```
00020 ; MAIN MODULE FOR DANDY
               00030 ;(C)1983 JOHN HOWARD PALEVICH
               00040 BASE
3000:
                               .EQ $3000
5800:
               00050 BOC
                               .EQ BASE+$2800
               00060 AL
00F0:
                               .EQ $F0
00F1:
               00070 AH
                               .EQ $F1
               00080 BL
00F2:
                               .EQ $F2
00F3:
               00090 BH
                               .EQ $F3
00F4:
               00100 DL
                               .EQ $F4
00F5:
               00110 DH
                               .EQ $F5
               00120
                               .IN "D2:SYSTEXT"
               00010 ;SYSTEXT
               00020 CHRORG .EQ $E000
E000:
E456:
               00030 CIOV .EQ $E456
E459:
               00040 SIOV .EQ $E459
E45C:
               00050 SETVBV .EQ $E45C
E45F:
               00060 SYSVBV .EQ $E45F
               00070 XITVBL .EQ $E462
E462:
0008:
               00080 WARMST .EQ $8
0009:
               00090 BOOT .EQ $9
000A:
               00100 DOSVEC .EQ $A
000C:
               00110 DOSINI .EQ $C
000E:
              00120 APPMHI .EQ $E
               00130 POKMSK .EQ $10
0010:
0011:
               00140 BRKKEY .EQ $11
0012:
              00150 RTCLOK .EQ $12
              00160 JIFFY
0014:
                             .EQ $14
               00170 SOUNDR .EQ $41
0041:
0042:
              00180 CRITIC .EQ $42
004D:
              00190 ATRACT .EQ $4D
004E:
              00200 DRKMSK .EQ $4E
004F:
               00210 COLRSH .EQ $4F
006A:
               00220 RAMTOP .EQ $6A
0200:
              00230 VDSLST
                             .EQ $200
               00240 CDTMV1 .EQ $218
0218:
021A:
               00250 CDTMV2 .EQ $21A
021C:
              00260 CDTMV3 .EQ $21C
021E:
               00270 CDTMV4 .EQ $21E
0220:
               00280 CDTMV5 .EQ $220
               00290 VVBLKD
0224:
                              .EQ $224
022F:
              00300 SDMCTL .EQ $22F
0230:
              00310 SDLSTL .EQ $230
0231:
               00320 SDLSTH .EQ $231
0232:
               00330 SSKCTL
                             .EQ $232
0234:
               00340 LPENH .EQ $234
0235:
               00350 LPENV .EQ $235
026F:
               00360 GPRIOR .EQ $26F
0270:
               00370 PADDLO .EQ $270
               00380 STICKO .EQ $278
0278:
               00390 PTRIGO .EQ $27C
027C:
0284:
               00400 STRIGO .EQ $284
02C0:
               00410 PCOLRO .EQ $2C0
02C4:
               00420 COLOR0 .EQ $2C4
               00430 RAMSIZ .EQ $2E4
02E4:
02E5:
               00440 MEMTOP .EQ $2E5
02E7:
               00450 MEMLO .EQ $2E7
               00460 DVSTAT .EQ $2EA
02EA:
02F0:
               00470 CRSINH .EQ $2F0
02F3:
               00480 CHACT .EQ $2F3
               00490 CHBAS .EQ $2F4
02F4:
02FC:
               00500 CH .EQ $2FC
                               .OR $300
               00510
0300:
               00520 DDEVIC
```

BS 1

0201.	00530	DINTE	DC 1
0301:	00530		.BS 1
0302:	00540 00550		.BS 1
0303: 0304:	00560		.BS 1
0305:	00570		.BS 1
0306:	00570		.BS 1
0307:	00590		.BS 1
0308:	00600		.BS 1
0309:	00610		.BS 1
030A:	00620		.BS 1
030B:	00630		.BS 1
	00640		OR \$340
0340:	00650	ICHID	.BS 1
0341:	00660	ICDNO	.BS 1
0342:	00670	ICCOM	.BS 1
0343:	00680	ICSTA	.BS 1
0344:	00690		.BS 1
0345:	00700		.BS 1
0346:	00710		.BS 1
0347:	00720		.BS 1
0348:	00730		.BS 1
0349:	00740		.BS 1
034A:	00750		.BS 1
034B:	00760		.BS 1
034C:	00770		.BS 4
D000: D004:	00780 00790		.EQ \$D000 .EQ \$D004
D004:	00800		.EQ \$D004
D000:	00810		.EQ \$D000
D00D:	00820		.EQ \$D000
D011:	00830		.EQ \$D011
D012:	00840		.EQ \$D012
D016:	00850		.EQ \$D016
D018:	00860	PRIOR	.EQ \$D018
D01C:	00870	VDELAY	.EQ \$D01C
D01D:	08800	GRACTL	.EQ \$D01D
D01E:	00890		.EQ \$D01E
D01F:	00900	CONSOL	.EQ \$D01F
D400:	00910	DMACTL	.EQ \$D400
D401:	00920	CHACTL	.EQ \$D401
D402: D403:	00930 00940	DLISTL	.EQ \$D402 .EQ \$D403
D404:	00940	DLISTH HSCROL	.EQ \$D403 .EQ \$D404
D404:	00960	VSCROL	.EQ \$D404
D407:	00970	PMBASE	.EQ \$D103
D409:	00980	CHBASE	.EQ \$D409
D40A:	00990	WSYNC	.EQ \$D40A
D40B:	01000	VCOUNT	.EQ \$D40B
D40C:	01010	PENH	.EQ \$D40C
D40D:	01020	PENV	.EQ \$D40D
D40E:	01030	NMIEN	.EQ \$D40E
D40F:	01040	NMIRES	.EQ \$D40F
D40F:	01050	NMIST	.EQ \$D40F
D200:	01060	AUDF1	.EQ \$D200
D201:	01070	AUDC1	.EQ \$D201
D208:	01080	AUDCTL	.EQ \$D208
D209:	01090	STIMER	.EQ \$D209
D20A: D20B:	$01100 \\ 01110$	SKRES POTGO	.EQ \$D20A .EQ \$D20B
D20D:	01110	SEROUT	.EQ \$D20B
D20E:	01120	IRQEN	.EQ \$D20E
D20F:	01130	SKCTL	.EQ \$D20E
D200:	01150	POT0	.EQ \$D201
D208:	01160	ALLPOT	.EQ \$D208
D209:	01170	KBCODE	.EQ \$D209
D20A:	01180	RANDOM	.EO \$D20A

```
.EQ $D20E
D20E:
               01190 IRQST
D20F:
               01200 SKSTAT
                              .EQ $D20F
                              .EQ $D300
D300:
               01210 PORTA
D301:
               01220 PORTB
                              .EQ $D301
D302:
               01230 PACTL
                              .EQ $D302
D303:
               01240 PBCTL
                              .EQ $D303
0003:
               01250 OPEN
                              .EQ 3
000C:
               01260 CLOSE
                              .EQ 12
0007:
               01270 GETCHR
                              .EQ 7
000B:
               01280 PUTCHR
                              .EQ 11
0005:
               01290 GETREC
                              .EQ 5
0009:
               01300 PUTREC
                              .EQ 9
000D:
               01310 STATIS
                              .EQ 13
009B:
               01320 EOL
                              .EQ $9B
               00130 ;
                              .OR BOC-3
               00140;
                              .TF "X:"
               00150;
                              JMP START
               00160
                              .OR BOC
5800:
               00170 CHAR.SET .EQ *
                              .IN "D2:CHARSET"
               00180
               00010 ; DANDY CHARACTER SET
               00020 ;CHAR 0
5800: 00 00 00
5803: 00 00 00
5806: 00 00 00
5809: 00 00 00
580C: 00 00 00
580F: 00
               00030
                      5810: 00 00 00
5813: 00 00 00
5816: 00 00 00
5819: 00 00 00
581C: 00 00 00
581F: 00
               00040
                      00050 ;CHAR 1
5820: FF FF CC
5823: CC F3 F3
5826: FF FF FC
5829: CC CF F3
582C: F3 CF CF
582F: FF
               00060
                     .HS FFFFCCCCF3F3FFFFFCCCCFF3F3CFCFFF
5830: FF F3 F3
5833: CF CF F3
5836: 33 3F FF
5839: FF CF CF
583C: 33 33 FF
                      .HS FFF3F3CFCFF3333FFFFFCFCF3333FFFF
583F: FF
               00070
               00080 ;CHAR 2
5840: 55 6A 6B
5843: 6F 6F 6F
5846: 6B 6B 6B
5849: 6F 6F 6F
584C: 6F 6F 6A
584F: 55
               00090
                     .HS 556A6B6F6F6F6B6B6B6F6F6F6F6F6A55
5850: 55 A9 E9
5853: F9 F9 F9
5856: E9 E9 E9
5859: F9 F9 F9
585C: F9 F9 A9
                      .HS 55A9E9F9F9F9E9E9E9F9F9F9F9F9A955
585F: 55
               00100
               00110 ;CHAR 3
5860: 54 10 10
5863: 10 10 10
5866: 10 10 10
5869: 10 10 10
586C: 10 10 10
```

586F: 5870:	05 15	04	04	00120	.HS 5410101010101010101010101010105
5873: 5876:	$\begin{array}{c} 04 \\ 04 \end{array}$	04 04	04 04		
5879: 587C:	$\begin{array}{c} 04 \\ 04 \end{array}$	$\begin{array}{c} 04 \\ 04 \end{array}$	$\begin{array}{c} 04 \\ 04 \end{array}$		
587F:	50			00130 00140	.HS 1504040404040404040404040404040450;CHAR 4
5880: 5883:	55 10	10 10	10 10		
5886: 5889:	10	10	10		
588C: 588F:	10 55 50	10	10	00150	.HS 551010101010101010101010101055
5890: 5893: 5896:	01 01	04 01 01	04 01 01		
5899: 589C:	01	01	01		
589F:	50			00160 00170	.HS 50040401010101010101010101040450; CHAR 5
58A0: 58A3:	$\begin{array}{c} 00 \\ 04 \end{array}$	01 04	05 05		
58A6: 58A9:	01 01	01 01	01 01		
58AC: 58AF:	01	01	01	00180	.HS 0001050404050101010101010101010
58B0: 58B3: 58B6:	00 40 00	00 40 00	40 40 00		
58B9: 58BC:	00 40	50 50	50 00		
58BF:	00			00190 00200	.HS 0000404040400000000505040500000; CHAR 6
58C0: 58C3:	55 7E	55 7E	7E 7E		
	6A		7E		
	7E 55	7E		00210	.HS 55557E7E7E7E6A6A6A6A7E7E7E7E5555
58D0: 58D3: 58D6:	BD	BD	BD		
	Α9	BD	BD		
58DF:		בב	33		.HS 5555BDBDBDBDBDA9A9A9A9BDBDBDBD5555;CHAR 7
	$\begin{smallmatrix}04\\44\end{smallmatrix}$				
58E9:	04	04	44		
	00 40			00240	.HS 04155544444455150404044455550400
58F3: 58F6:	44	40	40		
58F9:		44	44		
58FF:	00	- •	- •		.HS 40545444404050544444444454504000; CHAR 8
5903:		02	0A		
5909:	2A		2A		
590C: 590F:	0A 00	00	00	00270	.HS 000F0101020A2F2E2A2A2A2A0A000000

```
5910: 00 00 40
5913: 40 80 A0
5916: A8 A8 A8
5919: A8 A8 A8
591C: A0 00 00
591F: 00
               00280
                       .HS 0000404080A0A8A8A8A8A8A8A0000000
               00290 ;CHAR 9
5920: 05 04 05
5923: 09 2A 8B
5926: 8B 0A 2A
5929: 20 28 08
592C: 28 00 00
               00300
592F: 00
                       .HS 050405092A8B8B0A2A20280828000000
5930: 40 40 40
5933: 80 A0 88
5936: 88 80 A0
5939: 20 A0 80
593C: A0 00 00
593F: 00
               00310
                      .HS 40404080A0888880A020A080A0000000
               00320 ;CHAR 10
5940: 05 15 50
5943: 40 48 48
5946: 43 43 4B
5949: 4A 42 50
594C: 15 05
            0.0
594F: 00
               00330
                      .HS 05155040484843434B4A425015050000
5950: 50 54 05
5953: 01 21 21
5956: C1 C1 E1
5959: A1 81 05
595C: 54 50 00
595F: 00
                       .HS 505405012121C1C1E1A1810554500000
               00340
               00350 ;CHAR 11
5960: AA AA 96
5963: 96 92 96
5966: AA AA 88
5969: 88 80 80
596C: 88 8E AA
596F: AA
               00360
                      .HS AAAA96969296AAAA888888080888EAAAA
5970: AA AA 96
5973: 96 86 96
5976: AA AA 22
5979: 22 02 02
597C: 22 22 AA
597F: AA
               00370
                       .HS AAAA96968696AAAA222202022222AAAA
               00380 ;CHAR 12
5980: 00 0A 25
5983: 25 25 25
5986: 25 09 02
5989: 02 02 00
598C: 00 00 00
598F: 00
               00390
                      .HS 000A2525252525090202020000000000
5990: 00 28 96
5993: 56 56 56
5996: 56 58 60
5999: 60 60 80
599C: 80 80 00
                       .HS 0028965656565656586060608080800000
599F: 00
               00400
               00410 ;CHAR 13
59A0: 00 00 02
59A3: 0A 0B 0B
59A6: 0A 0A 02
59A9: 02 00 0A
59AC: 00 0A 00
               00420
                       .HS 0000020A0B0B0A0A0202000A000A0000
59AF: 00
59B0: 00
         00 A0
```

```
59B3: A8 B8 B8
59B6: 28 28 A0
59B9: A0 00 28
59BC: 80 28 00
59BF: 00
                      .HS 0000A0A8B8B82828A0A0002880280000
               00430
               00440 ;CHAR 14
59C0: 00 0A 2A
59C3: 2F 2F 2F
59C6: 2A 2A 0A
59C9: 02 02 00
59CC: 2A 02 2A
59CF: 00
               00450
                     .HS 000A2A2F2F2F2A2A0A0202002A022A00
59D0: 00 A8 AA
59D3: BE BE BE
59D6: 2A 2A 28
59D9: A0 A0 00
59DC: 2A A0 2A
59DF: 00
               00460
                       .HS 00A8AABEBEBE2A2A28A0A0002AA02A00
               00470 ;CHAR 15
59E0: 2A AA BE
59E3: BE BE BE
59E6: A8 A8 28
59E9: 0A 0A 00
59EC: A8 0A 0A
59EF: A8
               00480 .HS 2AAABEBEBEBEA8A8280A0A00A80A0AA8
59F0: A8 AA BE
59F3: BE BE BE
59F6: 2A 2A 28
59F9: A0 A0 00
59FC: 2A A0 A0
59FF: 2A
               00490
                      .HS A8AABEBEBEBE2A2A28A0A0002AA0A02A
               00500 ;CHAR 16
5A00: 03 03 00
5A03: 01 05 0D
5A06: 01 31 01
5A09: 15 00 0C
5A0C: 0C 0C 00
5A0F: 30
               00510 .HS 03030001050D01310115000C0C0C0030
5A10: C0 C0 00
5A13: 40 70 70
5A16: 40 4C 40
5A19: 54 00 30
5A1C: 30 30 00
5A1F: 0C
               00520
                      .HS C0C000407070404C405400303030000C
               00530 ;CHAR 17
5A20: 03 03 00
5A23: 05 17 OF
5A26: 01 35 14
5A29: 15 00 0C
5A2C: 0C 0C 00
5A2F: 30
               00540
                     .HS 03030005170F01351415000C0C0C0030
5A30: C0 C0 00
5A33: 50 D4 50
5A36: 40 0C 04
5A39: 54 00 30
5A3C: 30 30 00
5A3F: 0C
               00550
                       .HS C0C00050D450400C045400303030000C
               00560 ;CHAR 18
5A40: 03 03 00
5A43: 15 OF OD
5A46: 03 30 17
5A49: 05 00 0C
5A4C: 0C 0C 00
5A4F: 30
               00570
                      .HS 030300150F0D03301705000C0C0C0030
5A50: C0 C0 00
5A53: 54 50 70
```

```
5A56: 50 14 D4
5A59: 50 00 30
5A5C: 30 30 00
5A5F: 0C
               00580
                       .HS C0C0005450705014D45000303030000C
               00590 ;CHAR 19
5A60: 03 03 00
5A63: 03 0D 05
5A66: 17 50 55
5A69: 03 00 0C
5A6C: 0C 0C 00
