        le
000002C2:    3A       .DB $3A
000002C3:    2000AF   JSR $AF00
000002C6:    32       .DB $32
000002C7:    77       .DB $77
000002C8:    24C3     BIT $C3
000002CA:    E122     SBC ($22,X)
000002CC:    3E0132   ROL $3201,X
000002CF:    77       .DB $77
000002D0:    24C3     BIT $C3
000002D2:    E122     SBC ($22,X)
000002D4:    3E0232   ROL $3202,X
000002D7:    77       .DB $77
000002D8:    24C3     BIT $C3
000002DA:    E122     SBC ($22,X)
000002DC:    3E0332   ROL $3203,X
000002DF:    77       .DB $77
000002E0:    243A     BIT $3A
000002E2:    A3       .DB $A3
000002E3:    2F       .DB $2F
000002E4:    E608     INC $08
000002E6:    C2       .DB $C2
000002E7:    9D233A   STA $3A23,X
000002EA:    9E       .DB $9E
000002EB:    1EB7C2   ASL $C2B7,X
000002EE:    9D233A   STA $3A23,X
000002F1:    77       .DB $77
000002F2:    24FE     BIT $FE
000002F4:    02       .DB $02
000002F5:    C2       .DB $C2
000002F6:    12       .DB $12
000002F7:    23       .DB $23
000002F8:    3A       .DB $3A
000002F9:    9D30E6   STA $E630,X
000002FC:    02       .DB $02
000002FD:    C2       .DB $C2
000002FE:    9D2321   STA $2123,X
00000301:    A530     LDA $30
00000303:    7EE640   ROR $40E6,X
00000306:    CA       DEX
00000307:    12       .DB $12
00000308:    23       .DB $23
00000309:    21EC     AND ($EC,X)
0000030B:    307E     BMI $7E
0000030D:    E6E0     INC $E0
0000030F:    CA       DEX
00000310:    9D2321   STA $2123,X
00000313:    2F       .DB $2F
00000314:    3011     BMI $11
00000316:    78       SEI
00000317:    2406     BIT $06
00000319:    14       .DB $14
0000031A:    CD521B   CMP $1B52
0000031D:    3A       .DB $3A
0000031E:    A42F     LDY $2F
00000320:    F601     INC $01,X
00000322:    32       .DB $32
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```
00000323:        A42F        LDY $2F
00000325:        3A          .DB $3A
00000326:        77          .DB $77
00000327:        24FE        BIT $FE
00000329:        00          BRK
0000032A:        CA          DEX
0000032B:        4123        EOR ($23,X)
0000032D:        FE01CA      INC $CA01,X
00000330:        5523        EOR $23,X
00000332:        FE02CA      INC $CA02,X
00000335:        4B          .DB $4B
00000336:        23          .DB $23
00000337:        210C        AND ($0C,X)
00000339:        24E5        BIT $E5
0000033B:        2112        AND ($12,X)
0000033D:        1C          .DB $1C
0000033E:        C3          .DB $C3
0000033F:        5C          .DB $5C
00000340:        23          .DB $23
00000341:        2115        AND ($15,X)
00000343:        24E5        BIT $E5
00000345:        21D6        AND ($D6,X)
00000347:        1B          .DB $1B
00000348:        C3          .DB $C3
00000349:        5C          .DB $5C
0000034A:        23          .DB $23
0000034B:        2102        AND ($02,X)
0000034D:        24E5        BIT $E5
0000034F:        2112        AND ($12,X)
00000351:        1C          .DB $1C
00000352:        C3          .DB $C3
00000353:        5C          .DB $5C
00000354:        23          .DB $23
00000355:        211F        AND ($1F,X)
00000357:        24E5        BIT $E5
00000359:        21D6        AND ($D6,X)
0000035B:        1B          .DB $1B
0000035C:        CD841C      CMP $1C84
0000035F:        E3          .DB $E3
00000360:        CD48EF      CMP $EF48
00000363:        E1CD        SBC ($CD,X)
00000365:        48          PHA
00000366:        EF          .DB $EF
00000367:        2605        ROL $05
00000369:        2E3CCD      ROL $CD3C
0000036C:        1F          .DB $1F
0000036D:        EE2127      INC $2721
00000370:        24CD        BIT $CD
00000372:        48          PHA
00000373:        EF          .DB $EF
00000374:        CD59EE      CMP $EE59
00000377:        AF          .DB $AF
00000378:        CD1DE9      CMP $E91D
0000037B:        CD72EE      CMP $EE72
0000037E:        CD9F23      CMP $239F
00000381:        FE59CA      INC $CA59,X
00000384:        9D23FE      STA $FE23,X
00000387:        4ECA98      LSR $98CA
0000038A:        23          .DB $23
0000038B:        FE18CA      INC $CA18,X
0000038E:        98          TYA
0000038F:        23          .DB $23
00000390:        FE7FCA      INC $CA7F,X
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00000393:       98         TYA
00000394:       23         .DB $23
00000395:       C3         .DB $C3
00000396:       74         .DB $74
00000397:       23         .DB $23
00000398:       2165       AND ($65,X)
0000039A:       2437       BIT $37
0000039C:       C9AF       CMP #$AF
0000039E:       C9CD       CMP #$CD
000003A0:       87         .DB $87
000003A1:       1B         .DB $1B
000003A2:       2133       AND ($33,X)
000003A4:       24FE       BIT $FE
000003A6:       4ECAB0     LSR $B0CA
000003A9:       23         .DB $23
000003AA:       212F       AND ($2F,X)
000003AC:       24FE       BIT $FE
000003AE:       59C0F5     EOR $F5C0,Y
000003B1:       CD48EF     CMP $EF48
000003B4:       F1C9       SBC ($C9),Y
000003B6:       3A         .DB $3A
000003B7:       A52F       LDA $2F
000003B9:       3D32A5     AND $A532,X
000003BC:       2F         .DB $2F
000003BD:       C03A       CPY #$3A
000003BF:       A42F       LDY $2F
000003C1:       E601       INC $01
000003C3:       C2         .DB $C2
000003C4:       E8         INX
000003C5:       23         .DB $23
000003C6:       E526       SBC $26
000003C8:       17         .DB $17
000003C9:       2E00CD     ROL $CD00
000003CC:       1F         .DB $1F
000003CD:       EE2136     INC $3621
000003D0:       24CD       BIT $CD
000003D2:       48         PHA
000003D3:       EF         .DB $EF
000003D4:       CD59EE     CMP $EE59
000003D7:       E1CD       SBC ($CD,X)
000003D9:       38         SEC
000003DA:       E9FE       SBC #$FE
000003DC:       0DCAE8     ORA $E8CA
000003DF:       23         .DB $23
000003E0:       FE7FCA     INC $CA7F,X
000003E3:       F523       SBC $23,X
000003E5:       C3         .DB $C3
000003E6:       D8         CLD
000003E7:       23         .DB $23
000003E8:       E5CD       SBC $CD
000003EA:       72         .DB $72
000003EB:       EECD8A     INC $8ACD
000003EE:       1C         .DB $1C
000003EF:       CD452D     CMP $2D45
000003F2:       E1AF       SBC ($AF,X)
000003F4:       C9CD       CMP #$CD
000003F6:       72         .DB $72
000003F7:       EECD8A     INC $8ACD
000003FA:       1C         .DB $1C
000003FB:       3EFF32     ROL $32FF,X
000003FE:       012F       ORA ($2F,X)
00000400:       37         .DB $37
00000401:       C920       CMP #$20
```

```
00000403:       52         .DB $52              R
00000404:       6570       ADC $70              ep
00000406:       6C6163     JMP ($6361)          lac
00000409:       6520       ADC $20              e
0000040B:       00         BRK
0000040C:       204372     JSR $7243                    Cr
0000040F:       6561       ADC $61              ea
00000411:       74         .DB $74              t
00000412:       6520       ADC $20              e
00000414:       00         BRK
00000415:       205363     JSR $6353                    Sc
00000418:       72         .DB $72              r
00000419:       6174       ADC ($74,X)          at
0000041B:       63         .DB $63              c
0000041C:       68         PLA                  h
0000041D:       200020     JSR $2000
00000420:       456D       EOR $6D              Em
00000422:       7074       BVS $74              pt
00000424:       792000     ADC $0020,Y          y
00000427:       5B         .DB $5B              K
00000428:       592F4E     EOR $4E2F,Y          Y M
0000042B:       5D3F20     EOR $203F,X
0000042E:       00         BRK
0000042F:       594553     EOR $5345,Y          YES
00000432:       00         BRK
00000433:       4E4F00     LSR $004F                    NO
00000436:       0E5072     ASL $7250                     Pr
00000439:       6573       ADC $73              es
0000043B:       73         .DB $73              s
0000043C:       203C52     JSR $523C                      R
0000043F:       4554       EOR $54              et
00000441:       5552       EOR $52,X                    ur
00000443:       4E3E20     LSR $203E                    n
00000446:       74         .DB $74              t
00000447:       6F         .DB $6F              o
00000448:       20636F     JSR $6F63                    co
0000044B:       6E7469     ROR $6974                    nti
0000044E:       6E7565     ROR $6575                    nue
00000451:       206F72     JSR $726F                    or
00000454:       203C43     JSR $433C                      c
00000457:       414E       EOR ($4E,X)          an
00000459:       3E2074     ROL $7420,X            r
0000045C:       6F         .DB $6F              o
0000045D:       206162     JSR $6261                    ab
00000460:       6F         .DB $6F              o
00000461:       72         .DB $72              r
00000462:       74         .DB $74              t
00000463:       2E0046     ROL $4600                     F
00000466:       756E       ADC $6E,X                    un
00000468:       63         .DB $63              c
00000469:       74         .DB $74              t
0000046A:       696F       ADC #$6F                    io
0000046C:       6E2073     ROR $7320                    n s
0000046F:       6B         .DB $6B              k
00000470:       6970       ADC #$70                    ip
00000472:       7065       BVS $65              pe
00000474:       64         .DB $64              d
00000475:       2E0000     ROL $0000
00000478:       861F       STX $1F
0000047A:       C9C9       CMP #$C9
0000047C:       2A         ROL A
0000047D:       23         .DB $23
0000047E:       14         .DB $14
```