                      .HS 030300030D0517505503000C0C0C0030
5A6F: 30
               00600
5A70: C0 C0 00
5A73: 50 50 50
5A76: 50 5C 54
5A79: 50 00 30
5A7C: 30 30 00
5A7F: 0C
               00610
                      .HS C0C000505050505C545000303030000C
               00620 ;CHAR 20
5A80: 01 01 05
5A83: 05 15 15
5A86: 01 01 01
5A89: 01 01 01
5A8C: 01 01 01
5A8F: 01
               00630 .HS 01010505151501010101010101010101
5A90: 40 40 50
5A93: 50 54 54
5A96: 40 40 40
5A99: 40 40 40
5A9C: 40 40 40
5A9F: 40
                      .HS 4040505054544040404040404040404040
               00640
               00650 ;CHAR 21
5AA0: 01 01 00
5AA3: 00 00 00
5AA6: 01 01 05
5AA9: 05 15 15
5AAC: 54 54 50
               00660
5AAF: 50
                      .HS 01010000000001010505151554545050
5AB0: 55 55 15
5AB3: 15 55 55
5AB6: 51 51 40
5AB9: 40 00 00
5ABC: 00 00 00
                       .HS 5555151555555515140400000000000000
5ABF: 00
               00670
               00680 ;CHAR 22
5AC0: 00 00 00
5AC3: 00 00 00
5AC6: 55 55 55
5AC9: 55 00 00
5ACC: 00 00 00
5ACF: 00
               00690
                       .HS 0000000000005555555000000000000
5AD0: 00 00 10
5AD3: 10 14 14
5AD6: 55 55 55
5AD9: 55 14 14
5ADC: 10 10 00
5ADF: 00
               00700
                      .HS 00001010141455555555141410100000
               00710 ;CHAR 23
5AE0: 50 50 54
5AE3: 54 15 15
5AE6: 05 05 01
5AE9: 01 00 00
5AEC: 00 00 01
5AEF: 01
                      .HS 50505454151505050101000000000101
               00720
5AF0: 00 00 00
5AF3: 00 00 00
5AF6: 41 41 51
```

```
5AF9: 51 55 55
5AFC: 15 15 55
5AFF: 55
                      .HS 0000000000041415151555515155555
               00730
               00740 ;CHAR 24
5B00: 01 01 01
5B03: 01 01 01
5B06: 01 01 01
5B09: 01 15 15
5B0C: 05 05 01
5B0F: 01
               00750 .HS 010101010101010101151505050101
5B10: 40 40 40
5B13: 40 40 40
5B16: 40 40 40
5B19: 40 54 54
5B1C: 50 50 40
5B1F: 40
                       .HS 404040404040404040545450504040
               00760
               00770 ;CHAR 25
5B20: 00 00 00
5B23: 00 00 00
5B26: 41 41 45
5B29: 45 55 55
5B2C: 54 54 55
5B2F: 55
               00780 .HS 00000000000414145455555545454555
5B30: 05 05 15
5B33: 15 54 54
5B36: 50 50 40
5B39: 40 00 00
5B3C: 00 00 40
5B3F: 40
               00790
                       .HS 05051515545450504040000000004040
               00800 ;CHAR 26
5B40: 00 00 04
5B43: 04 14 14
5B46: 55 55 55
5B49: 55 14 14
5B4C: 04 04 00
5B4F: 00
               00810
                      .HS 00000404141455555555141404040000
5B50: 00 00 00
5B53: 00 00 00
5B56: 55 55 55
5B59: 55 00 00
5B5C: 00 00 00
5B5F: 00
               00820 .HS 000000000005555555000000000000
               00830 ;CHAR 27
5B60: 55 55 54
5B63: 54 55 55
5B66: 45 45 41
5B69: 41 00 00
5B6C: 00 00 00
5B6F: 00
               00840
                     .HS 5555545455554545414100000000000000
5B70: 40 40 00
5B73: 00 00 00
5B76: 40 40 50
5B79: 50 54 54
5B7C: 15 15 05
5B7F: 05
               00850
                       .HS 40400000000040405050545415150505
                               .IN "D2:DUNGEON"
               00190
               00010 ; DUNGEON MODULE
               00020 ; EQUATES FOR DUNGEON MOD
3000:
               00030 DUNGEON.PIC
                                   .EQ BASE
5000:
               00040 P.M.BASE .EQ BASE+$2000
5000:
               00050 C.BASE
                               .EQ BASE+$2000
5300:
               00060 M.BASE
                               .EQ P.M.BASE+$300
               00070 P.BASE
5400:
                               .EQ P.M.BASE+$400
               00080 ;TIMES 120 TABLE
4F88:
               00090 T.120.H .EQ P.M.BASE-120
4FC4:
               00100 T.120.L .EO T.120.H+60
```

```
00110 ; PLAYER DISPLAY
               00120 PLAY.PIC .EQ T.120.H-160
4EE8:
4EC0:
               00130 NAME.PIC .EQ PLAY.PIC-40
0051:
               00140 DISPLAY.LENGTH .EQ 81
               00150 DISPLAY.LIST .EQ NAME.PIC-DISPLAY.LENGTH
4E6F:
                               .IN "D2:EDIT"
               00200
               00010 ;EDITOR MODULE
               00020 EDIT.X
5B80:
                               .BS 1
5B81:
               00030 EDIT.Y
                               .BS 1
5B82:
               00040 E.LEVEL .BS 1
               00050 E.CHAR
5B83:
                               .BS 1
               00060 EDIT
5B84: 20 09 63 00070
                               JSR DUNGEON.INIT
5B87: A9 00
               08000
                               LDA #0
5B89: 8D 4D 73 00090
                               STA G.N.P
5B8C: 20 64 6D 00100
                               JSR SCORE.INIT
5B8F: A2 A0
               00110
                              LDX #160
5B91: BD A4 5D 00120 .1
                              LDA ED.INST-1,X
5B94: 9D E7 4E 00130
                               STA PLAY.PIC-1,X
5B97: CA
               00140
                               DEX
                               BNE .1
5B98: D0 F7
               00150
               00160 ; INFORM DUNGEON.SWAP.IN IT'S A
               00170 ; BOGUS SWAP IN (CRUDE)
5B9A: A9 FF
               00180
                               LDA #$FF
5B9C: 8D BB 65 00190
                               STA BOGUS.SWAP.IN
5B9F: AD 82 5B 00200
                              LDA E.LEVEL
5BA2: A2 00
                              LDX #0 ; NEW
               00210
5BA4: A0 00
               00220
                               LDY #0 ; GOING DOWN
5BA6: 20 BC 65 00230
                               JSR DUNGEON.SWAP.IN
5BA9: A9 00
               00240
                               LDA #0
5BAB: 8D 3A 67 00250
                               STA C.X.L
5BAE: 8E 3B 67 00260
                               STX C.X.H
5BB1: 8D 3C 67 00270
                               STA C.Y.L
5BB4: 8C 3D 67 00280
                               STY C.Y.H
               00290 ;SET UP CHAR TO PLOT
5BB7: A9 00
               00300 E.C.P
                               LDA #0
5BB9: 8D 83 5B 00310
                               STA E.CHAR
               00320;
               00330 EDIT.LOOP
5BBC: 20 96 66 00340
                               JSR DUNGEON.SHOW
               00350 ; WAIT FOR A TICK
5BBF: A5 14
               00360
                               LDA RTCLOK+2
5BC1: C5 14
               00370 .2
                               CMP RTCLOK+2
5BC3: F0 FC
               00380
                               BEQ .2
               00390 ;GET STICK
5BC5: AD 78 02 00400
                               LDA STICKO
5BC8: 0A
               00410
                               ASL
5BC9: A8
               00420
                               TAY
5BCA: 18
                               CLC
               00430
5BCB: AD 3A 67 00440
                               LDA C.X.L
5BCE: 79 F5 5C 00450
                              ADC P.X.TAB, Y
5BD1: 8D 3A 67 00460
                               STA C.X.L
5BD4: AD 3B 67 00470
                               LDA C.X.H
5BD7: 79 F6 5C 00480
                              ADC P.X.TAB+1,Y
5BDA: 8D 3B 67 00490
                              STA C.X.H
5BDD: 18
                               CLC
               00500
5BDE: AD 3C 67 00510
                               LDA C.Y.L
5BE1: 79 15 5D 00520
                               ADC P.Y.TAB,Y
5BE4: 8D 3C 67 00530
                               STA C.Y.L
5BE7: AD 3D 67 00540
                              LDA C.Y.H
5BEA: 79 16 5D 00550
                               ADC P.Y.TAB+1,Y
5BED: 8D 3D 67 00560
                               STA C.Y.H
               00570 CLIP
5BF0: AD 3D 67 00580
                               LDA C.Y.H
5BF3: C9 1D
               00590
                               CMP #29
5BF5: B0 09
               00600
                               BCS .2
```

```
5BF7: C9 01
               00610
                              CMP #1
5BF9: B0 07
               00620
                              BCS .1
                              LDA #1
5BFB: A9 01
               00630
5BFD: 4C 02 5C 00640
                              JMP .1
5C00: A9 1C
               00650 .2
                              LDA #28
5C02: 8D 3D 67 00660 .1
                              STA C.Y.H
5C05: AD 3B 67 00670
                              LDA C.X.H
5C08: C9 3A
                              CMP #58
               00680
                              BCS .4
5C0A: B0 09
               00690
               00700
                              CMP #1
5C0C: C9 01
                              BCS .3
5C0E: B0 07
               00710
5C10: A9 01
               00720
                              LDA #1
5C12: 4C 17 5C 00730
                              JMP .3
5C15: A9 3A
               00740 .4
                              LDA #58
5C17: 8D 3B 67 00750 .3
                              STA C.X.H
               00760 ;TWIDDLE TO MAKE CURSOR
5C1A: AD 3B 67 00770
                              LDA C.X.H
5C1D: 8D 80 5B 00780
                              STA EDIT.X
5C20: AD 3D 67 00790
                              LDA C.Y.H
5C23: 8D 81 5B 00800
                             STA EDIT.Y
               00810 ;set cursor position
                       LDX #E.X.C-PLAY.PIC
5C26: A2 8E
               00820
5C28: AD 80 5B 00830
                              LDA EDIT.X
5C2B: 20 46 5E 00840
                              JSR TYPE.NUMBER
5C2E: A2 91
               00850
                              LDX #E.Y.C-PLAY.PIC
5C30: A9 1D
               00860
                             LDA #29
5C32: 38
               00870
                              SEC
5C33: ED 81 5B 00880
                              SBC EDIT.Y
5C36: 20 46 5E 00890
                              JSR TYPE.NUMBER
               00900 ;SAVE OLD CHAR
5C39: AE 80 5B 00910
                              LDX EDIT.X
5C3C: AC 81 5B 00920
                              LDY EDIT.Y
5C3F: 20 3E 67 00930
                             JSR DUNGEON.WHATS.AT
5C42: 48
               00940
                              PHA
5C43: AA
               00950
                              TAX
5C44: BD AD 5D 00960
                              LDA TRANS.INT, X
5C47: 8D 7E 4F 00970
                              STA E.O.C
               00980 ;SHOW CURSOR
5C4A: AE 80 5B 00990
                            LDX EDIT.X
5C4D: AC 81 5B 01000
                              LDY EDIT.Y
5C50: A9 10
                             LDA #16
               01010
5C52: 20 56 67 01020
                              JSR DUNGEON.PLOT
5C55: A5 14
               01030
                              LDA RTCLOK+2
5C57: C5 14
               01040 .5
                              CMP RTCLOK+2
5C59: F0 FC
               01050
                              BEQ .5
5C5B: 68
               01060
                              PLA
               01070 ; IF TRIGGER, PLOT E.CHAR
               01080 ;ELSE RESTORE OLD CHAR
5C5C: AE 84 02 01090
                              LDX STRIG0
                              BNE .6
5C5F: D0 03
               01100
5C61: AD 83 5B 01110
                              LDA E.CHAR
5C64: AE 80 5B 01120 .6
                              LDX EDIT.X
5C67: AC 81 5B 01130
                              LDY EDIT.Y
5C6A: 20 56 67 01140
                              JSR DUNGEON.PLOT
               01150 ; CHECK KEYBOARD
5C6D: 20 D6 62 01160
                              JSR GET.CHAR
                              BCC PARSE.CHAR
5C70: 90 10
               01170
               01180 ; CHECK BREAK KEY
5C72: 20 FB 6E 01190
                              JSR CHECK.BREAK
               01200 ; CHECK CONSOL KEYS
5C75: AD 1F D0 01210
                              LDA CONSOL
5C78: C9 07
               01220
                              CMP #7
5C7A: F0 03
               01230
                              BEQ .7
5C7C: 4C D7 5C 01240
                              JMP EDIT.QUIT
5C7F: 4C BC 5B 01250 .7
                              JMP EDIT.LOOP
               01260 PARSE, CHAR
```

```
CMP #'-
5C82: C9 2D
               01270
                                            ;UP
5C84: D0 15
               01280
                               BNE .2
5C86: AE 82 5B 01290
                               LDX E.LEVEL
5C89: E0 02
               01300
                               CPX #2
5C8B: 90 01
                               BCC .16
               01310
5C8D: CA
               01320
                               DEX
5C8E: 8E 82 5B 01330 .16
                               STX E.LEVEL
5C91: 8A
               01340
                               TXA