```
0000047F:      22        .DB  $22
00000480:      63        .DB  $63
00000481:      14        .DB  $14
00000482:      2A        ROL  A
00000483:      63        .DB  $63
00000484:      14        .DB  $14
00000485:      EB        .DB  $EB
00000486:      2A        ROL  A
00000487:      2114      AND  ($14,X)
00000489:      CD5A6E    CMP  $6E5A
0000048C:      00        BRK
0000048D:      14        .DB  $14
0000048E:      118F      ORA  ($8F),Y
00000490:      26CD      ROL  $CD
00000492:      7E1DD8    ROR  $D81D,X
00000495:      CA        DEX
00000496:      AD2411    LDA  $1124
00000499:      A126      LDA  ($26,X)
0000049B:      CD0827    CMP  $2708
0000049E:      D8        CLD
0000049F:      CA        DEX
000004A0:      AD24CD    LDA  $CD24
000004A3:      4669      LSR  $69
000004A5:      D8        CLD
000004A6:      CDB224    CMP  $24B2
000004A9:      D8        CLD
000004AA:      CD7226    CMP  $2672
000004AD:      AF        .DB  $AF
000004AE:      32        .DB  $32
000004AF:      A62F      LDX  $2F
000004B1:      C92A      CMP  #$2A
000004B3:      63        .DB  $63
000004B4:      30EB      BMI  $EB
000004B6:      2A        ROL  A
000004B7:      B3        .DB  $B3
000004B8:      307C      BMI  $7C
000004BA:      BA        TSX
000004BB:      C2        .DB  $C2
000004BC:      6E253E    ROR  $3E25
000004BF:      7F        .DB  $7F
000004C0:      A56F      LDA  $6F
000004C2:      3E7FA3    ROL  $A37F,X
000004C5:      5F        .DB  $5F
000004C6:      7DBBC2    ADC  $C2BB,X
000004C9:      6E2563    ROR  $6325
000004CC:      6A        ROR  A
000004CD:      7DB4CA    ADC  $CAB4,X
000004D0:      7B        .DB  $7B
000004D1:      252B      AND  $2B
000004D3:      22        .DB  $22
000004D4:      88        DEY
000004D5:      26AF      ROL  $AF
000004D7:      32        .DB  $32
000004D8:      8A        TXA
000004D9:      2621      ROL  $21
000004DB:      D2        .DB  $D2
000004DC:      3022      BMI  $22
000004DE:      8B        .DB  $8B
000004DF:      2621      ROL  $21
000004E1:      D2        .DB  $D2
000004E2:      3D228D    AND  $8D22,X
000004E5:      2621      ROL  $21
000004E7:      00        BRK
```

```
000004E8:      1122      ORA ($22),Y
000004EA:      4D3022    EOR $2230
000004ED:      9D303A    STA $3A30,X
000004F0:      62        .DB $62
000004F1:      3057      BMI $57
000004F3:      3E04A2    ROL $A204,X
000004F6:      C2        .DB $C2
000004F7:      19253E    ORA $3E25,Y
000004FA:      18        CLC
000004FB:      A2C2      LDX #$C2
000004FD:      32        .DB $32
000004FE:      25CD      AND $CD
00000500:      38        SEC
00000501:      26CA      ROL $CA
00000503:      7B        .DB $7B
00000504:      25CD      AND $CD
00000506:      7D25D8    ADC $D825,X
00000509:      0E501A    ASL $1A50
0000050C:      BEC26E    LDX $6EC2,Y
0000050F:      2523      AND $23
00000511:      13        .DB $13
00000512:      0DC20B    ORA $0BC2
00000515:      25C3      AND $C3
00000517:      FF        .DB $FF
00000518:      24CD      BIT $CD
0000051A:      38        SEC
0000051B:      26CA      ROL $CA
0000051D:      7B        .DB $7B
0000051E:      25CD      AND $CD
00000520:      7D25D8    ADC $D825,X
00000523:      1A        .DB $1A
00000524:      BEC26E    LDX $6EC2,Y
00000527:      25FE      AND $FE
00000529:      FC        .DB $FC
0000052A:      CA        DEX
0000052B:      192523    ORA $2325,Y
0000052E:      13        .DB $13
0000052F:      C2        .DB $C2
00000530:      23        .DB $23
00000531:      25CD      AND $CD
00000533:      38        SEC
00000534:      26CA      ROL $CA
00000536:      7B        .DB $7B
00000537:      25CD      AND $CD
00000539:      7D25D8    ADC $D825,X
0000053C:      0E0023    ASL $2300
0000053F:      23        .DB $23
00000540:      23        .DB $23
00000541:      7EB7CA    ROR $CAB7,X
00000544:      52        .DB $52
00000545:      25FE      AND $FE
00000547:      06CA      ASL $CA
00000549:      59252B    EOR $2B25,Y
0000054C:      2B        .DB $2B
0000054D:      4E2BC3    LSR $C32B
00000550:      5C        .DB $5C
00000551:      252B      AND $2B
00000553:      4E2B2B    LSR $2B2B
00000556:      C3        .DB $C3
00000557:      5C        .DB $5C
00000558:      252B      AND $2B
0000055A:      2B        .DB $2B
0000055B:      2B        .DB $2B
```

```
0000055C:      0C        .DB $0C
0000055D:      0C        .DB $0C
0000055E:      0C        .DB $0C
0000055F:      0C        .DB $0C
00000560:      1A        .DB $1A
00000561:      BEC26E    LDX $6EC2,Y
00000564:      250D      AND $0D
00000566:      CA        DEX
00000567:      32        .DB $32
00000568:      2513      AND $13
0000056A:      23        .DB $23
0000056B:      C3        .DB $C3
0000056C:      60        RTS
0000056D:      25CD      AND $CD
0000056F:      72        .DB $72
00000570:      2621      ROL $21
00000572:      B3        .DB $B3
00000573:      263E      ROL $3E
00000575:      0132      ORA ($32,X)
00000577:      A62F      LDX $2F
00000579:      37        .DB $37
0000057A:      C9AF      CMP #$AF
0000057C:      C93A      CMP #$3A
0000057E:      8A        TXA
0000057F:      26B7      ROL $B7
00000581:      CA        DEX
00000582:      A7        .DB $A7
00000583:      253A      AND $3A
00000585:      8A        TXA
00000586:      263D      ROL $3D
00000588:      32        .DB $32
00000589:      8A        TXA
0000058A:      262A      ROL $2A
0000058C:      8B        .DB $8B
0000058D:      2611      ROL $11
0000058F:      80        .DB $80
00000590:      00        BRK
00000591:      19228B    ORA $8B22,Y
00000594:      262A      ROL $2A
00000596:      8D2611    STA $1126
00000599:      80        .DB $80
0000059A:      00        BRK
0000059B:      19228D    ORA $8D22,Y
0000059E:      262A      ROL $2A
000005A0:      8D26EB    STA $EB26
000005A3:      2A        ROL A
000005A4:      8B        .DB $8B
000005A5:      26C9      ROL $C9
000005A7:      CDAE25    CMP $25AE
000005AA:      D8        CLD
000005AB:      C3        .DB $C3
000005AC:      8425      STY $25
000005AE:      CD6626    CMP $2666
000005B1:      21D2      AND ($D2,X)
000005B3:      3022      BMI $22
000005B5:      8B        .DB $8B
000005B6:      2621      ROL $21
000005B8:      D2        .DB $D2
000005B9:      3D228D    AND $8D22,X
000005BC:      263E      ROL $3E
000005BE:      1A        .DB $1A
000005BF:      47        .DB $47
000005C0:      32        .DB $32
```

```
000005C1:        8A        TXA
000005C2:        260E      ROL  $0E
000005C4:        00        BRK
000005C5:        2152      AND  ($52,X)
000005C7:        3122      AND  ($22),Y
000005C9:        4F        .DB  $4F
000005CA:        30F5      BMI  $F5
000005CC:        C5D5      CMP  $D5
000005CE:        E5CD      SBC  $CD
000005D0:        27        .DB  $27
000005D1:        26E1      ROL  $E1
000005D3:        D1C1      CMP  ($C1),Y
000005D5:        F121      SBC  ($21),Y
000005D7:        4D30CD    EOR  $CD30
000005DA:        FF        .DB  $FF
000005DB:        D1DA      CMP  ($DA),Y
000005DD:        1B        .DB  $1B
000005DE:        260C      ROL  $0C
000005E0:        05CA      ORA  $CA
000005E2:        F125      SBC  ($25),Y
000005E4:        2A        ROL  A
000005E5:        4F        .DB  $4F
000005E6:        3011      BMI  $11
000005E8:        80        .DB  $80
000005E9:        00        BRK
000005EA:        19224F    ORA  $4F22,Y
000005ED:        30C3      BMI  $C3
000005EF:        CB        .DB  $CB
000005F0:        2541      AND  $41
000005F2:        2152      AND  ($52,X)
000005F4:        3E229F    ROL  $9F22,X
000005F7:        30F5      BMI  $F5
000005F9:        C5D5      CMP  $D5
000005FB:        E5CD      SBC  $CD
000005FD:        27        .DB  $27
000005FE:        26E1      ROL  $E1
00000600:        D1C1      CMP  ($C1),Y
00000602:        F121      SBC  ($21),Y
00000604:        9D30CD    STA  $CD30,X
00000607:        FF        .DB  $FF
00000608:        D1D8      CMP  ($D8),Y
0000060A:        05CA      ORA  $CA
0000060C:        22        .DB  $22
0000060D:        262A      ROL  $2A
0000060F:        9F        .DB  $9F
00000610:        3011      BMI  $11
00000612:        80        .DB  $80
00000613:        00        BRK
00000614:        19229F    ORA  $9F22,Y
00000617:        30C3      BMI  $C3
00000619:        F8        SED
0000061A:        25FE      AND  $FE
0000061C:        02        .DB  $02
0000061D:        CA        DEX
0000061E:        F125      SBC  ($25),Y
00000620:        37        .DB  $37
00000621:        C9CD      CMP  #$CD
00000623:        6C26AF    JMP  ($AF26)
00000626:        C978      CMP  #$78
00000628:        E603      INC  $03
0000062A:        C2        .DB  $C2
0000062B:        3126      AND  ($26),Y
0000062D:        CD5726    CMP  $2657
```