5C92: 18
               01350
                               CLC
5C93: 69 20
                               ADC #$20
               01360
5C95: 8D E4 4E 01370
                              STA LEVEL.LABEL
5C98: 4C BC 5B 01380
                               JMP EDIT.LOOP
                               CMP #'=
5C9B: C9 3D
               01390 .2
                                            ; DOWN
5C9D: D0 0D
               01400
                               BNE .3
5C9F: A0 00
               01410
                               LDY #0
5CA1: AE 82 5B 01420
                               LDX E.LEVEL
5CA4: E0 1A
               01430
                               CPX #26
5CA6: B0 E6
               01440
                               BCS .16
5CA8: E8
               01450
                               INX
5CA9: 4C 8E 5C 01460
                               JMP .16
5CAC: C9 52
               01470 .3
                               CMP #'R
5CAE: D0 14
               01480
                               BNE .4
               01490 ; READ IN LEVEL
5CB0: A0 00
               01500 .31
                               LDY #0
5CB2: AE 82 5B 01510
                               LDX E.LEVEL
5CB5: 8A
               01520
                               TXA
5CB6: A2 00
               01530
                               LDX #0
5CB8: 20 BC 65 01540
                               JSR DUNGEON.SWAP.IN
5CBB: 8E 3B 67 01550
                               STX C.X.H
5CBE: 8C 3D 67 01560
                               STY C.Y.H
5CC1: 4C BC 5B 01570
                               JMP EDIT.LOOP
5CC4: C9 57
                               CMP #'W
               01580 .4
5CC6: D0 0B
               01590
                               BNE .5
               01600 ; WRITE THIS LEVEL
5CC8: A2 00
               01610
                               LDX #0
                                            ; NEW(!)
5CCA: AD 82 5B 01620
                               LDA E.LEVEL
5CCD: 20 CE 64 01630
                               JSR DUNGEON.SWAP.OUT
               01640 ; AND READ IT ('CAUSE WRITE IS
               01650 ; DESTRUCTIVE)
5CD0: 4C B0 5C 01660
                               JMP .31
5CD3: C9 51
               01670 .5
                               CMP #'Q
                               BNE E2INT
5CD5: D0 06
               01680
               01690 ;QUIT OUT OF EDITOR
               01700 EDIT.QUIT
5CD7: 20 0E 64 01710
                               JSR DUNGEON.QUIT
5CDA: 4C 69 72 01720
                               JMP RESTART
               01730 ;TRANSLATE TO INTERNAL CODE
5CDD: A2 0F
               01740 E2INT LDX #HIGH.TRANS
5CDF: DD 95 5D 01750 .71
                               CMP TRANS.EXT,X
               01760
5CE2: F0 05
                               BEQ .72
5CE4: CA
               01770
                               DEX
                               BPL .71
5CE5: 10 F8
               01780
5CE7: A2 00
               01790
                               LDX #0
5CE9: 8E 83 5B 01800 .72
                               STX E.CHAR
5CEC: BD AD 5D 01810
                               LDA TRANS.INT,X
5CEF: 8D 84 4F 01820
                               STA E.C.C
               01830 ;
5CF2: 4C BC 5B 01840 .9
                               JMP EDIT.LOOP
5CF5: 00 00 00
5CF8: 00 00 00
5CFB: 00 00 00
5CFE: 00
               01850 P.X.TAB
                              .DA 0,0,0,0,0
                                                ;0-4
5CFF: 40 00 40
5D02: 00 40 00
                               .DA 64,64,64,0
5D05: 00 00
               01860
                                                ;5-8
5D07: C0 FF C0
```

```
.DA -64, -64, -64; 9-11
5D0A: FF C0 FF 01870
5D0D: 00 00 00
5D10: 00 00 00
5D13: 00 00
               01880
                              .DA 0,0,0,0 ;12-15
5D15: 00 00 00
5D18: 00 00 00
5D1B: 00 00 00
               01890 P.Y.TAB .DA 0,0,0,0,0
5D1E: 00
                                              ;0-4
5D1F: 40 00 C0
5D22: FF 00 00
5D25: 00 00
               01900
                              .DA 64,-64,0,0
                                              ;5-8
5D27: 40 00 C0
                       .DA 64,-64,0 ;9-11
5D2A: FF 00 00 01910
5D2D: 00 00 40
5D30: 00 C0 FF
5D33: 00 00
               01920
                              .DA 0,64,-64,0 ;12-15
               01930 DEFAULT.DUNGEON
                          LDA #29 ;FOR Y=29 TO 0
5D35: A9 1D
               01940
5D37: 85 F1
               01950
                             STA AH
5D39: A9 3B
                            LDA #59 ;FOR X=59 TO 0
               01960 .81
5D3B: 85 F0
               01970
                              STA AL
                            LDA #0
5D3D: A9 00
               01980 .82
5D3F: A6 F0
               01990
                             LDX AL
5D41: A4 F1
               02000
                              LDY AH
5D43: 20 56 67 02010
                              JSR DUNGEON.PLOT
5D46: C6 F0
              02020
                             DEC AL
                                       ; NEXT X
5D48: 10 F3
               02030
                              BPL .82
5D4A: C6 F1
               02040
                              DEC AH
                                      ;NEXY Y
5D4C: 10 EB
               02050
                              BPL .81
               02060 ; PUT IN LEFT AND RIGHT WALLS
                             LDA #29 ;FOR Y=29 TO 0
5D4E: A9 1D
               02070
5D50: 85 F1
                              STA AH
               02080
5D52: A9 01
               02090 .83
                             LDA #1
5D54: A4 F1
               02100
                             LDY AH
5D56: A2 00
               02110
                              LDX #0
5D58: 20 56 67 02120
                             JSR DUNGEON.PLOT
5D5B: A9 01
               02130
                             LDA #1
5D5D: A4 F1
               02140
                              LDY AH
5D5F: A2 3B
               02150
                              LDX #59
5D61: 20 56 67 02160
                              JSR DUNGEON.PLOT
5D64: C6 F1
               02170
                              DEC AH
                                       ; NEXT Y
5D66: 10 EA
                              BPL .83
               02180
               02190 ; AND TOP AND BOTTOM
5D68: A9 3B
               02200
                          LDA #59 ; FOR X=59 TO 0
5D6A: 85 F0
               02210
                              STA AL
5D6C: A9 01
               02220 .84
                              LDA #1
5D6E: A6 F0
               02230
                              LDX AL
5D70: A0 00
               02240
                             LDY #0
                             JSR DUNGEON.PLOT LDA #1
5D72: 20 56 67 02250
5D75: A9 01
               02260
5D77: A6 F0
               02270
                              LDX AL
5D79: A0 1D
                            LDY #29
JSR DUN
               02280
5D7B: 20 56 67 02290
                              JSR DUNGEON.PLOT
5D7E: C6 F0
               02300
                              DEC AL
                                       ; NEXT X
               02310
5D80: 10 EA
                              BPL .84
               02320 ; AND UP
5D82: A9 03
               02330
                              LDA #3
5D84: A2 05
               02340
                              LDX #5
5D86: A0 05
               02350
                              LDY #5
5D88: 20 56 67 02360
                              JSR DUNGEON.PLOT
               02370 ; AND DOWN
5D8B: A9 04
               02380
                             LDA #4
                              LDX #8
5D8D: A2 08
               02390
5D8F: A0 05
               02400
                              LDY #5
5D91: 20 56 67 02410
                              JSR DUNGEON.PLOT
5D94: 60
         02420
                              RTS
```

```
02430 ; TABLE OF CHARS TO TRANSLATE
              02440 ; NUMERICAL ORDER
              02450 TRANS.EXT
5D95: 20 2A 4F
5D98: 55 44 4B
5D9B: 2B 24 53
5D9E: 31 32 33
5DA1: 48 41 42
                            .AS " *OUDK+$S123HABC"
5DA4: 43
              02460
000F:
              02470 HIGH.TRANS .EQ *-TRANS.EXT-1
              02480 ED.INST
5DA5: 00 00 34
5DA8: 79 70 65
5DAB: 00 02
              02490
                            .AT ' Type "'
              02500 TRANS.INT
5DAD: 00 0A 6F
5DB0: 75 64 6B
5DB3: 0B 04 73
5DB6: 11 12 13
5DB9: 68 61 62
              02510 .AT " *oudk+$s123habc"
5DBC: 63
5DBD: 02 00 74
5DC0: 6F 00 64
5DC3: 72 61 77
5DC6: 00 69 74
5DC9: 65 6D 00
              02520 .AT '" to draw item '
5DCC: 00
5DCD: 00 00 00
5DD0: 00 02 0D
5DD3: 02 00 75
5DD6: 70 00 6C
5DD9: 65 76 65
5DDC: 6C 00 00
              02530 .AT ' "-" up level '
5DDF: 00 00
5DE1: 02 1D 02
5DE4: 00 64 6F
5DE7: 77 6E 00
5DEA: 6C 65 76
5DED: 65 6C 00
5DF0: 00 00 00
              02540 .AT '"=" down level '
5DF3: 00 00
5DF5: 00 00 00
5DF8: 00 02 32
5DFB: 02 00 72
5DFE: 65 61 64
5E01: 00 6C 65
5E04: 76 65 6C
              02550 .AT ' "R" read level '
5E07: 00 00
5E09: 02 37 02
5E0C: 00 77 72
5E0F: 69 74 65
5E12: 00 6C 65
5E15: 76 65 6C
5E18: 00 00 00
5E1B: 00 00
              02560 .AT '"W" write level '
5E1D: 00 00 00
5E20: 00 02 31
5E23: 02 00 71
5E26: 75 69 74
5E29: 00 65 64
5E2C: 69 74 6F
                           .AT '
5E2F: 72 00
             02580
                                     "Q" quit editor '
                            .AT ' ('
5E31: 00 08
              02590 E.X.C .EQ PLAY.PIC+*-ED.INST
4F76:
5E33: 78 78 0C 02600
                          .AT 'xx,'
4F79: 02610 E.Y.C
                          .EO PLAY.PIC+*-ED.INST
```

```
5E36: 79 79 09
                                .AT 'yy)="'
5E39: 1D 02
                02620
                                .EQ PLAY.PIC+*-ED.INST
4F7E:
                02630 E.O.C
5E3B: 63 02 1C
                                .AT 'c"<--"'
5E3E: 0D 0D 02 02640
                                .EQ PLAY.PIC+*-ED.INST
                02650 E.C.C
4F84:
5E41: 00 02 00
                                .AT ' "
5E44: 00 00
                02660
                02670 ; PUT (A) -> PLAY.PIC[X,X+1]
                02680 ; DECIMAL
                02690 TYPE.NUMBER
                                CMP #10
5E46: C9 0A
                02700
5E48: 90 15
                02710
                                BCC .1
5E4A: A0 00
                02720
                                LDY #0
5E4C: 38
                02730 .2
                                SEC
5E4D: E9 0A
                02740
                                SBC #10
5E4F: C8
                02750
                                INY
5E50: C9 0A
                02760
                                CMP #10
5E52: B0 F8
                02770
                                BCS .2
5E54: 48
                02780
                                PHA
5E55: 98
                02790
                                TYA
5E56: 18
                02800
                                CLC
5E57: 69 10
                02810
                                ADC #$10 ;TO INTERNAL
5E59: 9D E8 4E 02820
                                STA PLAY.PIC,X
5E5C: 4C 65 5E 02830
                                JMP .3
5E5F: 48
                02840 .1
                                PHA
5E60: A9 00
                02850
                                LDA #0
5E62: 9D E8 4E 02860
                                STA PLAY.PIC,X
5E65: 68
                02870 .3
                                PLA
5E66: 18
                02880
                                CLC
5E67: 69 10
                                ADC #$10
                02890
5E69: 9D E9 4E 02900
                                STA PLAY.PIC+1,X
5E6C: 60
                02910
                                RTS
                00210
                                .IN "D2:GAME"
                00010 ; GAME MODULE (WOOPIE)
5E6D:
                00020 M.P.X
                                .BS 4
5E71:
                00030 N.M.P.Y
                                .BS 4
5E75:
                00040 O.M.P.Y
                                .BS 4
5E79: FE FB EF
5E7C: BF
                00050 M.OFF
                                .HS FEFBEFBF
5E7D: 31 32 33
5E80: 34 21 22
5E83: 23 24 20 00060 KEY.TAB
                                .AS @1234!"#$ @
                00070 WARP.TIMER
5E86:
                                    .BS 1
5E87:
                00080 IN.FLIGHT
                                    .BS 4
                                .BS 4
5E8B:
                00090 M.X
                                .BS 4
5E8F:
                00100 M.Y
5E93:
                00110 M.X.V
                                .BS 4
5E97:
                00120 M.Y.V
                                .BS 4
5E9B:
                00130 N.BOMBS
                                .BS 4
5E9F:
                00140 N.KEYS
                                .BS 4
5EA3:
                00150 N.FOOD
                                .BS 4
5EA7:
                00160 HEALTH
                                .BS 4
5EAB:
                00170 P.IN.WARP
                                    .BS 4
5EAF:
                00180 P.X.H
                                .BS 4
                                .BS 4
5EB3:
                00190 P.X.L
5EB7:
                00200 P.Y.H
                                .BS 4
                                .BS 4
5EBB:
                00210 P.Y.L
5EBF:
                00220 P.DIR
                                .BS 4
5EC3: 00 01 00
5EC6: FF
                00230 DISK.X
                                .HS 000100FF
5EC7: FF 00 01
5ECA: 00
                00240 DISK.Y
                                .HS FF000100
                00250 ; GAME BEGINS HERE
5ECB:
                00260 P
                                .BS 1
5ECC: 00 28 50
```

```
5ECF: 78
               00270 SCORE.OFF
                                   .HS 00285078
5ED0: 00 00 00
5ED3: 00
               00280 STICK.DIR
                                   .HS 00000000
5ED4: 00 03 01
5ED7: 02
               00290
                                    .HS 00030102
5ED8: 00 05 07
5EDB: 06
               00300
                                    .HS 00050706
5EDC: 00 04 00 00310
                                    .HS 000400
0020:
               00320 INC
                               .EQ 32
5EDF: 00 00 20
5EE2: 00 20 00
5EE5: 20 00 00
5EE8: 00 E0 FF
5EEB: E0 FF E0
5EEE: FF
                00330 P.X.I .DA 0, INC, INC, INC, 0, -INC, -INC, -INC
5EEF: EO FF EO
5EF2: FF 00 00
5EF5: 20 00 20
5EF8: 00 20 00
5EFB: 00 00 E0
5EFE: FF
               00340 P.Y.I
                              .DA -INC,-INC,0,INC,INC,INC,0,-INC
                               .BS 2
               00350 NEW.X
5EFF:
5F01:
               00360 NEW.Y
                               .BS 2
5F03:
               00370 SAVE.DIR .BS 1
5F04:
               00380 NEW.LEVEL
                                    .BS 1
5F05:
               00390 CUR.LEVEL
                                    .BS 1
               00400 GAME
5F06: 20 09 63 00410
                               JSR DUNGEON.INIT
5F09: 20 64 6D 00420
                               JSR SCORE.INIT
5F0C: 20 5F 70 00430
                               JSR M.INIT
5F0F: 20 C4 67 00440
                               JSR D.INIT
5F12: 20 E7 6A 00450
                               JSR S.INIT
               00460 ;SET HEALTH OF NON-PLAYERS TO 0
5F15: AE 4D 73 00470
                               LDX G.N.P
5F18: E0 04
               00480 .17
                               CPX #4
5F1A: B0 09
               00490
                               BCS .18
5F1C: A9 00
               00500
                              LDA #0
5F1E: 9D A7 5E 00510
                               STA HEALTH, X
5F21: E8
               00520
                               INX
5F22: 4C 18 5F 00530
                               JMP .17
5F25: AE 4D 73 00540 .18
                             LDX G.N.P
               00550
5F28: CA
                               DEX
5F29: A9 09
                             LDA #9
               00560 .1
5F2B: 9D A7 5E 00570
                              STA HEALTH, X
                            LDA #0
STA N.BOMBS,X
STA N.KEYS,X
STA N.FOOD,X
STA P.DIR,X
5F2E: A9 00
               00580
5F30: 9D 9B 5E 00590
5F33: 9D 9F 5E 00600
5F36: 9D A3 5E 00610
5F39: 9D BF 5E 00620
5F3C: 9D 87 5E 00630
                               STA IN.FLIGHT, X
5F3F: CA
               00640
                               DEX
5F40: 10 E7
               00650
                               BPL .1
               00660 ; INFORM DUNGEON.SWAP.IT IT'S A
               00670 ; BOGUS SWAP IN (CRUDE!)
5F42: A9 FF
                               LDA #$FF
               00680
5F44: 8D BB 65 00690
                               STA BOGUS.SWAP.IN
5F47: A2 00
               00700
                               LDX #0
5F49: A0 00
               00710
                               LDY #0
5F4B: AD 82 5B 00720
                               LDA E.LEVEL
5F4E: 8D 05 5F 00730 GAME.DUN STA CUR.LEVEL
5F51: 20 BC 65 00740
                               JSR DUNGEON.SWAP.IN
5F54: 86 F0
               00750
                               STX AL
5F56: 84 F1
               00760
                               STY AH
5F58: 8E 3B 67 00770
                               STX C.X.H
5F5B: 8C 3D 67 00780
                               STY C.Y.H
5F5F: A9 OF 00790
                              TDA #7.WARP.TN
```

=====		4.0					
			6B	00800			S.EFFECT
5F63:				00810		LDA	
			5E	00820			WARP.TIMER
5F68:				00830		LDX	
5F6A:				00840	.10	LDA	
				00850			P.IN.WARP,X
5F6F:			62				CHECK.PLAYER
5F72:				00870			.11
5F74:			-	08800		LDA	
				00890			SCORE.MSG
5F79:		0B	6F.				INVENTORY
5F7C:				00910	•11	DEX	
5F7D:							.10
5F7F:				00930			#\$80
2F.8T:	QD QB	3A	6/	00940			C.X.L
				00950			C.Y.L
				00960			G.N.P
				00970		STA	
				00980		DEC	
				00990	• 1	LDX	
5F93:			02				CHECK.PLAYER
5F96:		28 CB	E 177	01010		BCC	
			ЭЕ	01020		LDY	
5F9B:			E 177	01030		LDA	
				01040			P.X.L,Y
			ЭЕ	01050			P.Y.L,Y
5FA3:		ΓU		01060		LDA	AL
5FA5:		C 2	E 177	01070		CLC	DICK A A
SEAO:	00	75	25	01080 01090			DISK.X,Y P.X.H,Y
5FAC:		AL	ЭĿ	01100		TAX	F.X.11, 1
5FAD:		c 1		01110		LDA	λU
5FAF:		гт		01110		CLC	AII
		C7	50	01120			DISK.Y,Y
5FB3•	99	B7	5E	01130			P.Y.H,Y
5FB6:		ט,	ЭЦ	01150		TAY	1 • 1 • 11 , 1
		CB	5 E	01160		LDA	D
5FBA:		CD	JЦ	01170		CLC	-
5FBB:		10				ADC	#16
				01190			DUNGEON.PLOT
				01200		DEC	
5FC3:			J_	01210		BPL	
31 00 1		-			;60TH OF		
				01230			200112
5FC5:	ΑD	86	5E	01240		T ₁ DA	WARP.TIMER
5FC8:			-	01250			TICK.NORMAL
			5E	01260			WARP.TIMER
5FCD:				01270			TICK.NORMAL
				01280			SWAP.LEVELS
							TER OF SCREEN
					TICK.NOR		
5FD2:	Α9	00		01310		LDA	#0
				01320		STA	
				01330		STA	
				01340		STA	
5FDA:	85	F2		01350		STA	BL
5FDC:	85	F3		01360		STA	
5FDE:						STA	
5FE0:						LDX	
				01390			CHECK.PLAYER
5FE5:				01400			.11
				01410	; DEAD MA	N	ADD IN OLD COG
5FE7:	AD	3A	67	01420	•		C.X.L
				01430			P.X.L,X
				01440			C.X.H
5FF0:	9D	AF	5E	01450		STA	P.X.H.X

```
LDA C.Y.L
5FF3: AD 3C 67 01460
5FF6: 9D BB 5E 01470
                                STA P.Y.L,X
5FF9: AD 3D 67 01480
                               LDA C.Y.H
5FFC: 9D B7 5E 01490
                                STA P.Y.H,X
5FFF: 18
                01500 .11
                                CLC
                01510
6000: A5 F0
                               LDA AL
6002: 7D B3 5E 01520
                               ADC P.X.L,X
6005: 85 F0
                01530
                                STA AL
6007: A5 F1
                01540
                                LDA AH
6009: 7D AF
            5E 01550
                                ADC P.X.H,X
600C: 85 F1
                01560
                                STA AH
600E: A5 F4
                01570
                                LDA DL
6010: 69 00
                01580
                                ADC #0
6012: 85 F4
                01590
                                STA DL
                01600 ; NOW DO Y
6014: 18
                01610
                                CLC
6015: A5 F2
                01620
                               LDA BL
6017: 7D BB 5E 01630
                                ADC P.Y.L,X
601A: 85 F2
                01640
                                STA BL
601C: A5 F3
                01650
                               LDA BH
601E: 7D B7
            5E 01660
                               ADC P.Y.H,X
6021: 85 F3
                01670
                                STA BH
6023: A5 F5
                01680
                                LDA DH
6025: 69 00
                01690
                                ADC #0
6027: 85 F5
                01700
                                STA DH
6029: CA
                01710
                                DEX
602A: 10 B6
                01720
                               BPL .1
                01730 ; DIVIDE RESULT BY 4
602C: A5 F4
                               LDA DL
                                             ;X FIRST
                01740
602E: 4A
                01750
                               LSR
602F: 66 F1
                01760
                                ROR AH
6031: 66 F0
                01770
                               ROR AL
6033: 4A
                01780
                               LSR
6034: 66 F1
                01790
                                ROR AH
6036: 66 F0
                01800
                                ROR AL
6038: A5 F1
                01810
                               LDA AH
603A: 8D 3B 67 01820
                                STA C.X.H
603D: A5 F0
                01830
                               LDA AL
603F: 8D 3A 67 01840
                                STA C.X.L
6042: A5 F5
                01850
                               LDA DH
                                             ;Y FIRST
6044: 4A
                01860
                               LSR
6045: 66 F3
                                ROR BH
                01870
6047: 66 F2
                01880
                               ROR BL
6049: 4A
                01890
                               LSR
604A: 66 F3
                01900
                                ROR BH
604C: 66 F2
                01910
                                ROR BL
604E: A5 F3
                01920
                               LDA BH
6050: 8D 3D 67 01930
                                STA C.Y.H
6053: A5 F2
                01940
                               LDA BL
6055: 8D 3C 67 01950
                                STA C.Y.L
                01960 ; DISPLAY
6058: 20 96 66 01970
                                JSR DUNGEON.SHOW
                01980 ; WAIT FOR TICK
605B: A5 14
                01990
                               LDA RTCLOK+2
605D: C5 14
                02000 .2
                                CMP RTCLOK+2
605F: F0 FC
                02010
                                BEQ .2
                02020 ; CHECK KEYBOARD
6061: 20 D6 62 02030 CHECK.CH JSR GET.CHAR
6064: B0 4A
                02040
                               BCS .1
6066: A2 08
                02050
                               LDX #8
6068: DD 7D 5E 02060 .3
                                CMP KEY. TAB, X
606B: F0 06
                02070
                                BEQ .2
606D: CA
                02080
                                DEX
606E: 10 F8
                02090
                                BPL .3
6070: 4C B0 60 02100
                                JMP .1 ; DUD KEY-STROKE
6073: E0 04 02110 .2
                               CPX #4
```

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6075: B0 0E
               02120
                             BCS .5
6077: 20 C4 62 02130
                             JSR CHECK.PLAYER
              02140
607A: 90 34
                             BCC .1 ; DEAD
               02150 ;EAT HEALTH FOOD
607C: 8E CB 5E 02160
                             STX P
6082: 4C B0 60 02180
6085: E0 00
607F: 20 A4 6F 02170
                             JSR EAT.HEALTH.FOOD
                             JMP .1
6085: E0 08
              02190 .5
                             CPX #8
6087: B0 13
              02200
                             BCS .9
              02210 ;FIRE SMART BOMB
6089: 8A
              02220
                           TXA
608A: 38
              02230
                            SEC
608B: E9 04
                            SBC #4
              02240
608D: AA
               02250
                            TAX
608E: 20 C4 62 02260
                            JSR CHECK.PLAYER
                            BCC .1 ;DEAD
STX P
6091: 90 1D
              02270
6093: 8E CB 5E 02280
                      JSR FIRE.SMART.BOMB
6096: 20 BC 6F 02290
6099: 4C B0 60 02300
               02310 ;FREEZE GAME
609C: 20 D6 62 02320 .9
                             JSR GET.CHAR
609F: 90 OF
              02330
                             BCC .1
               02340 ; CONSOL ACTIVITY?