```
00000630:      C9FE       CMP #$FE
00000632:      02         .DB $02
00000633:      C0CD       CPY #$CD
00000635:      57         .DB $57
00000636:      26C9       ROL $C9
00000638:      2A         ROL A
00000639:      88         DEY
0000063A:      267C       ROL $7C
0000063C:      B5C8       LDA $C8,X
0000063E:      2B         .DB $2B
0000063F:      22         .DB $22
00000640:      88         DEY
00000641:      26B7       ROL $B7
00000643:      C9CD       CMP #$CD
00000645:      54         .DB $54
00000646:      264E       ROL $4E
00000648:      6F         .DB $6F
00000649:      206669     JSR $6966                        fi
0000064C:      6C656E     JMP ($6E65)        len
0000064F:      616D       ADC ($6D,X)        ame
00000651:      652E       ADC $2E
00000653:      00         BRK
00000654:      E137       SBC ($37,X)
00000656:      C93A       CMP #$3A
00000658:      A42F       LDY $2F
0000065A:      E602       INC $02
0000065C:      C03A       CPY #$3A
0000065E:      92         .DB $92
0000065F:      F9EE0A     SBC $0AEE,Y
00000662:      32         .DB $32
00000663:      92         .DB $92
00000664:      F9C921     SBC $21C9,Y
00000667:      BF         .DB $BF
00000668:      26C3       ROL $C3
0000066A:      7526       ADC $26,X
0000066C:      21BF       AND ($BF,X)
0000066E:      26C3       ROL $C3
00000670:      7526       ADC $26,X
00000672:      21D3       AND ($D3,X)
00000674:      263A       ROL $3A
00000676:      A42F       LDY $2F
00000678:      E602       INC $02
0000067A:      C0E5       CPY #$E5
0000067C:      2605       ROL $05
0000067E:      2E00CD     ROL $CD00
00000681:      1F         .DB $1F
00000682:      EEE1CD     INC $CDE1
00000685:      48         PHA
00000686:      EF         .DB $EF
00000687:      C900       CMP #$00
00000689:      00         BRK
0000068A:      00         BRK
0000068B:      00         BRK
0000068C:      00         BRK
0000068D:      00         BRK
0000068E:      00         BRK
0000068F:      205665     JSR $6556                        Ve
00000692:      72         .DB $72            r
00000693:      6966       ADC #$66                         if
00000695:      792066     ADC $6620,Y        y f
00000698:      696C       ADC #$6C                         il
0000069A:      6520       ADC $20            e
0000069C:      20203A     JSR $3A20
```

```
0000069F:       200020    JSR $2000
000006A2:       206167    JSR $6761                     ag
000006A5:       6169      ADC ($69,X)        ai
000006A7:       6E7374    ROR $7473                     nst
000006AA:       206669    JSR $6966                     fi
000006AD:       6C6520    JMP ($2065)        le
000006B0:       3A        .DB $3A
000006B1:       200042    JSR $4200                      B
000006B4:       6164      ADC ($64,X)        ad
000006B6:       207665    JSR $6576                     ve
000006B9:       72        .DB $72            r
000006BA:       6966      ADC #$66                      if
000006BC:       792E00    ADC $002E,Y        y
000006BF:       20202A    JSR $2A20
000006C2:       205665    JSR $6556
000006C5:       72        .DB $72
000006C6:       6966      ADC #$66
000006C8:       79696E    ADC $6E69,Y
000006CB:       67        .DB $67
000006CC:       206461    JSR $6164
000006CF:       74        .DB $74
000006D0:       612E      ADC ($2E,X)
000006D2:       00        BRK
000006D3:       202020    JSR $2020
000006D6:       202020    JSR $2020
000006D9:       202020    JSR $2020
000006DC:       202020    JSR $2020
000006DF:       202020    JSR $2020
000006E2:       202020    JSR $2020
000006E5:       200011    JSR $1100
000006E8:       34        .DB $34
000006E9:       28        PLP
000006EA:       CD7E1D    CMP $1D7E
000006ED:       D8        CLD
000006EE:       CA        DEX
000006EF:       03        .DB $03
000006F0:       27        .DB $27
000006F1:       1146      ORA ($46),Y
000006F3:       28        PLP
000006F4:       CD0827    CMP $2708
000006F7:       D8        CLD
000006F8:       CA        DEX
000006F9:       03        .DB $03
000006FA:       27        .DB $27
000006FB:       CD4669    CMP $6946
000006FE:       D8        CLD
000006FF:       CD3C27    CMP $273C
00000702:       D8        CLD
00000703:       AF        .DB $AF
00000704:       32        .DB $32
00000705:       A62F      LDX $2F
00000707:       C9D5      CMP #$D5
00000709:       21FD      AND ($FD,X)
0000070B:       2F        .DB $2F
0000070C:       CD151B    CMP $1B15
0000070F:       D12A      CMP ($2A),Y
00000711:       A7        .DB $A7
00000712:       2F        .DB $2F
00000713:       CDDE18    CMP $18DE
00000716:       D8        CLD
00000717:       3A        .DB $3A
00000718:       36F5      ROL $F5,X
0000071A:       B7        .DB $B7
```

```
0000071B:      CA        DEX
0000071C:      BF        .DB $BF
0000071D:      0C        .DB $0C
0000071E:      E602      INC $02
00000720:      CA        DEX
00000721:      BF        .DB $BF
00000722:      0C        .DB $0C
00000723:      CD721E    CMP $1E72
00000726:      3E1132    ROL $3211,X
00000729:      9E        .DB $9E
0000072A:      3021      BMI $21
0000072C:      D2        .DB $D2
0000072D:      3122      AND ($22),Y
0000072F:      9F        .DB $9F
00000730:      3021      BMI $21
00000732:      9D30CD    STA $CD30,X
00000735:      FF        .DB $FF
00000736:      D1D8      CMP ($D8),Y
00000738:      3E01B7    ROL $B701,X
0000073B:      C921      CMP #$21
0000073D:      4D3036    EOR $3630
00000740:      20219D    JSR $9D21
00000743:      3036      BMI $36
00000745:      202157    JSR $5721
00000748:      3011      BMI $11
0000074A:      80        .DB $80
0000074B:      28        PLP
0000074C:      060A      ASL $0A
0000074E:      CD1F1B    CMP $1B1F
00000751:      217F      AND ($7F,X)
00000753:      3011      BMI $11
00000755:      8A        TXA
00000756:      28        PLP
00000757:      0614      ASL $14
00000759:      CD1F1B    CMP $1B1F
0000075C:      2155      AND ($55,X)
0000075E:      3011      BMI $11
00000760:      A530      LDA $30
00000762:      1A        .DB $1A
00000763:      BEC2C0    LDX $C0C2,Y
00000766:      27        .DB $27
00000767:      2158      AND ($58,X)
00000769:      28        PLP
0000076A:      1157      ORA ($57),Y
0000076C:      3006      BMI $06
0000076E:      0A        ASL A
0000076F:      CD1F1B    CMP $1B1F
00000772:      2158      AND ($58,X)
00000774:      28        PLP
00000775:      117F      ORA ($7F),Y
00000777:      3006      BMI $06
00000779:      14        .DB $14
0000077A:      CD1F1B    CMP $1B1F
0000077D:      214D      AND ($4D,X)
0000077F:      30CD      BMI $CD
00000781:      FF        .DB $FF
00000782:      D1D8      CMP ($D8),Y
00000784:      21A7      AND ($A7,X)
00000786:      3011      BMI $11
00000788:      57        .DB $57
00000789:      3006      BMI $06
0000078B:      0A        ASL A
0000078C:      CD1F1B    CMP $1B1F
```

```
0000078F:      21CF      AND  ($CF,X)
00000791:      3011      BMI  $11
00000793:      7F        .DB  $7F
00000794:      3006      BMI  $06
00000796:      14        .DB  $14
00000797:      CD1F1B    CMP  $1B1F
0000079A:      2180      AND  ($80,X)
0000079C:      28        PLP
0000079D:      11A7      ORA  ($A7),Y
0000079F:      3006      BMI  $06
000007A1:      0A        ASL  A
000007A2:      CD1F1B    CMP  $1B1F
000007A5:      218A      AND  ($8A,X)
000007A7:      28        PLP
000007A8:      11CF      ORA  ($CF),Y
000007AA:      3006      BMI  $06
000007AC:      14        .DB  $14
000007AD:      CD1F1B    CMP  $1B1F
000007B0:      219D      AND  ($9D,X)
000007B2:      30CD      BMI  $CD
000007B4:      FF        .DB  $FF
000007B5:      D1D8      CMP  ($D8),Y
000007B7:      214D      AND  ($4D,X)
000007B9:      30CD      BMI  $CD
000007BB:      FF        .DB  $FF
000007BC:      D1D8      CMP  ($D8),Y
000007BE:      AF        .DB  $AF
000007BF:      C921      CMP  #$21
000007C1:      04        .DB  $04
000007C2:      0122      ORA  ($22,X)
000007C4:      FD2F21    SBC  $212F,X
000007C7:      52        .DB  $52
000007C8:      3122      AND  ($22),Y
000007CA:      FF        .DB  $FF
000007CB:      2F        .DB  $2F
000007CC:      2180      AND  ($80,X)
000007CE:      00        BRK
000007CF:      22        .DB  $22
000007D0:      0130      ORA  ($30,X)
000007D2:      1155      ORA  ($55),Y
000007D4:      3021      BMI  $21
000007D6:      0530      ORA  $30
000007D8:      1A        .DB  $1A
000007D9:      77        .DB  $77
000007DA:      21A7      AND  ($A7,X)
000007DC:      3011      BMI  $11
000007DE:      07        .DB  $07
000007DF:      3006      BMI  $06
000007E1:      0A        ASL  A
000007E2:      CD1F1B    CMP  $1B1F
000007E5:      21CF      AND  ($CF,X)
000007E7:      3011      BMI  $11
000007E9:      2F        .DB  $2F
000007EA:      3006      BMI  $06
000007EC:      14        .DB  $14
000007ED:      CD1F1B    CMP  $1B1F
000007F0:      21FD      AND  ($FD,X)
000007F2:      2F        .DB  $2F
000007F3:      CDFFD1    CMP  $D1FF
000007F6:      D2        .DB  $D2
000007F7:      2D28FE    AND  $FE28
000007FA:      04        .DB  $04
000007FB:      C2        .DB  $C2
```