60A1: A9 08
               02350
                           LDA #8
60A3: 8D 1F D0 02360
                            STA CONSOL
60A6: AD 1F D0 02370
                            LDA CONSOL
60A9: C9 07
               02380
                            CMP #7
                            BNE .99
60AB: D0 12
               02390
60AD: 4C 9C 60 02400
                             JMP .9
               02410 .1
               02420 ; CHECK BREAK KEY
60B0: 20 FB 6E 02430
                             JSR CHECK.BREAK
               02440 ; CHECK CONSOL
60B3: A9 08
              02450
                            LDA #8
60B5: 8D 1F D0 02460
                            STA CONSOL
60B8: AD 1F D0 02470
                            LDA CONSOL
60BB: C9 07
              02480
                            CMP #7
60BD: F0 03
               02490
                            BEQ MOVE.PLAYERS
60BF: 4C BB 62 02500 .99
                             JMP GAME.QUIT
               02510 MOVE.PLAYERS
60C2: AD 4D 73 02520 .3
                         LDA G.N.P
60C5: 8D CB 5E 02530
                             STA P
60C8: CE CB 5E 02540 MOVE.LOOP DEC P
              02550 BPL .19
60CB: 10 03
60CD: 4C AF 62 02560
                             JMP MOVE.LOOP.Q
60D0: AE CB 5E 02570 .19
                             LDX P
60D3: BD CC 5E 02580
                            LDA SCORE.OFF,X
60D6: A8
              02590
                            TAY
                            LDA HEALTH, X
60D7: BD A7 5E 02600
                            CLC
ADC #16
60DA: 18
               02610
                        ADC #16
STA P.HEALTH, Y
JSR CHECK BT
60DB: 69 10
               02620
60DD: 99 F0 4E 02630
60E0: 20 C4 62 02640
                             JSR CHECK.PLAYER
60E3: 90 E3
              02650
                             BCC MOVE.LOOP ; DEAD
               02660 ;LIVE PLAYER -- MOVE 'IM
60E5: AE CB 5E 02670
                             LDX P
60E8: BD 78 02 02680
                             LDA STICKO,X
60EB: C9 OF
               02690
                            CMP #15
60ED: F0 D9
               02700
                            BEQ MOVE.LOOP ; NOT
60EF: A8
               02710
                             TAY
60F0: BD 84 02 02720
                             LDA STRIGO,X
                     BEQ MOVE.LOOP ;
LDA STICK.DIR,Y
STA P.DIR,X
60F3: F0 D3
            02730
60F5: B9 D0 5E 02740
60F8: 9D BF 5E 02750
               02760 ; INCREMENTAL MOVE
60FB: 0A
               02770 AST
```

```
60FC: A8
               02780
                              TAY
60FD: 18
               02790
                              CLC
60FE: BD B3 5E 02800
                              LDA P.X.L,X
6101: 79 DF 5E 02810
                             ADC P.X.I,Y
6104: 8D FF 5E 02820
                             STA NEW.X
6107: BD AF 5E 02830
                              LDA P.X.H,X
610A: 79 E0 5E 02840
                             ADC P.X.I+1,Y
610D: 8D 00 5F 02850
                             STA NEW.X+1
6110: 18
               02860
                              CLC
6111: BD BB 5E 02870
                              LDA P.Y.L,X
6114: 79 EF 5E 02880
                             ADC P.Y.I,Y
6117: 8D 01 5F 02890
                             STA NEW.Y
611A: BD B7 5E 02900
                              LDA P.Y.H,X
611D: 79 F0 5E 02910
                             ADC P.Y.I+1,Y
6120: 8D 02 5F 02920
                              STA NEW.Y+1
               02930 ;SEE IF MOVED ON-SCREEN
6123: AD 00 5F 02940
                              LDA NEW.X+1
6126: DD AF 5E 02950
                              CMP P.X.H,X
6129: D0 26
               02960
                              BNE MOVE.IT
612B: AD 02 5F 02970
                              LDA NEW.Y+1
612E: DD B7 5E 02980
                              CMP P.Y.H,X
6131: D0 1E
               02990
                              BNE MOVE.IT
               03000 ; NOPE, SO SAVE NEW LOC & LOOP
               03010 MOVE.SAVE
6133: AE CB 5E 03020
                              LDX P
6136: AD FF 5E 03030
                              LDA NEW.X
6139: 9D B3 5E 03040
                             STA P.X.L,X
613C: AD 00 5F 03050
                             LDA NEW.X+1
613F: 9D AF 5E 03060
                             STA P.X.H,X
6142: AD 01 5F 03070
                             LDA NEW.Y
6145: 9D BB 5E 03080
                             STA P.Y.L,X
6148: AD 02 5F 03090
                              LDA NEW.Y+1
614B: 9D B7 5E 03100
                             STA P.Y.H,X
614E: 4C C8 60 03110
                             JMP MOVE.LOOP
               03120 ; YEP, LOOK AT NEW CELL
               03130 ; ALSO, CANCLE ATRACT MODE
6151: A9 00
               03140 MOVE.IT LDA #0
6153: 85 4D
               03150
                              STA ATRACT
6155: AE 00 5F 03160
                              LDX NEW.X+1
6158: AC 02 5F 03170
                             LDY NEW.Y+1
615B: 20 3E 67 03180
                             JSR DUNGEON.WHATS.AT
615E: C9 00
               03190
                              CMP #0
               03200
6160: D0 22
                              BNE PICK.UP
               03210 ;HIT NOTHING
6162: AE CB 5E 03220 MOVE.TO LDX P
6165: BD B7 5E 03230
                              LDA P.Y.H,X
6168: A8
               03240
                              TAY
                             LDA P.X.H,X
6169: BD AF 5E 03250
616C: AA
               03260
                             TAX
616D: A9 00
               03270
                              LDA #0
616F: 20 56 67 03280
                              JSR DUNGEON.PLOT
6172: AE 00 5F 03290
                             LDX NEW.X+1
6175: AC 02 5F 03300
                              LDY NEW.Y+1
6178: AD CB 5E 03310
                              LDA P
617B: 18
               03320
                              CLC
617C: 69 10
               03330
                              ADC #16
617E: 20 56 67 03340
                              JSR DUNGEON.PLOT
6181: 4C 33 61 03350
                              JMP MOVE.SAVE
               03360 ;HIT SOMETHING
6184: C9 10
               03370 PICK.UP CMP #16
6186: 90 03
                              BCC .1
               03380
6188: 4C BC 61 03390
                              JMP HIT.WALL
618B: 48
               03400 .1
                              PHA
618C: 0A
               03410
                              \mathsf{ASL}
618D: AA
               03420
                              TAX
618E: BD 9C 61 03430
                              TDA HTT.OBJ.X
```

```
6191: 85 F0
                   03440
                                      STA AL
6193: BD 9D 61 03450
                                   LDA HI'
                                      LDA HIT.OBJ+1,X
                   03450
03460
6196: 85 F1
6198: 68
                   03470
                                     PLA
6199: 6C F0 00 03480
                                      JMP (AL)
                   03490 HIT.OBJ .DA HIT.WALL
619C: BC 61
                                                        ;0
                   03500 .DA HIT.WALL ;1
03510 .DA HIT.DOOR ;2
619E: BC 61
               61A0: 02 62
61A2: BC 61
                                                        ;3(UP)
61A4: 5B 62
61A6: 0D 62
61A8: 1D 62
61AA: 2D 62
61AC: 3D 62
61AE: BC 61
61B0: BC 61
                                                        ;10
                                    .DA HIT.WALL ;11
.DA HIT.WALL ;12
.DA HIT.WALL ;13
61B2: BC 61
61B4: BC 61
61B6: BC 61
61B8: BC 61
                                      .DA HIT.WALL ;14
.DA HIT.WALL ;15
61BA: BC 61
                   03650 ; PLAYER HIT A WALL -- IF IT'S
                   03660 ; A DIAGONAL MOVE THEN SLIDE HIM
                   03670 ;SIDEWAYS.
61BC: AE CB 5E 03680 HIT.WALL LDX P
61BF: BD BF 5E 03690
                                    LDA P.DIR,X
61C2: 29 01
                   03700
                                      AND #1
                                      BNE .1
61C4: D0 03
                   03710
                   03720 ; NOT DIAGONAL
61C6: 4C C8 60 03730 JMP MOVE.LOOP
61C9: BD AF 5E 03740 .1 LDA P.X.H,X
61CC: CD 00 5F 03750 CMP NEW.X+1
61CF: F0 1A 03760 BEQ .11
61D1: BD B7 5E 03770 LDA P.Y.H,X
61D4: CD 02 5F 03780 CMP NEW.Y+1
61D7: F0 03 03790 BEQ .12
                   03800 ; MOVED DIAGONALLY -- SO PUNT
61D9: 4C C8 60 03810
                                   JMP MOVE.LOOP
                   03820 ; MOVED X ONLY, SO UPDATE Y ONLY
61DC: AD 01 5F 03830 .12 LDA NEW.Y
61DF: 9D BB 5E 03840 STA P.Y.L,X
61E2: AD 02 5F 03850 LDA NEW.Y+1
61E5: 9D B7 5E 03860 STA P.Y.H,X
61E8: 4C C8 60 03870 JMP MOVE.LOG
61E8: 4C C8 60 03870
                                     JMP MOVE.LOOP
                   03880 ; MOVED Y ONLY, SO UPDATE X ONLY
61EB: AD FF 5E 03890 .11 LDA NEW.X
61EE: 9D B3 5E 03900 STA P.X.L,X
61F1: AD 00 5F 03910 LDA NEW.X+1
61F4: 9D AF 5E 03920 STA P.X.H,X
61F7: 4C C8 60 03930 JMP MOVE.LOOP
                   03940 TOO.MANY LDA #Z.HAVE.NONE
61FA: A9 08
61FC: 20 42 6B 03950
                                     JSR S.EFFECT
61FF: 4C C8 60 03960
                                      JMP MOVE.LOOP
6202: AE CB 5E 03970 HIT.DOOR LDX P
6205: 20 28 6F 03980 JSR OPEN.DOOR
                            BCS TOO.MANY
6208: B0 F0
                   03990
620A: 4C 62 61 04000
620D: AE CB 5E 04010 HIT.KEY LDX P
                             LDA N.KEYS,X
CMP #9
6210: BD 9F 5E 04020
6213: C9 09
                   04030
                                    BCS TOO.MANY
6215: B0 E3
                   04040
6217: FE 9F 5E 04050
                                     INC N.KEYS,X
621A: 4C 4D 62 04060
                                      JMP PICK.IT.UP
621D: AE CB 5E 04070 HIT.FOOD LDX P
6220: BD A3 5E 04080
                                      LDA N.FOOD,X
6223: C9 09 04090
                                     CMP #9
```

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6225: B0 D3
                              BCS TOO.MANY
               04100
6227: FE A3 5E 04110
                              INC N.FOOD,X
                     JMP PICK.IT.UP
622A: 4C 4D 62 04120
622D: AE CB 5E 04130 HIT.MONEY
                                 LDX P
6230: A9 07
                             LDA #Z.PICK.MONEY
               04140
6232: 20 42 6B 04150
                             JSR S.EFFECT
6235: A9 64
              04160
                            LDA #100
6237: 20 A2 6D 04170
                              JSR SCORE.INC
623A: 4C 62 61 04180
                              JMP MOVE.TO
623D: AE CB 5E 04190 HIT.BOMB LDX P
6240: BD 9B 5E 04200 LDA N.BOMBS,X
6243: C9 09
               04210
                             CMP #9
6245: B0 B3
                              BCS TOO.MANY
               04220
6247: FE 9B 5E 04230
624A: 4C 4D 62 04240
                             INC N.BOMBS,X
                             JMP PICK.IT.UP
               04250 ; ACTUALLY GRAB OBJECT
               04260 PICK.IT.UP
624D: A9 05
               04270
                             LDA #Z.PICKUP.OBJECT
624F: 20 42 6B 04280
                             JSR S.EFFECT
6252: AE CB 5E 04290
                            LDX P
6255: 20 OB 6F 04300
                              JSR INVENTORY
6258: 4C 62 61 04310
                              JMP MOVE.TO
               04320 HIT.DOWN
625B: A9 0E
               04330
                              LDA #Z.WARP.OUT
625D: 20 42 6B 04340
                              JSR S.EFFECT
               04350 ;GO INTO WARP
6260: AE CB 5E 04360
                              LDX P
6263: A9 02
               04370
                              LDA #2
6265: 20 40 6E 04380
                              JSR SCORE.MSG
6268: AE CB 5E 04390
                            LDX P
626B: BD B7 5E 04400
                              LDA P.Y.H,X
626E: A8
               04410
                              TAY
626F: BD AF 5E 04420
                            LDA P.X.H,X
6272: AA
               04430
                             TAX
                            LDA #0
6273: A9 00
               04440
6275: 20 56 67 04450
                             JSR DUNGEON.PLOT
6278: AE CB 5E 04460
                             LDX P
627B: A9 FF
               04470
                             LDA #$FF
627D: 9D AB 5E 04480
                             STA P.IN.WARP,X
               04490 ; EVERYBODY IN WARP OR DEAD?
6280: AE 4D 73 04500
                             LDX G.N.P
6283: CA
               04510 .1
                             DEX
6284: 30 08
               04520
                             BMI .2
6286: 20 C4 62 04530
                            JSR CHECK.PLAYER
6289: 90 F8
               04540
                              BCC .1
               04550 ;AT LEAST ONE PLAYER ALIVE
628B: 4C C8 60 04560
                              JMP MOVE.LOOP
               04570 ; NO PLAYERS LEFT ON SCREEN
628E: A9 28
               04580 .2
                              LDA #40
6290: 8D 86 5E 04590
                              STA WARP.TIMER
6293: 4C C8 60 04600
                              JMP MOVE.LOOP
               04610 ;SWAP DUNGEON LEVELS
               04620 SWAP.LEVELS
6296: AE 05 5F 04630
                              LDX CUR.LEVEL
              04640
6299: E8
                              INX
629A: E0 1B
               04650
                              CPX #27
629C: 90 01
               04660
                              BCC .10
               04670 ; PLAYERS HAVE SOLVED THE
               04680 ; TWENTY SIXTH LEVEL, SO GIVE IT
               04690 ; TO THEM AGAIN. . . .
629E: CA
               04700
                              DEX
629F: 8E 04 5F 04710 .10
                              STX NEW.LEVEL
62A2: 20 6C 70 04720
                              JSR M.CLEAN.UP
               04730 ;SWAP IN NEW LEVEL
62A5: A2 00
               04740
                              LDX #0
62A7: AD 04 5F 04750
                             TIDA NEW TIEVEL
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```
62AA: A0 00
               04760
                               LDY #0
62AC: 4C 4E 5F 04770
                               JMP GAME.DUN
               04780 ; QUIT OUT OF MOVE LOOP
               04790 MOVE.LOOP.Q
62AF: 20 DD 67 04800
                               JSR D.TICK
62B2: 20 8E 70 04810
                               JSR M.TICK
62B5: 20 6C 6B 04820
                               JSR S.TICK
62B8: 4C C5 5F 04830
                               JMP TICK
               04840 GAME.QUIT
62BB: 20 09 6B 04850
                               JSR S.QUIT
62BE: 20 0E 64 04860
                               JSR DUNGEON.QUIT
62C1: 4C 69 72 04870
                               JMP RESTART
               04880 ; CHECK IF PLAYER'S ON SCREEN
               04890 ; RETURN CC IF NOT ON.
               04900 CHECK.PLAYER
62C4: 48
               04910
                               PHA
62C5: BD A7 5E 04920
                               LDA HEALTH, X
62C8: F0 08
               04930
                               BEQ .1
62CA: BD AB 5E 04940
                               LDA P.IN.WARP, X
62CD: D0 03
               04950
                               BNE .1
62CF: 68
               04960
                               PLA
62D0: 38
               04970
                               SEC
62D1: 60
               04980
                               RTS
62D2: 68
               04990 .1
                               PLA
62D3: 18
               05000
                               CLC
62D4: 60
               05010
                               RTS
               05020 ;GET CHARACTER FROM KEYBOARD
               05030 ; TO A -- RETURN CS IF NO CHAR
62D5:
               05040 GET.CHAR.X
                                   .BS 1
62D6: AD FC 02 05050 GET.CHAR LDA CH
                               CMP #255
               05060
62D9: C9 FF
62DB: D0 02
               05070
                               BNE .1
62DD: 38
               05080
                               SEC
62DE: 60
               05090
                               RTS
62DF: 8E D5 62 05100 .1
                               STX GET.CHAR.X
62E2: A2 70
                               LDX #KEY.IOCB
               05110
62E4: A9 07
               05120
                               LDA #GETCHR
62E6: 9D 42 03 05130
                               STA ICCOM, X
62E9: A9 00
               05140
                               LDA #0
62EB: 9D 48 03 05150
                               STA ICBLL, X
62EE: 9D 49 03 05160
                               STA ICBLH, X
62F1: 20 56 E4 05170
                               JSR CIOV
62F4: 29 7F
                               AND #$7F
               05180
                               CMP #'a
62F6: C9 61
               05190
                               BCC .2
62F8: 90 07
               05200
                               CMP #'z+1
62FA: C9 7B
               05210
                               BCS .2
62FC: B0 03
               05220
62FE: 38
               05230
                               SEC
62FF: E9 20
               05240
                               SBC #$20
6301: AE D5 62 05250 .2
                               LDX GET.CHAR.X
6304: 18
               05260
                               CLC
               05270
                               RTS
6305: 60
                               .IN "D2:DINIT"
               00220
               00010 ; DINIT -- INIT/QUIT DUNGEON
6306:
               00020 QUIET.QUIT
                                 .BS 1
                               .AS "E:"
6307: 45 3A
               00030 ED.MS
               00040 DUNGEON.INIT
6309: A9 00
               00050
                               LDA #0
630B: 8D 06 63 00060
                               STA QUIET.QUIT
               00070 ;SAVE OLD COLORS
630E: A2 04
               08000
                               LDX #4
6310: BD C4 02 00090 .10
                               LDA PCOLR0+4,X
6313: 9D 04 64 00100
                               STA STORE.COLORS, X
6316: CA
               00110
                               DEX
6317: 10 F7
               00120
                               BPL .10
               00130 :SET NEW COLORS
```

```
6319: A2 04
               00140
                               LDX #4
631B: BD 09 64 00150 .40
                               LDA SET.COLORS, X
631E: 9D C4 02 00160
                               STA PCOLR0+4,X
6321: CA
               00170
                               DEX
6322: 10 F7
               00180
                               BPL .40
               00190 ;MAKE TIMES-120 TABLE
               00200 ; SKIPPING 4K BOUNDRY
6324: A9 00
               00210
                               LDA #0
6326: 85 F1
               00220
                               STA AH
6328: A9 03
               00230
                               LDA #3
632A: 85 F0
               00240
                               STA AL
632C: A2 00
               00250
                               LDX #0
               00260 T.120.LOOP
632E: A5 F0
               00270
                               LDA AL
6330: 9D C4 4F 00280
                               STA T.120.L,X
6333: A5 F1
               00290
                               LDA AH
6335: 18
               00300
                               CLC
6336: 69 30
               00310
                               ADC /DUNGEON.PIC
6338: 9D 88 4F 00320
                               STA T.120.H,X
633B: 18
               00330
                               CLC
633C: A5 F0
               00340
                               LDA AL
633E: 69 78
               00350
                               ADC #120
6340: 85 F0
               00360
                               STA AL
6342: A5 F1
               00370
                               LDA AH
               00380
                               ADC #0
6344: 69 00
6346: 85 F1
              00390
                               STA AH
6348: E8
               00400
                               INX
6349: E0 22
               00410
                               CPX #34
              00420
634B: D0 08
                               BNE .1
                               LDA #3
634D: A9 03
               00430
634F: 85 F0
               00440
                               STA AL
6351: A9 10
               00450
                               LDA #16
6353: 85 F1
               00460
                               STA AH
6355: E0 3C
               00470 .1
                               CPX #60
6357: 90 D5
                               BCC T.120.LOOP
               00480
               00490 ;SET UP DLI HANDLER
6359: A9 14
               00500
                              LDA #DLI.HANDLER
635B: 8D 00 02 00510
                               STA VDSLST
635E: A9 6A
               00520
                               LDA /DLI.HANDLER
6360: 8D 01 02 00530
                               STA VDSLST+1
               00540 ;SET UP VBI HANDLER
6363: 20 4A 6A 00550
                               JSR VBI.INIT
6366: AD 24 02 00560
                               LDA VVBLKD
6369: 8D 00 64 00570
                              STA STORE.VVBLKD
636C: AD 25 02 00580
                              LDA VVBLKD+1
636F: 8D 01 64 00590
                               STA STORE.VVBLKD+1
6372: A9 07
               00600
                               LDA #7
6374: A2 6A
               00610
                               LDX /VBI.HANDLER
6376: A0 57
               00620
                               LDY #VBI.HANDLER
6378: 20 5C E4 00630
                               JSR SETVBV
               00640 ; MOVE DISPLAY LIST
637B: A2 50
               00650
                              LDX #DISPLAY.LENGTH-1
637D: BD C4 69 00660 .40
                               LDA DISPLAY.DATA,X