```
000007FC:      32          .DB $32
000007FD:      28          PLP
000007FE:      11A5        ORA ($A5),Y

00000800:      13          .DB $13 *******begin duplicate copy
00000801:      A028        LDY #$28
00000803:      63          .DB $63
00000804:      2920        AND #$20
00000806:      3139        AND ($39),Y
00000808:      38          SEC
00000809:      3520        AND $20,X
0000080B:      43          .DB $43
0000080C:      42          .DB $42
0000080D:      53          .DB $53
0000080E:      20546F      JSR $6F54
00000811:      7973A9      ADC $A973,Y
00000814:      02          .DB $02
00000815:      8502        STA $02
00000817:      A982        LDA #$82
00000819:      8503        STA $03
0000081B:      A200        LDX #$00
0000081D:      BD35A0      LDA $A035,X
00000820:      9D0002      STA $0200,X
00000823:      BD81A0      LDA $A081,X
00000826:      9D0005      STA $0500,X
00000829:      BDBBA0      LDA $A0BB,X
0000082C:      9D0004      STA $0400,X
0000082F:      E8          INX
00000830:      D0EB        BNE $EB
00000832:      4CB6E0      JMP $E0B6
00000835:      83          .DB $83
00000836:      100C        BPL $0C
00000838:      02          .DB $02
00000839:      83          .DB $83
0000083A:      00          BRK
0000083B:      0C          .DB $0C
0000083C:      0A          ASL A
0000083D:      83          .DB $83
0000083E:      160C        ASL $0C,X
00000840:      0183        ORA ($83,X)
00000842:      17          .DB $17
00000843:      0C          .DB $0C
00000844:      0181        ORA ($81,X)
00000846:      060C        ASL $0C
00000848:      0A          ASL A
00000849:      83          .DB $83
0000084A:      010C        ORA ($0C,X)
0000084C:      0101        ORA ($01,X)
0000084E:      14          .DB $14
0000084F:      0C          .DB $0C
00000850:      04          .DB $04
00000851:      0628        ASL $28
00000853:      0523        ORA $23
00000855:      0C          .DB $0C
00000856:      03          .DB $03
00000857:      08          PHP
00000858:      1509        ORA $09,X
0000085A:      00          BRK
0000085B:      0C          .DB $0C
0000085C:      02          .DB $02
0000085D:      0A          ASL A
0000085E:      010C        ORA ($0C,X)
00000860:      07          .DB $07
```

```
00000861:      0A        ASL  A
00000862:      00        BRK
00000863:      03        .DB  $03
00000864:      060C      ASL  $0C
00000866:      0582      ORA  $82
00000868:      3F        .DB  $3F
00000869:      0C        .DB  $0C
0000086A:      04        .DB  $04
0000086B:      83        .DB  $83
0000086C:      02        .DB  $02
0000086D:      0C        .DB  $0C
0000086E:      03        .DB  $03
0000086F:      83        .DB  $83
00000870:      03        .DB  $03
00000871:      0C        .DB  $0C
00000872:      0100      ORA  ($00,X)
00000874:      050C      ORA  $0C
00000876:      02        .DB  $02
00000877:      8100      STA  ($00,X)
00000879:      0C        .DB  $0C
0000087A:      02        .DB  $02
0000087B:      0B        .DB  $0B
0000087C:      00        BRK
0000087D:      02        .DB  $02
0000087E:      14        .DB  $14
0000087F:      FF        .DB  $FF
00000880:      FF        .DB  $FF
00000881:      44193E8C                        ******duplicate of $0081
00000885:      1B        .DB  $1B
00000886:      8A        TXA
00000887:      FF        .DB  $FF
00000888:      FF        .DB  $FF
00000889:      FF        .DB  $FF
0000088A:      FF        .DB  $FF
0000088B:      FF        .DB  $FF
0000088C:      FF        .DB  $FF
0000088D:      FF        .DB  $FF
0000088E:      FF        .DB  $FF
0000088F:      FF        .DB  $FF
00000890:      FF        .DB  $FF
00000891:      44        .DB  $44
00000892:      196883    ORA  $8368,Y
00000895:      8A        TXA
00000896:      1EFFFF    ASL  $FFFF,X
00000899:      FF        .DB  $FF
0000089A:      FF        .DB  $FF
0000089B:      FF        .DB  $FF
0000089C:      FF        .DB  $FF
0000089D:      FF        .DB  $FF
0000089E:      FF        .DB  $FF
0000089F:      FF        .DB  $FF
000008A0:      FF        .DB  $FF
000008A1:      44        .DB  $44
000008A2:      19133E    ORA  $3E13,Y
000008A5:      53        .DB  $53
000008A6:      04        .DB  $04
000008A7:      43        .DB  $43
000008A8:      6DFFFF    ADC  $FFFF
000008AB:      FF        .DB  $FF
000008AC:      FF        .DB  $FF
000008AD:      FF        .DB  $FF
000008AE:      FF        .DB  $FF
000008AF:      FF        .DB  $FF
```

```
000008B0:      FF         .DB $FF
000008B1:      3D2504     AND $0425,X
000008B4:      5B         .DB $5B
000008B5:      8C4013     STY $1340
000008B8:      3D2EFF     AND $FF2E,X
000008BB:      7012       BVS $12
000008BD:      7011       BVS $11
000008BF:      38         SEC
000008C0:      0F         .DB $0F
000008C1:      54         .DB $54
000008C2:      0DE00F     ORA $0FE0
000008C5:      00         BRK
000008C6:      00         BRK
000008C7:      14         .DB $14
000008C8:      77         .DB $77
000008C9:      E53E       SBC $3E
000008CB:      02         .DB $02
000008CC:      CDFF61     CMP $61FF
000008CF:      7C         .DB $7C
000008D0:      B5CA       LDA $CA,X
000008D2:      D520       CMP $20,X
000008D4:      C921       CMP #$21
000008D6:      87         .DB $87
000008D7:      13         .DB $13
000008D8:      EB         .DB $EB
000008D9:      2A         ROL A
000008DA:      23         .DB $23
000008DB:      14         .DB $14
000008DC:      EB         .DB $EB
000008DD:      73         .DB $73
000008DE:      23         .DB $23
000008DF:      72         .DB $72
000008E0:      C93A       CMP #$3A
000008E2:      4B         .DB $4B
000008E3:      14         .DB $14
000008E4:      E601       INC $01
000008E6:      A7         .DB $A7
000008E7:      CA         DEX
000008E8:      17         .DB $17
000008E9:      212A       AND ($2A,X)
000008EB:      2114       AND ($14,X)
000008ED:      EB         .DB $EB
000008EE:      2A         ROL A
000008EF:      23         .DB $23
000008F0:      14         .DB $14
000008F1:      EB         .DB $EB
000008F2:      CD5A6E     CMP $6E5A
000008F5:      D2         .DB $D2
000008F6:      17         .DB $17
000008F7:      2121       AND ($21,X)
000008F9:      97         .DB $97
000008FA:      13         .DB $13
000008FB:      E52A       SBC $2A
000008FD:      23         .DB $23
000008FE:      14         .DB $14
000008FF:      23         .DB $23
00000900:      22         .DB $22
00000901:      D614       DEC $14,X
00000903:      21D6       AND ($D6,X)
00000905:      14         .DB $14
00000906:      E53E       SBC $3E
00000908:      01CD       ORA ($CD,X)
0000090A:      B06B       BCS $6B
```

```
0000090C:      D1EB        CMP ($EB),Y
0000090E:      73          .DB $73
0000090F:      23          .DB $23
00000910:      72          .DB $72
00000911:      2A          ROL A
00000912:      23          .DB $23
00000913:      14          .DB $14
00000914:      22          .DB $22
00000915:      2114        AND ($14,X)
00000917:      C9AF        CMP #$AF
00000919:      CD5621      CMP $2156
0000091C:      A7          .DB $A7
0000091D:      C2          .DB $C2
0000091E:      52          .DB $52
0000091F:      213A        AND ($3A,X)
00000921:      9513        STA $13,X
00000923:      E680        INC $80
00000925:      A7          .DB $A7
00000926:      C2          .DB $C2
00000927:      2E21AF      ROL $AF21
0000092A:      CD112B      CMP $2B11
0000092D:      C93A        CMP #$3A
0000092F:      8A          TXA
00000930:      13          .DB $13
00000931:      32          .DB $32
00000932:      E613        INC $13
00000934:      AF          .DB $AF
00000935:      CD592D      CMP $2D59
00000938:      A7          .DB $A7
00000939:      C2          .DB $C2
0000093A:      52          .DB $52
0000093B:      212A        AND ($2A,X)
0000093D:      13          .DB $13
0000093E:      14          .DB $14
0000093F:      0114        ORA ($14,X)
00000941:      00          BRK
00000942:      09E5        ORA #$E5
00000944:      3E01CD      ROL $CD01,X
00000947:      B06B        BCS $6B
00000949:      22          .DB $22
0000094A:      E913        SBC #$13
0000094C:      3E00C9      ROL $C900,X
0000094F:      C3          .DB $C3
00000950:      18          CLC
00000951:      213E        AND ($3E,X)
00000953:      FF          .DB $FF
00000954:      C9C9        CMP #$C9
00000956:      AF          .DB $AF
00000957:      CD6021      CMP $2160
0000095A:      AF          .DB $AF
0000095B:      CD7222      CMP $2272
0000095E:      C9C9        CMP #$C9
00000960:      2100        AND ($00,X)
00000962:      1122        ORA ($22),Y
00000964:      4D3021      EOR $2130
00000967:      00          BRK
00000968:      12          .DB $12
00000969:      22          .DB $22
0000096A:      9D30CD      STA $CD30,X
0000096D:      841C        STY $1C
0000096F:      3A          .DB $3A
00000970:      A42F        LDY $2F
00000972:      E602        INC $02
```

```
00000974:      C437       CPY $37
00000976:      22         .DB $22
00000977:      CD1522     CMP $2215
0000097A:      CDA921     CMP $21A9
0000097D:      DA         .DB $DA
0000097E:      8C21C5     STY $C521
00000981:      CD1B22     CMP $221B
00000984:      C1CD       CMP ($CD,X)
00000986:      CF         .DB $CF
00000987:      21D8       AND ($D8,X)
00000989:      C3         .DB $C3
0000098A:      77         .DB $77
0000098B:      21FE       AND ($FE,X)
0000098D:      02         .DB $02
0000098E:      CA         DEX
0000098F:      93         .DB $93
00000990:      2137       AND ($37,X)
00000992:      C979       CMP #$79
00000994:      B7         .DB $B7
00000995:      CA         DEX
00000996:      A121       LDA ($21,X)
00000998:      C5CD       CMP $CD
0000099A:      1B         .DB $1B
0000099B:      22         .DB $22
0000099C:      C1CD       CMP ($CD,X)
0000099E:      CF         .DB $CF
0000099F:      21D8       AND ($D8,X)
000009A1:      CD841C     CMP $1C84
000009A4:      AF         .DB $AF
000009A5:      32         .DB $32
000009A6:      A62F       LDX $2F
000009A8:      C906       CMP #$06
000009AA:      34         .DB $34
000009AB:      0E0021     ASL $2100
000009AE:      52         .DB $52
000009AF:      3122       AND ($22),Y
000009B1:      4F         .DB $4F
000009B2:      30C5       BMI $C5
000009B4:      CDF121     CMP $21F1
000009B7:      214D       AND ($4D,X)
000009B9:      30CD       BMI $CD
000009BB:      FF         .DB $FF
000009BC:      D1C1       CMP ($C1),Y
000009BE:      D8         CLD
000009BF:      0C         .DB $0C
000009C0:      05C8       ORA $C8
000009C2:      2A         ROL A
000009C3:      4F         .DB $4F
000009C4:      3011       BMI $11
000009C6:      80         .DB $80
000009C7:      00         BRK
000009C8:      19224F     ORA $4F22,Y
000009CB:      30C3       BMI $C3
000009CD:      B3         .DB $B3
000009CE:      2141       AND ($41,X)
000009D0:      2152       AND ($52,X)
000009D2:      3122       AND ($22),Y
000009D4:      9F         .DB $9F
000009D5:      30C5       BMI $C5
000009D7:      CDF121     CMP $21F1
000009DA:      219D       AND ($9D,X)
000009DC:      30CD       BMI $CD
000009DE:      FF         .DB $FF
```

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```
000009DF:      D1C1      CMP ($C1),Y
000009E1:      D8        CLD
000009E2:      05C8      ORA $C8
000009E4:      2A        ROL A
000009E5:      9F        .DB $9F
000009E6:      3011      BMI $11
000009E8:      80        .DB $80
000009E9:      00        BRK
000009EA:      19229F    ORA $9F22,Y
000009ED:      30C3      BMI $C3
000009EF:      D621      DEC $21,X
000009F1:      78        SEI
000009F2:      E603      INC $03
000009F4:      C2        .DB $C2
000009F5:      FB        .DB $FB
000009F6:      21CD      AND ($CD,X)
000009F8:      28        PLP
000009F9:      22        .DB $22
000009FA:      C9FE      CMP #$FE
000009FC:      02        .DB $02
000009FD:      C0CD      CPY #$CD
000009FF:      28        PLP
00000A00:      22        .DB $22
00000A01:      C93A      CMP #$3A
00000A03:      A42F      LDY $2F
00000A05:      E602      INC $02
00000A07:      C0E5      CPY #$E5
00000A09:      2605      ROL $05
00000A0B:      2E00CD    ROL $CD00
00000A0E:      1F        .DB $1F
00000A0F:      EEE1CD    INC $CDE1
00000A12:      48        PHA
00000A13:      EF        .DB $EF
00000A14:      C921      CMP #$21
00000A16:      3E22C3    ROL $C322,X
00000A19:      1E2221    ASL $2122,X
00000A1C:      5122      EOR ($22),Y
00000A1E:      3A        .DB $3A
00000A1F:      A42F      LDY $2F
00000A21:      E602      INC $02
00000A23:      C0CD      CPY #$CD
00000A25:      48        PHA
00000A26:      EF        .DB $EF
00000A27:      C93A      CMP #$3A
00000A29:      A42F      LDY $2F
00000A2B:      E602      INC $02
00000A2D:      C03A      CPY #$3A
00000A2F:      92        .DB $92
00000A30:      F9EE0A    SBC $0AEE,Y
00000A33:      32        .DB $32
00000A34:      92        .DB $92
00000A35:      F9C921    SBC $21C9,Y
00000A38:      64        .DB $64
00000A39:      22        .DB $22
00000A3A:      CD48EF    CMP $EF48
00000A3D:      C920      CMP #$20
00000A3F:      202A20    JSR $202A
00000A42:      52        .DB $52
00000A43:      6561      ADC $61
00000A45:      64        .DB $64
00000A46:      696E      ADC #$6E
00000A48:      67        .DB $67
00000A49:      206461    JSR $6164
```

```
00000A4C:        74          .DB $74
00000A4D:        612E        ADC ($2E,X)
00000A4F:        0D0020      ORA $2000
00000A52:        202A20      JSR $202A
00000A55:        57          .DB $57
00000A56:        72          .DB $72
00000A57:        6974        ADC #$74
00000A59:        696E        ADC #$6E
00000A5B:        67          .DB $67
00000A5C:        206461      JSR $6164
00000A5F:        74          .DB $74
00000A60:        612E        ADC ($2E,X)
00000A62:        0D000D      ORA $0D00
00000A65:        0A          ASL A
00000A66:        00          BRK
00000A67:        11B6        ORA ($B6),Y
00000A69:        22          .DB $22
00000A6A:        CD7E1D      CMP $1D7E
00000A6D:        D8          CLD
00000A6E:        CA          DEX
00000A6F:        8622        STX $22
00000A71:        214D        AND ($4D,X)
00000A73:        3011        BMI $11
00000A75:        08          PHP
00000A76:        00          BRK
00000A77:        197EE6      ORA $E67E,Y
00000A7A:        80          .DB $80
00000A7B:        CA          DEX
00000A7C:        8E22CD      STX $CD22
00000A7F:        4669        LSR $69
00000A81:        D8          CLD
00000A82:        CD9822      CMP $2298
00000A85:        D8          CLD
00000A86:        CD711C      CMP $1C71
00000A89:        AF          .DB $AF
00000A8A:        32          .DB $32
00000A8B:        A62F        LDX $2F
00000A8D:        C921        CMP #$21
00000A8F:        A122        LDA ($22,X)
00000A91:        3E0132      ROL $3201,X
00000A94:        A62F        LDX $2F
00000A96:        37          .DB $37
00000A97:        C93E        CMP #$3E
00000A99:        03          .DB $03
00000A9A:        214D        AND ($4D,X)
00000A9C:        30CD        BMI $CD
00000A9E:        D8          CLD
00000A9F:        DEC946      DEC $46C9,X
00000AA2:        696C        ADC #$6C
00000AA4:        6520        ADC $20
00000AA6:        6E6F74      ROR $746F
00000AA9:        206F6E      JSR $6E6F
00000AAC:        206E65      JSR $656E
00000AAF:        74          .DB $74
00000AB0:        77          .DB $77
00000AB1:        6F          .DB $6F
00000AB2:        72          .DB $72
00000AB3:        6B          .DB $6B
00000AB4:        2E0020      ROL $2000
00000AB7:        5175        EOR ($75),Y
00000AB9:        6575        ADC $75
00000ABB:        6520        ADC $20
00000ABD:        6669        ROR $69
```

```
00000ABF:        6C6520   JMP ($2065)
00000AC2:        3A       .DB $3A
00000AC3:        2000AF   JSR $AF00
00000AC6:        32       .DB $32
00000AC7:        77       .DB $77
00000AC8:        24C3     BIT $C3
00000ACA:        E122     SBC ($22,X)
00000ACC:        3E0132   ROL $3201,X
00000ACF:        77       .DB $77
00000AD0:        24C3     BIT $C3
00000AD2:        E122     SBC ($22,X)
00000AD4:        3E0232   ROL $3202,X
00000AD7:        77       .DB $77
00000AD8:        24C3     BIT $C3
00000ADA:        E122     SBC ($22,X)
00000ADC:        3E0332   ROL $3203,X
00000ADF:        77       .DB $77
00000AE0:        243A     BIT $3A
00000AE2:        A3       .DB $A3
00000AE3:        2F       .DB $2F
00000AE4:        E608     INC $08
00000AE6:        C2       .DB $C2
00000AE7:        9D233A   STA $3A23,X
00000AEA:        9E       .DB $9E
00000AEB:        1EB7C2   ASL $C2B7,X
00000AEE:        9D233A   STA $3A23,X
00000AF1:        77       .DB $77
00000AF2:        24FE     BIT $FE
00000AF4:        02       .DB $02
00000AF5:        C2       .DB $C2
00000AF6:        12       .DB $12
00000AF7:        23       .DB $23
00000AF8:        3A       .DB $3A
00000AF9:        9D30E6   STA $E630,X
00000AFC:        02       .DB $02
00000AFD:        C2       .DB $C2
00000AFE:        9D2321   STA $2123,X
00000B01:        A530     LDA $30
00000B03:        7EE640   ROR $40E6,X
00000B06:        CA       DEX
00000B07:        12       .DB $12
00000B08:        23       .DB $23
00000B09:        21EC     AND ($EC,X)
00000B0B:        307E     BMI $7E