6380: 9D 6F 4E 00670
                               STA DISPLAY.LIST,X
6383: CA
               00680
                               DEX
6384: 10 F7
               00690
                               BPL .40
               00700 ;SET UP DISPLAY LIST
6386: A2 6F
               00710
                               LDX #DISPLAY.LIST
6388: A0 4E
               00720
                               LDY /DISPLAY.LIST
638A: 20 81 64 00730
                               JSR SET.DLIST
               00740 ;ENABLE DLI
638D: A9 C0
               00750
                               LDA #$C0
638F: 8D 0E D4 00760
                               STA NMIEN
               00770 ; PUT LABEL ON SCREEN
6392: A2 27
               00780
                               LDX #39
6394: BD D8 63 00790 .42
                               TIDA TIABETIATITHE X
```

```
6397: 9D CO 4E 00800
                               STA NAME.PIC,X
639A: BD B0 63 00810
                              LDA P.L.LINE, X
639D: 9D E8 4E 00820
                             STA PLAY.PIC,X
63A0: 9D 10 4F 00830
                             STA PLAY.PIC+40,X
63A3: 9D 38 4F 00840
                             STA PLAY.PIC+80,X
63A6: 9D 60 4F 00850
                              STA PLAY.PIC+120,X
63A9: CA
               00860
                              DEX
63AA: 10 E8
               00870
                              BPL .42
               00880 ; SHOW CURRENT MODE
63AC: 20 77 74 00890
                              JSR MODE.SHOW
               00900 ; AND RETURN
63AF: 60
               00910
                               RTS
63B0: 00 28 65
63B3: 61 6C 74
               00920 P.L.LINE .AT " Health "
63B6: 68 00
               00930 P.HEALTH .EQ PLAY.PIC+*-P.L.LINE
4EF0:
63B8: 03 10 05
                              .AT "#0% "
               00940
63BB: 00
4EF4:
               00950 P.HAND
                              .EQ PLAY.PIC+*-P.L.LINE
63BC: 13 14 15
63BF: 16 17 18
63C2: 19 10 11
63C5: 12 13 14
63C8: 15 16 17
63CB: 18 19 10
63CE: 11 12 13
63D1: 00
                               .AT "345678901234567890123 "
               00960
4F0A:
               00970 P.SCORE .EQ PLAY.PIC+*-P.L.LINE
63D2: 03 03 03
63D5: 03 03 03 00980
                               .AT "#####"
               00990 LABEL.LINE
63D8: 00 2D 6F
63DB: 64 65 1A
                               .AT " Mode: "
63DE: 00
               01000
4EC7:
               01010 MODE.LABEL .EQ NAME.PIC+*-LABEL.LINE
63DF: 11 12 13
63E2: 14 15 16
63E5: 17 18 19
63E8: 10 11 12
                              .AT "12345678901234 "
63EB: 13 14 00 01020
               01030 DIFF.LABEL .EQ NAME.PIC+*-LABEL.LINE
4ED6:
63EE: 11 12 13
63F1: 14 15 16
63F4: 17 00 2C
63F7: 65 76 65
63FA: 6C 00
                              .AT "1234567 Level "
               01040
               01050 LEVEL.LABEL .EQ NAME.PIC+*-LABEL.LINE
4EE4:
63FC: 03 00 00
                               .AT "#
63FF: 00
               01060
               01070 ; VARIABLES USED ABOVE
6400:
               01080 STORE.VVBLKD .BS 2
               01090 STORE.SDLSTL .BS 2
6402:
               01100 STORE.COLORS .BS 5
6404:
6409: 38 7E 42
640C: 84 00
               01110 SET.COLORS
                                 .HS 387E428400
               01120 ;QUIT -- RETURNING DATA
               01130 DUNGEON.QUIT
640E: 85 F0
               01140
                               STA AL
6410: 86 F1
               01150
                               STX AH
               01160
6412: 84 F2
                               STY BL
               01170 ; RESTORE DISPLAY LIST
6414: 20 94 64 01180
                              JSR RESET.DLIST
               01190 ; RESTORE VBI HANDLER
6417: A9 07
               01200
                              LDA #7
6419: AC 00 64 01210
                              LDY STORE. VVBLKD
641C: AE 01 64 01220
                             IDX STORE VVBLKD+1
```

```
641F: 20 5C E4 01230
                                JSR SETVBV
                01240 ; RESTORE COLORS
6422: A2 04
                01250 LDX #4
                              LDA STORE.COLORS,X
STA PCOLR0+4,X
6424: BD 04 64 01260 .1
6427: 9D C4 02 01270
642A: CA
                01280
                                DEX
642B: 10 F7
                01290
                                BPL .1
                01300 ;START I/O
642D: 20 09 6B 01310 START.IO JSR S.QUIT
6430: 20 94 64 01320
                                JSR RESET.DLIST
                01330 ; MAKE SCREEN BACKROUND BLACK
6433: A9 00
                01340
                                LDA #00
6435: 8D C6 02 01350
                                STA COLOR0+2
                01360 ; RESTORE VBI HANDLER
                        LDA #7
6438: A9 07
                01370
643A: AC 00 64 01380
                               LDY STORE.VVBLKD
                              LDX STORE.VVBLKD+1
JSR SETVBV
LDA RTCLOK+2
CLC
643D: AE 01 64 01390
6440: 20 5C E4 01400
6443: A5 14
             01410
6445: 18
               01420
             01430
01440 .1
                              ADC #4
CMP RTCLOK+2
6446: 69 04
6448: C5 14
644A: D0 FC
               01450
                                BNE .1
644C: 60
                01460
                                RTS
                01470 ;STOP I/O
                01480 STOP.IO
                01490 ;BLANK SCREEN
644D: A9 20
                01500
                                LDA #$20
644F: 8D 2F 02 01510
                                STA SDMCTL
6452: 8D 00 D4 01520
                                STA DMACTL
                01530 ;SET FLAG SO DSHOW KNOWS TO
                01540 ;SHOW THE SCREEN
6455: A9 00
                01550
                               LDA #0
6457: 8D C3 69 01560
                               STA DUNGEON.VIEW
                              JSR S.INIT
LDA #DISPLAY.LIST
645A: 20 E7 6A 01570
645D: A9 6F
                01580
645F: 8D 30 02 01590
                               STA SDLSTL
                        LDA /DISPLAY.LIST
STA SDLSTH
LDA /DISPLAY.LIST
STA SDLSTH
LDY #VBI.HANDLER
LDA /VBI.HANDLER
LDA #7
JSR SETVBV
LDA #$C0
STA NMIEN
6462: A9 4E
                01600
6464: 8D 31 02 01610
6467: A0 57
               01620
6469: A2 6A
                01630
646B: A9 07
                01640
646D: 20 5C E4 01650
6470: A9 C0
                01660
6472: 8D 0E D4 01670
                01680 ;SET NEW COLORS
6475: A2 04
                01690 LDX #4
                             LDA SET.COLORS,X
STA PCOLR0+4,X
6477: BD 09 64 01700 .40
647A: 9D C4 02 01710
                01720
647D: CA
                                DEX
647E: 10 F7
                01730
                                BPL .40
                01740
6480: 60
                                RTS
                01750 ;SET DISPLAY LIST TO (X,Y)
                01760 ; (SAVING OLD VALUE)
                01770 SET.DLIST
6481: AD 30 02 01780
                               LDA SDLSTL
6484: 8D 02 64 01790
                                STA STORE.SDLSTL
6487: AD 31 02 01800
                              LDA SDLSTH
648A: 8D 03 64 01810
                               STA STORE.SDLSTL+1
648D: 8E 30 02 01820
                               STX SDLSTL
6490: 8C 31 02 01830
                                STY SDLSTH
6493: 60
                01840
                                RTS
                01850 ; RESTORE DISPLAY LIST VALUES
                01860 RESET.DLIST
6494: AD 02 64 01870
                                LDA STORE.SDLSTL
6497: 8D 30 02 01880
                               STA SDISTI
```

```
649A: AD 03 64 01890
                                  LDA STORE.SDLSTL+1
649D: 8D 31 02 01900
                                  STA SDLSTH
64A0: 60
                 01910
                                RTS
                 00230
                                 .IN "D2:DSWAP"
                 00010 ;DSWAP -- DUNGEON SWAPPING CODE
                 00020 PRINT.NAME
64A1: 7D
                 00030
                                 .HS 7D
64A2: 58 78 78
64A5: 78 69 6E
64A8: 67 20 74
64AB: 6F 20 4C
64AE: 65 76 65
64B1: 6C 20
                                 .AS "Xxxxing to Level "
                 00040
                 00050 PRINT.L.NAME
64B3: 23 2E 20
64B6: 2E 20 2E 00060
                                  .AS "#. . ."
                 00070
64B9: 9B
                                 .DA #EOL
0019:
                 00080 PRINT.NAME.L .EQ *-PRINT.NAME
                 00090 ;FILE NAME
                 00100 FILE.NAME
64BA: 44 3A 4C
64BD: 45 56 45
64C0: 4C 2E
                                  .AS "D:LEVEL."
                 00110
                 00120 FILE.EXT .AS "#"
64C2: 23
64C3: 9B
                 00130
                                 .DA #EOL
000A:
                 00140 FILE.NAME.L .EQ *-FILE.NAME
64C4: 57 61 72
64C7: 70 57 72
64CA: 69 74
                 00150 PRINT.NAME.T .AS "WarpWrit"
64CC: 03 07
                 00160 PRINT.NAME.O .HS 0307
                 00170 ;SWAP OUT (A HAS LEVEL #)
                 00180 ;
                 00190 DUNGEON.SWAP.OUT
64CE: A2 01
                 00200
                                 LDX #1 ;WRITE
64D0: 20 44 65 00210
                                  JSR FILE.DIR
                 00220 ; ENCODE LEVEL FOR STORAGE
64D3: A9 00
                 00230 LDA #DUNGEON.PIC
64D5: 85 F0
                00240
                                 STA AL
64D5: 85 F0 00240
64D7: A9 30 00250
64D9: 85 F1 00260
64DB: A9 00 00270
64DD: 85 F3 00280
64DF: A9 00 00290 .1
64E1: 85 F2 00300
                                LDA /DUNGEON.PIC
                               STA AH
LDA #0
STA BH ;Y
LDA #0
STA BL ;X
LDX BL
LDY BH
64E3: A6 F2
                 00310 .2
64E5: A4 F3
                 00320
                                JSR DUNGEON.WHATS.AT STA DL ;(X,Y) LDX BL
64E7: 20 3E 67 00330
64EA: 85 F4
              00340
64EC: A6 F2
                 00350
64EE: E8
                 00360
                                  INX
                                LDY BH
64EF: A4 F3
                 00370
64F1: 20 3E 67 00380
                                JSR DUNGEON.WHATS.AT
64F4: 0A
                00390
                                 ASL ;(X+1,Y)
64F5: 0A
                00400
                                 ASL
64F6: 0A
               00410
                                 ASL
             00420
00430
00440
00450
64F7: 0A
                                 ASL
64F8: 05 F4
                                  ORA DL ; NOW ENCODED
64FA: A0 00
            00450
00460
00470
00480
00490 .3
00500
00510
                                LDY #0
64FC: 91 F0
                                 STA (AL),Y
64FE: E6 F0
                                 INC AL
                                 BNE .3
6500: D0 02
6502: E6 F1
                                 INC AH
6504: E6 F2
                                INC BL ; NEXT X
                                 INC BL
6506: E6 F2
6508: A5 F2
                                  LDA BL
650A: C9 3C 00520
                                 CMP #60
```

```
BCC .2
650C: 90 D5
               00530
                              INC BH ; NEXT Y
650E: E6 F3
               00540
6510: A5 F3
               00550
                              LDA BH
6512: C9 1E
               00560
                              CMP #30
6514: 90 C9
               00570
                              BCC .1
               00580 ;WRITE FILE
                       LDX #FILE.IOCB
6516: A2 20
               00590
6518: A9 0B
                              LDA #PUTCHR
               00600
651A: 9D 42 03 00610
                              STA ICCOM, X
651D: A9 00
                             LDA #DUNGEON.PIC
               00620
651F: 9D 44 03 00630
                             STA ICBAL,X
                             LDA /DUNGEON.PIC
6522: A9 30
               00640
6524: 9D 45 03 00650
                             STA ICBAH,X
6527: A9 84
               00660
                             LDA #DUNGEON.SIZE
                             STA ICBLL, X
6529: 9D 48 03 00670
652C: A9 03
                             LDA /DUNGEON.SIZE
               00680
652E: 9D 49 03 00690
                              STA ICBLH, X
6531: 20 56 E4 00700
                              JSR CIOV
               00710 ;CLOSE FILE
6534: A9 0C
                              LDA #CLOSE
               00720
6536: 9D 42 03 00730
                              STA ICCOM, X
6539: 20 56 E4 00740
                             JSR CIOV
653C: 20 4D 64 00750
                              JSR STOP.IO
653F: 60
               00760
                              RTS
               00770;
6540:
               00780 WHICH.WAY
                                   .BS 1
               00790 DUNGEON.SIZE .EQ 900
0384:
6541:
               00800 IO.DIR .BS 1
6542: 04 08
               00810 IO.DIR.T .HS 0408
               00820 ; CONSTRUCT FILE NAME
               00830 ; A=LEVEL
               00840; Y=0 FOR DOWN, 1 FOR UP
               00850 ;X=0 FOR READ, 1 FOR WRITE
6544: 18
               00860 FILE.DIR CLC
                              ADC #'@
6545: 69 40
               00870
6547: 8D C2 64 00880
                              STA FILE.EXT
654A: 8D B3 64 00890
                             STA PRINT.L.NAME
654D: 38
               00900
                              SEC
654E: E9 20
               00910
                              SBC #$20
6550: 8D E4 4E 00920
                              STA LEVEL.LABEL
6553: 98
               00930
                             TYA
6554: 18
               00940
                              CLC
6555: 69 03
               00950
                              ADC #3 ;CC 3-4
6557: 8D 40 65 00960
                              STA WHICH.WAY
               00970 ;SET UP IO DIRECTION
655A: BD 42 65 00980
                              LDA IO.DIR.T,X
655D: 8D 41 65 00990
                              STA IO.DIR
               01000 ;SET UP MESSAGE
6560: BD CC 64 01010
                              LDA PRINT.NAME.O,X
6563: AA
               01020
                              TAX
6564: A0 03