00000B0D:        E6E0     INC $E0
00000B0F:        CA       DEX
00000B10:        9D2321   STA $2123,X
00000B13:        2F       .DB $2F
00000B14:        3011     BMI $11
00000B16:        78       SEI
00000B17:        2406     BIT $06
00000B19:        14       .DB $14
00000B1A:        CD521B   CMP $1B52
00000B1D:        3A       .DB $3A
00000B1E:        A42F     LDY $2F
00000B20:        F601     INC $01,X
00000B22:        32       .DB $32
00000B23:        A42F     LDY $2F
00000B25:        3A       .DB $3A
00000B26:        77       .DB $77
00000B27:        24FE     BIT $FE
00000B29:        00       BRK
00000B2A:        CA       DEX
```

```
00000B2B:          4123      EOR ($23,X)
00000B2D:          FE01CA    INC $CA01,X
00000B30:          5523      EOR $23,X
00000B32:          FE02CA    INC $CA02,X
00000B35:          4B        .DB $4B
00000B36:          23        .DB $23
00000B37:          210C      AND ($0C,X)
00000B39:          24E5      BIT $E5
00000B3B:          2112      AND ($12,X)
00000B3D:          1C        .DB $1C
00000B3E:          C3        .DB $C3
00000B3F:          5C        .DB $5C
00000B40:          23        .DB $23
00000B41:          2115      AND ($15,X)
00000B43:          24E5      BIT $E5
00000B45:          21D6      AND ($D6,X)
00000B47:          1B        .DB $1B
00000B48:          C3        .DB $C3
00000B49:          5C        .DB $5C
00000B4A:          23        .DB $23
00000B4B:          2102      AND ($02,X)
00000B4D:          24E5      BIT $E5
00000B4F:          2112      AND ($12,X)
00000B51:          1C        .DB $1C
00000B52:          C3        .DB $C3
00000B53:          5C        .DB $5C
00000B54:          23        .DB $23
00000B55:          211F      AND ($1F,X)
00000B57:          24E5      BIT $E5
00000B59:          21D6      AND ($D6,X)
00000B5B:          1B        .DB $1B
00000B5C:          CD841C    CMP $1C84
00000B5F:          E3        .DB $E3
00000B60:          CD48EF    CMP $EF48
00000B63:          E1CD      SBC ($CD,X)
00000B65:          48        PHA
00000B66:          EF        .DB $EF
00000B67:          2605      ROL $05
00000B69:          2E3CCD    ROL $CD3C
00000B6C:          1F        .DB $1F
00000B6D:          EE2127    INC $2721
00000B70:          24CD      BIT $CD
00000B72:          48        PHA
00000B73:          EF        .DB $EF
00000B74:          CD59EE    CMP $EE59
00000B77:          AF        .DB $AF
00000B78:          CD1DE9    CMP $E91D
00000B7B:          CD72EE    CMP $EE72
00000B7E:          CD9F23    CMP $239F
00000B81:          FE59CA    INC $CA59,X
00000B84:          9D23FE    STA $FE23,X
00000B87:          4ECA98    LSR $98CA
00000B8A:          23        .DB $23
00000B8B:          FE18CA    INC $CA18,X
00000B8E:          98        TYA
00000B8F:          23        .DB $23
00000B90:          FE7FCA    INC $CA7F,X
00000B93:          98        TYA
00000B94:          23        .DB $23
00000B95:          C3        .DB $C3
00000B96:          74        .DB $74
00000B97:          23        .DB $23
00000B98:          2165      AND ($65,X)
```

```
00000B9A:      2437      BIT $37
00000B9C:      C9AF      CMP #$AF
00000B9E:      C9CD      CMP #$CD
00000BA0:      87        .DB $87
00000BA1:      1B        .DB $1B
00000BA2:      2133      AND ($33,X)
00000BA4:      24FE      BIT $FE
00000BA6:      4ECAB0    LSR $B0CA
00000BA9:      23        .DB $23
00000BAA:      212F      AND ($2F,X)
00000BAC:      24FE      BIT $FE
00000BAE:      59C0F5    EOR $F5C0,Y
00000BB1:      CD48EF    CMP $EF48
00000BB4:      F1C9      SBC ($C9),Y
00000BB6:      3A        .DB $3A
00000BB7:      A52F      LDA $2F
00000BB9:      3D32A5    AND $A532,X
00000BBC:      2F        .DB $2F
00000BBD:      C03A      CPY #$3A
00000BBF:      A42F      LDY $2F
00000BC1:      E601      INC $01
00000BC3:      C2        .DB $C2
00000BC4:      E8        INX
00000BC5:      23        .DB $23
00000BC6:      E526      SBC $26
00000BC8:      17        .DB $17
00000BC9:      2E00CD    ROL $CD00
00000BCC:      1F        .DB $1F
00000BCD:      EE2136    INC $3621
00000BD0:      24CD      BIT $CD
00000BD2:      48        PHA
00000BD3:      EF        .DB $EF
00000BD4:      CD59EE    CMP $EE59
00000BD7:      E1CD      SBC ($CD,X)
00000BD9:      38        SEC
00000BDA:      E9FE      SBC #$FE
00000BDC:      0DCAE8    ORA $E8CA
00000BDF:      23        .DB $23
00000BE0:      FE7FCA    INC $CA7F,X
00000BE3:      F523      SBC $23,X
00000BE5:      C3        .DB $C3
00000BE6:      D8        CLD
00000BE7:      23        .DB $23
00000BE8:      E5CD      SBC $CD
00000BEA:      72        .DB $72
00000BEB:      EECD8A    INC $8ACD
00000BEE:      1C        .DB $1C
00000BEF:      CD452D    CMP $2D45
00000BF2:      E1AF      SBC ($AF,X)
00000BF4:      C9CD      CMP #$CD
00000BF6:      72        .DB $72
00000BF7:      EECD8A    INC $8ACD
00000BFA:      1C        .DB $1C
00000BFB:      3EFF32    ROL $32FF,X
00000BFE:      012F      ORA ($2F,X)
00000C00:      37        .DB $37
00000C01:      C920      CMP #$20
00000C03:      52        .DB $52
00000C04:      6570      ADC $70
00000C06:      6C6163    JMP ($6361)
00000C09:      6520      ADC $20
00000C0B:      00        BRK
00000C0C:      204372    JSR $7243
```

```
00000C0F:      6561      ADC $61
00000C11:      74        .DB $74
00000C12:      6520      ADC $20
00000C14:      00        BRK
00000C15:      205363    JSR $6353
00000C18:      72        .DB $72
00000C19:      6174      ADC ($74,X)
00000C1B:      63        .DB $63
00000C1C:      68        PLA
00000C1D:      200020    JSR $2000
00000C20:      456D      EOR $6D
00000C22:      7074      BVS $74
00000C24:      792000    ADC $0020,Y
00000C27:      5B        .DB $5B
00000C28:      592F4E    EOR $4E2F,Y
00000C2B:      5D3F20    EOR $203F,X
00000C2E:      00        BRK
00000C2F:      594553    EOR $5345,Y
00000C32:      00        BRK
00000C33:      4E4F00    LSR $004F
00000C36:      0E5072    ASL $7250
00000C39:      6573      ADC $73
00000C3B:      73        .DB $73
00000C3C:      203C52    JSR $523C
00000C3F:      4554      EOR $54
00000C41:      5552      EOR $52,X
00000C43:      4E3E20    LSR $203E
00000C46:      74        .DB $74
00000C47:      6F        .DB $6F
00000C48:      20636F    JSR $6F63
00000C4B:      6E7469    ROR $6974
00000C4E:      6E7565    ROR $6575
00000C51:      206F72    JSR $726F
00000C54:      203C43    JSR $433C
00000C57:      414E      EOR ($4E,X)
00000C59:      3E2074    ROL $7420,X
00000C5C:      6F        .DB $6F
00000C5D:      206162    JSR $6261
00000C60:      6F        .DB $6F
00000C61:      72        .DB $72
00000C62:      74        .DB $74
00000C63:      2E0046    ROL $4600
00000C66:      756E      ADC $6E,X
00000C68:      63        .DB $63
00000C69:      74        .DB $74
00000C6A:      696F      ADC #$6F
00000C6C:      6E2073    ROR $7320
00000C6F:      6B        .DB $6B
00000C70:      6970      ADC #$70
00000C72:      7065      BVS $65
00000C74:      64        .DB $64
00000C75:      2E0000    ROL $0000
00000C78:      861F      STX $1F
00000C7A:      C9C9      CMP #$C9
00000C7C:      2A        ROL A
00000C7D:      23        .DB $23
00000C7E:      14        .DB $14
00000C7F:      22        .DB $22
00000C80:      63        .DB $63
00000C81:      14        .DB $14
00000C82:      2A        ROL A
00000C83:      63        .DB $63
00000C84:      14        .DB $14
```

```
00000C85:      EB        .DB $EB
00000C86:      2A        ROL A
00000C87:      2114      AND ($14,X)
00000C89:      CD5A6E    CMP $6E5A
00000C8C:      00        BRK
00000C8D:      14        .DB $14
00000C8E:      118F      ORA ($8F),Y
00000C90:      26CD      ROL $CD
00000C92:      7E1DD8    ROR $D81D,X
00000C95:      CA        DEX
00000C96:      AD2411    LDA $1124
00000C99:      A126      LDA ($26,X)
00000C9B:      CD0827    CMP $2708
00000C9E:      D8        CLD
00000C9F:      CA        DEX
00000CA0:      AD24CD    LDA $CD24
00000CA3:      4669      LSR $69
00000CA5:      D8        CLD
00000CA6:      CDB224    CMP $24B2
00000CA9:      D8        CLD
00000CAA:      CD7226    CMP $2672
00000CAD:      AF        .DB $AF
00000CAE:      32        .DB $32
00000CAF:      A62F      LDX $2F
00000CB1:      C92A      CMP #$2A
00000CB3:      63        .DB $63
00000CB4:      30EB      BMI $EB
00000CB6:      2A        ROL A
00000CB7:      B3        .DB $B3
00000CB8:      307C      BMI $7C
00000CBA:      BA        TSX
00000CBB:      C2        .DB $C2
00000CBC:      6E253E    ROR $3E25
00000CBF:      7F        .DB $7F
00000CC0:      A56F      LDA $6F
00000CC2:      3E7FA3    ROL $A37F,X
00000CC5:      5F        .DB $5F
00000CC6:      7DBBC2    ADC $C2BB,X
00000CC9:      6E2563    ROR $6325
00000CCC:      6A        ROR A
00000CCD:      7DB4CA    ADC $CAB4,X
00000CD0:      7B        .DB $7B
00000CD1:      252B      AND $2B
00000CD3:      22        .DB $22
00000CD4:      88        DEY
00000CD5:      26AF      ROL $AF
00000CD7:      32        .DB $32
00000CD8:      8A        TXA
00000CD9:      2621      ROL $21
00000CDB:      D2        .DB $D2
00000CDC:      3022      BMI $22
00000CDE:      8B        .DB $8B
00000CDF:      2621      ROL $21
00000CE1:      D2        .DB $D2
00000CE2:      3D228D    AND $8D22,X
00000CE5:      2621      ROL $21
00000CE7:      00        BRK
00000CE8:      1122      ORA ($22),Y
00000CEA:      4D3022    EOR $2230
00000CED:      9D303A    STA $3A30,X
00000CF0:      62        .DB $62
00000CF1:      3057      BMI $57
00000CF3:      3E04A2    ROL $A204,X
```

```
00000CF6:      C2          .DB  $C2
00000CF7:      19253E      ORA  $3E25,Y
00000CFA:      18          CLC
00000CFB:      A2C2        LDX  #$C2
00000CFD:      32          .DB  $32
00000CFE:      25CD        AND  $CD
00000D00:      38          SEC
00000D01:      26CA        ROL  $CA
00000D03:      7B          .DB  $7B
00000D04:      25CD        AND  $CD
00000D06:      7D25D8      ADC  $D825,X
00000D09:      0E501A      ASL  $1A50
00000D0C:      BEC26E      LDX  $6EC2,Y
00000D0F:      2523        AND  $23
00000D11:      13          .DB  $13
00000D12:      0DC20B      ORA  $0BC2
00000D15:      25C3        AND  $C3
00000D17:      FF          .DB  $FF
00000D18:      24CD        BIT  $CD
00000D1A:      38          SEC
00000D1B:      26CA        ROL  $CA
00000D1D:      7B          .DB  $7B
00000D1E:      25CD        AND  $CD
00000D20:      7D25D8      ADC  $D825,X
00000D23:      1A          .DB  $1A
00000D24:      BEC26E      LDX  $6EC2,Y
00000D27:      25FE        AND  $FE
00000D29:      FC          .DB  $FC
00000D2A:      CA          DEX
00000D2B:      192523      ORA  $2325,Y
00000D2E:      13          .DB  $13
00000D2F:      C2          .DB  $C2
00000D30:      23          .DB  $23
00000D31:      25CD        AND  $CD
00000D33:      38          SEC
00000D34:      26CA        ROL  $CA
00000D36:      7B          .DB  $7B
00000D37:      25CD        AND  $CD
00000D39:      7D25D8      ADC  $D825,X
00000D3C:      0E0023      ASL  $2300
00000D3F:      23          .DB  $23
00000D40:      23          .DB  $23
00000D41:      7EB7CA      ROR  $CAB7,X
00000D44:      52          .DB  $52
00000D45:      25FE        AND  $FE
00000D47:      06CA        ASL  $CA
00000D49:      59252B      EOR  $2B25,Y
00000D4C:      2B          .DB  $2B
00000D4D:      4E2BC3      LSR  $C32B
00000D50:      5C          .DB  $5C
00000D51:      252B        AND  $2B
00000D53:      4E2B2B      LSR  $2B2B
00000D56:      C3          .DB  $C3
00000D57:      5C          .DB  $5C
00000D58:      252B        AND  $2B
00000D5A:      2B          .DB  $2B
00000D5B:      2B          .DB  $2B
00000D5C:      0C          .DB  $0C
00000D5D:      0C          .DB  $0C
00000D5E:      0C          .DB  $0C
00000D5F:      0C          .DB  $0C
00000D60:      1A          .DB  $1A
00000D61:      BEC26E      LDX  $6EC2,Y
```

```
00000D64:      250D      AND $0D
00000D66:      CA        DEX
00000D67:      32        .DB $32
00000D68:      2513      AND $13
00000D6A:      23        .DB $23
00000D6B:      C3        .DB $C3
00000D6C:      60        RTS
00000D6D:      25CD      AND $CD
00000D6F:      72        .DB $72
00000D70:      2621      ROL $21
00000D72:      B3        .DB $B3
00000D73:      263E      ROL $3E
00000D75:      0132      ORA ($32,X)
00000D77:      A62F      LDX $2F
00000D79:      37        .DB $37
00000D7A:      C9AF      CMP #$AF
00000D7C:      C93A      CMP #$3A
00000D7E:      8A        TXA
00000D7F:      26B7      ROL $B7
00000D81:      CA        DEX
00000D82:      A7        .DB $A7
00000D83:      253A      AND $3A
00000D85:      8A        TXA
00000D86:      263D      ROL $3D
00000D88:      32        .DB $32
00000D89:      8A        TXA
00000D8A:      262A      ROL $2A
00000D8C:      8B        .DB $8B
00000D8D:      2611      ROL $11
00000D8F:      80        .DB $80
00000D90:      00        BRK
00000D91:      19228B    ORA $8B22,Y
00000D94:      262A      ROL $2A
00000D96:      8D2611    STA $1126
00000D99:      80        .DB $80
00000D9A:      00        BRK
00000D9B:      19228D    ORA $8D22,Y
00000D9E:      262A      ROL $2A
00000DA0:      8D26EB    STA $EB26
00000DA3:      2A        ROL A
00000DA4:      8B        .DB $8B
00000DA5:      26C9      ROL $C9
00000DA7:      CDAE25    CMP $25AE
00000DAA:      D8        CLD
00000DAB:      C3        .DB $C3
00000DAC:      8425      STY $25
00000DAE:      CD6626    CMP $2666
00000DB1:      21D2      AND ($D2,X)
00000DB3:      3022      BMI $22
00000DB5:      8B        .DB $8B
00000DB6:      2621      ROL $21
00000DB8:      D2        .DB $D2
00000DB9:      3D228D    AND $8D22,X
00000DBC:      263E      ROL $3E
00000DBE:      1A        .DB $1A
00000DBF:      47        .DB $47
00000DC0:      32        .DB $32
00000DC1:      8A        TXA
00000DC2:      260E      ROL $0E
00000DC4:      00        BRK
00000DC5:      2152      AND ($52,X)
00000DC7:      3122      AND ($22),Y
00000DC9:      4F        .DB $4F
```

```
00000DCA:        30F5       BMI  $F5
00000DCC:        C5D5       CMP  $D5
00000DCE:        E5CD       SBC  $CD
00000DD0:        27         .DB  $27
00000DD1:        26E1       ROL  $E1
00000DD3:        D1C1       CMP  ($C1),Y
00000DD5:        F121       SBC  ($21),Y
00000DD7:        4D30CD     EOR  $CD30
00000DDA:        FF         .DB  $FF
00000DDB:        D1DA       CMP  ($DA),Y
00000DDD:        1B         .DB  $1B
00000DDE:        260C       ROL  $0C
00000DE0:        05CA       ORA  $CA
00000DE2:        F125       SBC  ($25),Y
00000DE4:        2A         ROL  A
00000DE5:        4F         .DB  $4F
00000DE6:        3011       BMI  $11
00000DE8:        80         .DB  $80
00000DE9:        00         BRK
00000DEA:        19224F     ORA  $4F22,Y
00000DED:        30C3       BMI  $C3
00000DEF:        CB         .DB  $CB
00000DF0:        2541       AND  $41
00000DF2:        2152       AND  ($52,X)
00000DF4:        3E229F     ROL  $9F22,X
00000DF7:        30F5       BMI  $F5
00000DF9:        C5D5       CMP  $D5
00000DFB:        E5CD       SBC  $CD
00000DFD:        27         .DB  $27
00000DFE:        26E1       ROL  $E1
00000E00:        D1C1       CMP  ($C1),Y
00000E02:        F121       SBC  ($21),Y
00000E04:        9D30CD     STA  $CD30,X
00000E07:        FF         .DB  $FF
00000E08:        D1D8       CMP  ($D8),Y
00000E0A:        05CA       ORA  $CA
00000E0C:        22         .DB  $22
00000E0D:        262A       ROL  $2A
00000E0F:        9F         .DB  $9F
00000E10:        3011       BMI  $11
00000E12:        80         .DB  $80
00000E13:        00         BRK
00000E14:        19229F     ORA  $9F22,Y
00000E17:        30C3       BMI  $C3
00000E19:        F8         SED
00000E1A:        25FE       AND  $FE
00000E1C:        02         .DB  $02
00000E1D:        CA         DEX
00000E1E:        F125       SBC  ($25),Y
00000E20:        37         .DB  $37
00000E21:        C9CD       CMP  #$CD
00000E23:        6C26AF     JMP  ($AF26)
00000E26:        C978       CMP  #$78
00000E28:        E603       INC  $03
00000E2A:        C2         .DB  $C2
00000E2B:        3126       AND  ($26),Y
00000E2D:        CD5726     CMP  $2657
00000E30:        C9FE       CMP  #$FE
00000E32:        02         .DB  $02
00000E33:        C0CD       CPY  #$CD
00000E35:        57         .DB  $57
00000E36:        26C9       ROL  $C9
00000E38:        2A         ROL  A
```

```
00000E39:       88        DEY
00000E3A:       267C      ROL $7C
00000E3C:       B5C8      LDA $C8,X
00000E3E:       2B        .DB $2B
00000E3F:       22        .DB $22
00000E40:       88        DEY
00000E41:       26B7      ROL $B7
00000E43:       C9CD      CMP #$CD
00000E45:       54        .DB $54
00000E46:       264E      ROL $4E
00000E48:       6F        .DB $6F
00000E49:       206669    JSR $6966
00000E4C:       6C656E    JMP ($6E65)
00000E4F:       616D      ADC ($6D,X)
00000E51:       652E      ADC $2E
00000E53:       00        BRK
00000E54:       E137      SBC ($37,X)
00000E56:       C93A      CMP #$3A
00000E58:       A42F      LDY $2F
00000E5A:       E602      INC $02
00000E5C:       C03A      CPY #$3A
00000E5E:       92        .DB $92
00000E5F:       F9EE0A    SBC $0AEE,Y
00000E62:       32        .DB $32
00000E63:       92        .DB $92
00000E64:       F9C921    SBC $21C9,Y
00000E67:       BF        .DB $BF
00000E68:       26C3      ROL $C3
00000E6A:       7526      ADC $26,X
00000E6C:       21BF      AND ($BF,X)
00000E6E:       26C3      ROL $C3
00000E70:       7526      ADC $26,X
00000E72:       21D3      AND ($D3,X)
00000E74:       263A      ROL $3A
00000E76:       A42F      LDY $2F
00000E78:       E602      INC $02
00000E7A:       C0E5      CPY #$E5
00000E7C:       2605      ROL $05
00000E7E:       2E00CD    ROL $CD00
00000E81:       1F        .DB $1F
00000E82:       EEE1CD    INC $CDE1
00000E85:       48        PHA
00000E86:       EF        .DB $EF
00000E87:       C900      CMP #$00
00000E89:       00        BRK
00000E8A:       00        BRK
00000E8B:       00        BRK
00000E8C:       00        BRK
00000E8D:       00        BRK
00000E8E:       00        BRK
00000E8F:       205665    JSR $6556
00000E92:       72        .DB $72
00000E93:       6966      ADC #$66
00000E95:       792066    ADC $6620,Y
00000E98:       696C      ADC #$6C
00000E9A:       6520      ADC $20
00000E9C:       20203A    JSR $3A20
00000E9F:       200020    JSR $2000
00000EA2:       206167    JSR $6761
00000EA5:       6169      ADC ($69,X)
00000EA7:       6E7374    ROR $7473
00000EAA:       206669    JSR $6966
00000EAD:       6C6520    JMP ($2065)
```

```
00000EB0:      3A         .DB $3A
00000EB1:      200042     JSR $4200
00000EB4:      6164       ADC ($64,X)
00000EB6:      207665     JSR $6576
00000EB9:      72         .DB $72
00000EBA:      6966       ADC #$66
00000EBC:      792E00     ADC $002E,Y
00000EBF:      20202A     JSR $2A20
00000EC2:      205665     JSR $6556
00000EC5:      72         .DB $72
00000EC6:      6966       ADC #$66
00000EC8:      79696E     ADC $6E69,Y
00000ECB:      67         .DB $67
00000ECC:      206461     JSR $6164
00000ECF:      74         .DB $74
00000ED0:      612E       ADC ($2E,X)
00000ED2:      00         BRK
00000ED3:      202020     JSR $2020
00000ED6:      202020     JSR $2020
00000ED9:      202020     JSR $2020
00000EDC:      202020     JSR $2020
00000EDF:      202020     JSR $2020
00000EE2:      202020     JSR $2020
00000EE5:      200011     JSR $1100
00000EE8:      34         .DB $34
00000EE9:      28         PLP
00000EEA:      CD7E1D     CMP $1D7E
00000EED:      D8         CLD
00000EEE:      CA         DEX
00000EEF:      03         .DB $03
00000EF0:      27         .DB $27
00000EF1:      1146       ORA ($46),Y
00000EF3:      28         PLP
00000EF4:      CD0827     CMP $2708
00000EF7:      D8         CLD
00000EF8:      CA         DEX
00000EF9:      03         .DB $03
00000EFA:      27         .DB $27
00000EFB:      CD4669     CMP $6946
00000EFE:      D8         CLD
00000EFF:      CD3C27     CMP $273C
00000F02:      D8         CLD
00000F03:      AF         .DB $AF
00000F04:      32         .DB $32
00000F05:      A62F       LDX $2F
00000F07:      C9D5       CMP #$D5
00000F09:      21FD       AND ($FD,X)
00000F0B:      2F         .DB $2F
00000F0C:      CD151B     CMP $1B15
00000F0F:      D12A       CMP ($2A),Y
00000F11:      A7         .DB $A7
00000F12:      2F         .DB $2F
00000F13:      CDDE18     CMP $18DE
00000F16:      D8         CLD
00000F17:      3A         .DB $3A
00000F18:      36F5       ROL $F5,X
00000F1A:      B7         .DB $B7
00000F1B:      CA         DEX
00000F1C:      BF         .DB $BF
00000F1D:      0C         .DB $0C
00000F1E:      E602       INC $02
00000F20:      CA         DEX
00000F21:      BF         .DB $BF
```

```
00000F22:       0C        .DB $0C
00000F23:       CD721E    CMP $1E72
00000F26:       3E1132    ROL $3211,X
00000F29:       9E        .DB $9E
00000F2A:       3021      BMI $21
00000F2C:       D2        .DB $D2
00000F2D:       3122      AND ($22),Y
00000F2F:       9F        .DB $9F
00000F30:       3021      BMI $21
00000F32:       9D30CD    STA $CD30,X
00000F35:       FF        .DB $FF
00000F36:       D1D8      CMP ($D8),Y
00000F38:       3E01B7    ROL $B701,X
00000F3B:       C921      CMP #$21
00000F3D:       4D3036    EOR $3630
00000F40:       20219D    JSR $9D21
00000F43:       3036      BMI $36
00000F45:       202157    JSR $5721
00000F48:       3011      BMI $11
00000F4A:       80        .DB $80
00000F4B:       28        PLP
00000F4C:       060A      ASL $0A
00000F4E:       CD1F1B    CMP $1B1F
00000F51:       217F      AND ($7F,X)
00000F53:       3011      BMI $11
00000F55:       8A        TXA
00000F56:       28        PLP
00000F57:       0614      ASL $14
00000F59:       CD1F1B    CMP $1B1F
00000F5C:       2155      AND ($55,X)
00000F5E:       3011      BMI $11
00000F60:       A530      LDA $30
00000F62:       1A        .DB $1A
00000F63:       BEC2C0    LDX $C0C2,Y
00000F66:       27        .DB $27
00000F67:       2158      AND ($58,X)
00000F69:       28        PLP
00000F6A:       1157      ORA ($57),Y
00000F6C:       3006      BMI $06
00000F6E:       0A        ASL A
00000F6F:       CD1F1B    CMP $1B1F
00000F72:       2158      AND ($58,X)
00000F74:       28        PLP
00000F75:       117F      ORA ($7F),Y
00000F77:       3006      BMI $06
00000F79:       14        .DB $14
00000F7A:       CD1F1B    CMP $1B1F
00000F7D:       214D      AND ($4D,X)
00000F7F:       30CD      BMI $CD
00000F81:       FF        .DB $FF
00000F82:       D1D8      CMP ($D8),Y
00000F84:       21A7      AND ($A7,X)
00000F86:       3011      BMI $11
00000F88:       57        .DB $57
00000F89:       3006      BMI $06
00000F8B:       0A        ASL A
00000F8C:       CD1F1B    CMP $1B1F
00000F8F:       21CF      AND ($CF,X)
00000F91:       3011      BMI $11
00000F93:       7F        .DB $7F
00000F94:       3006      BMI $06
00000F96:       14        .DB $14
00000F97:       CD1F1B    CMP $1B1F
```

```
00000F9A:      2180      AND ($80,X)
00000F9C:      28        PLP
00000F9D:      11A7      ORA ($A7),Y
00000F9F:      3006      BMI $06
00000FA1:      0A        ASL A
00000FA2:      CD1F1B    CMP $1B1F
00000FA5:      218A      AND ($8A,X)
00000FA7:      28        PLP
00000FA8:      11CF      ORA ($CF),Y
00000FAA:      3006      BMI $06
00000FAC:      14        .DB $14
00000FAD:      CD1F1B    CMP $1B1F
00000FB0:      219D      AND ($9D,X)
00000FB2:      30CD      BMI $CD
00000FB4:      FF        .DB $FF
00000FB5:      D1D8      CMP ($D8),Y
00000FB7:      214D      AND ($4D,X)
00000FB9:      30CD      BMI $CD
00000FBB:      FF        .DB $FF
00000FBC:      D1D8      CMP ($D8),Y
00000FBE:      AF        .DB $AF
00000FBF:      C921      CMP #$21
00000FC1:      04        .DB $04
00000FC2:      0122      ORA ($22,X)
00000FC4:      FD2F21    SBC $212F,X
00000FC7:      52        .DB $52
00000FC8:      3122      AND ($22),Y
00000FCA:      FF        .DB $FF
00000FCB:      2F        .DB $2F
00000FCC:      2180      AND ($80,X)
00000FCE:      00        BRK
00000FCF:      22        .DB $22
00000FD0:      0130      ORA ($30,X)
00000FD2:      1155      ORA ($55),Y
00000FD4:      3021      BMI $21
00000FD6:      0530      ORA $30
00000FD8:      1A        .DB $1A
00000FD9:      77        .DB $77
00000FDA:      21A7      AND ($A7,X)
00000FDC:      3011      BMI $11
00000FDE:      07        .DB $07
00000FDF:      3006      BMI $06
00000FE1:      0A        ASL A
00000FE2:      CD1F1B    CMP $1B1F
00000FE5:      21CF      AND ($CF,X)
00000FE7:      3011      BMI $11
00000FE9:      2F        .DB $2F
00000FEA:      3006      BMI $06
00000FEC:      14        .DB $14
00000FED:      CD1F1B    CMP $1B1F
00000FF0:      21FD      AND ($FD,X)
00000FF2:      2F        .DB $2F
00000FF3:      CDFFD1    CMP $D1FF
00000FF6:      D2        .DB $D2
00000FF7:      2D28FE    AND $FE28
00000FFA:      04        .DB $04
00000FFB:      C2        .DB $C2
00000FFC:      32        .DB $32
00000FFD:      28        .DB $28
00000FFE:      11        .DB $11
00000FFF:      A5        .DB $A5
```