               01030
                             LDY #3
6566: BD C4 64 01040 .1
                             LDA PRINT.NAME.T,X
6569: 99 A2 64 01050
                              STA PRINT.NAME+1,Y
656C: CA
               01060
                              DEX
656D: 88
               01070
                              DEY
656E: 10 F6
               01080
                              BPL .1
               01090 ;OPEN VIDEO SCREEN
6570: 20 2D 64 01100
                              JSR START.IO
6573: A9 01
               01110
                              LDA #1
6575: 8D F0 02 01120
                              STA CRSINH
               01130 ; PRINT MESSAGE
6578: A2 00
                            LDX #0
               01140
657A: A9 0B
               01150
                             LDA #PUTCHR
657C: 9D 42 03 01160
                             STA ICCOM, X
657F: A9 A1
               01170
                              LDA #PRINT.NAME
6581: 9D 44 03 01180
                             STA TCBALAX
```

```
6584: A9 64
               01190
                               LDA /PRINT.NAME
6586: 9D 45 03 01200
                               STA ICBAH, X
6589: A9 19
                              LDA #PRINT.NAME.L
               01210
658B: 9D 48 03 01220
                              STA ICBLL, X
658E: A9 00
                              LDA /PRINT.NAME.L
               01230
6590: 9D 49 03 01240
                               STA ICBLH, X
6593: 20 56 E4 01250
                               JSR CIOV
6596: A9 00
                               LDA #0
               01260
6598: 8D F0 02 01270
                               STA CRSINH
               01280 ; OPEN DISK FILE
659B: A2 20
               01290
                              LDX #FILE.IOCB
659D: A9 03
               01300
                               LDA #OPEN
659F: 9D 42 03 01310
                               STA ICCOM, X
               01320 ;SET UP FOR DISK I/O
65A2: AD 41 65 01330
                             LDA IO.DIR
65A5: 9D 4A 03 01340
                               STA ICAX1,X
65A8: A9 00
               01350
                               LDA #0
65AA: 9D 4B 03 01360
                               STA ICAX2,X
               01370 ; NOW OPEN FILE
65AD: A9 BA
               01380
                              LDA #FILE.NAME
65AF: 9D 44 03 01390
                               STA ICBAL, X
65B2: A9 64
               01400
                              LDA /FILE.NAME
65B4: 9D 45 03 01410
                               STA ICBAH, X
65B7: 20 56 E4 01420
                               JSR CIOV
               01430 ;
                             BPL .17
               01440 ;
                             JSR STOP.IO
               01450;
                               JSR DUNGEON.QUIT
65BA: 60
               01460 .17
                              RTS
               01470 ;
0020:
               01480 FILE.IOCB
                                   .EQ $20
65BB:
               01490 BOGUS.SWAP.IN .BS 1
               01500 ; SWAP-IN (A = LEVEL #)
               01510 ;
               01520; Y = 0 IF COMMING DOWN
                            1 IF COMMING UP
               01530 ;
               01540 DUNGEON.SWAP.IN
65BC: AE BB 65 01550
                              LDX BOGUS.SWAP.IN
65BF: F0 15
               01560
                              BEQ .80
65C1: A2 00
               01570
                              LDX #0
65C3: 8E BB 65 01580
                               STX BOGUS.SWAP.IN
65C6: 18
               01590
                               CLC
65C7: 69 20
                               ADC #$20
               01600
65C9: 8D E4 4E 01610
                               STA LEVEL.LABEL
65CC: 98
               01620
                               TYA
65CD: 18
               01630
                               CLC
                               ADC #3
65CE: 69 03
               01640
65D0: 8D 40 65 01650
                               STA WHICH.WAY
65D3: 4C 51 66 01660
                              JMP SEARCH.DISK
65D6: A2 00
               01670 .80
                              LDX #0
65D8: 20 44 65 01680
                               JSR FILE.DIR
65DB: 10 0E
               01690
                               BPL .81
65DD: A9 0C
                              LDA #CLOSE
               01700
65DF: 9D 42 03 01710
                               STA ICCOM, X
65E2: 20 56 E4 01720
                               JSR CIOV
65E5: 20 35 5D 01730
                               JSR DEFAULT.DUNGEON
65E8: 4C 4E 66 01740
                               JMP END.DECODE
               01750 ; READ IN DUNGEON
65EB: A9 07
               01760 .81
                               LDA #GETCHR
65ED: 9D 42 03 01770
                               STA ICCOM, X
65F0: A9 00
                              LDA #DUNGEON.PIC
               01780
65F2: 9D 44 03 01790
                               STA ICBAL, X
65F5: A9 30
               01800
                              LDA /DUNGEON.PIC
65F7: 9D 45 03 01810
                              STA ICBAH, X
65FA: A9 84
               01820
                              LDA #DUNGEON.SIZE
65FC: 9D 48 03 01830
                               STA ICBLL, X
65FF: A9 03 01840
                             LDA /DUNGEON.STZE
```

```
6601: 9D 49 03 01850
                                STA ICBLH, X
6604: 20 56 E4 01860
                                JSR CIOV
                01870 ;CLOSE IOCB #2
6607: A9 0C
                01880
                                LDA #CLOSE
6609: 9D 42 03 01890
                                STA ICCOM, X
                                JSR CIOV
660C: 20 56 E4 01900
                01910 ; DECODE INPUT
660F: A9 83
                               LDA #DUNGEON.PIC+899
                01920
6611: 85 F0
                01930
                                STA AL
6613: A9 33
                01940
                               LDA /DUNGEON.PIC+899
                                STA AH
6615: 85 F1
                01950
6617: A9 1D
               01960
                               LDA #29
6619: 85 F3
                01970
                                STA BH ; FOR Y=29 TO 0
661B: A9 3A
               01980 .1
                               LDA #58
661D: 85 F2
                01990
                                STA BL ;X IS 58 TO 0
661F: A0 00
                               LDY #0 ;STEP -2
                02000 .2
               02010
6621: B1 F0
                               LDA (AL),Y
6623: 85 F4
                02020
                                STA DL
6625: 29 OF
                02030
                               AND #$F
6627: A6 F2
                               LDX BL
                02040
6629: A4 F3
                02050
                               LDY BH
662B: 20 56 67 02060
                                JSR DUNGEON.PLOT
662E: A5 F4
                02070
                               LDA DL
6630: 4A
                02080
                                LSR
6631: 4A
                02090
                               LSR
6632: 4A
                02100
                               LSR
6633: 4A
                02110
                               LSR
6634: A6 F2
                02120
                               LDX BL
6636: E8
                02130
                                INX
6637: A4 F3
                02140
                               LDY BH
6639: 20 56 67 02150
                                JSR DUNGEON.PLOT
663C: A5 F0
               02160
                               LDA AL
663E: D0 02
                02170
                               BNE .3
6640: C6 F1
               02180
                               DEC AH
6642: C6 F0
                02190 .3
                               DEC AL ; P--
6644: C6 F2
                02200
                               DEC BL ; NEXT X
6646: C6 F2
                02210
                               DEC BL
6648: 10 D5
                02220
                                BPL .2
664A: C6 F3
                02230
                                DEC BH ; NEXT Y
664C: 10 CD
                02240
                                BPL .1
664E: 20 4D 64 02250 END.DECODE JSR STOP.IO
                02260 SEARCH.DISK
                02270 ;SEARCH FOR UP/DOWN DISK
6651: A9 00
                02280
                               LDA #0
6653: 85 F0
                02290
                                STA AL ;X
6655: A9 00
                02300 .1
                                LDA #0
6657: 85 F1
                02310
                                STA AH ;Y
6659: A6 F0
                02320 .2
                               LDX AL
665B: A4 F1
                02330
                               LDY AH
665D: 20 3E 67 02340
                                JSR DUNGEON.WHATS.AT
6660: CD 40 65 02350
                               CMP WHICH.WAY
6663: D0 05
                02360
                               BNE .3
6665: A6 F0
                02370
                               LDX AL
6667: A4 F1
                02380
                               LDY AH
6669: 60
                02390
                               RTS
666A: E6 F1
                                INC AH
                02400 .3
666C: A5 F1
                02410
                                LDA AH
666E: C9 1E
                                CMP #30
                02420
6670: 90 E7
                02430
                                BCC .2
6672: E6 F0
                                INC AL
                02440
6674: A5 F0
                02450
                               LDA AL
                                CMP #60
6676: C9 3C
                02460
6678: 90 DB
                02470
                               BCC .1
                02480 ; DIDN'T FIND -- PUNT
667A: A2 00
                02490
                               LDX #0
667C: A0 00
               02500
                               T_1DY #0
```

```
667E: 60
                02510
                                RTS
                02520 ; CHARACTER TO SEARCH FOR
667F:
                02530 SEARCH.CHAR
                                    .BS 1
                                .IN "D2:DSHOW"
                00010 ; DUNGEON SHOW MODULE
                00020 ;TIMES 120 -- X=X COORD
                00030 ;
                                     Y=Y COORD
                00040 ; RETURNS [YX] = ADDRESS
6680: 8A
                00050 T.120
                                TXA
6681: 18
                00060
                                CLC
                                ADC T.120.L, Y
6682: 79 C4 4F 00070
6685: AA
                08000
                                TAX
6686: A9 00
                00090
                                LDA #0
6688: 79 88 4F 00100
                                ADC T.120.H, Y
668B: A8
                00110
                                TAY
668C: 60
                00120
                                RTS
                00130 ; DOUBLE X & Y W/O MESSING A
                00140 TIMES.TWO
668D: 48
                00150
                                PHA
668E: 8A
                00160
                                TXA
668F: 0A
                00170
                                ASL
6690: AA
                00180
                                TAX
6691: 98
                00190
                                TYA
6692: 0A
                00200
                                ASL
6693: A8
                00210
                                TAY
6694: 68
                00220
                                PLA
6695: 60
                00230
                                RTS
                00240 ; DUNGEON SHOW
                00250 ; [X,Y] - "CENTER COORD"
                00260 ; RETURN UP.COORD, DN.COORD
                00270;
                                LF.COORD, RT.COORD
                00280 DUNGEON.SHOW
                00290 ; CHECK BOUNDS
6696: A9 01
                00300
                                LDA #1
6698: 8D 37 67 00310
                                STA DIRTY.COORD
669B: AD 3A 67 00320
                                LDA C.X.L
669E: 29 7F
                00330
                                AND #$7F
66A0: 4A
                00340
                                LSR
66A1: 4A
                00350
                                LSR
66A2: 4A
                00360
                                LSR
66A3: 4A
                00370
                                LSR
66A4: 4A
                00380
                                LSR
66A5: 8D 38 67 00390
                                STA H.COORD
66A8: AD 3C 67 00400
                                LDA C.Y.L
66AB: 29 7F
                00410
                                AND #$7F
66AD: 4A
                00420
                                LSR
66AE: 4A
                00430
                                LSR
66AF: 4A
                00440
                                LSR
                00450
66B0: 4A
                                LSR
66B1: 8D 39 67 00460
                                STA V.COORD
                00470 ;X (IN CHARS) TO X, Y TO Y
66B4: AD 3A 67 00480
                                LDA C.X.L
66B7: 0A
                00490
                                ASL
66B8: AD 3B 67 00500
                                LDA C.X.H
66BB: 2A
                00510
                                ROL
66BC: AA
                                TAX
                00520
66BD: AD 3C 67 00530
                                LDA C.Y.L
66C0: 0A
                00540
                                ASL
66C1: AD 3D 67 00550
                                LDA C.Y.H
66C4: 2A
                00560
                                ROL
66C5: A8
                00570
                                TAY
66C6: E0 14
                00580
                                CPX #20
66C8: B0 07
                00590
                                BCS .1
66CA: A2 14
                00600
                                LDX #20
66CC: A9 00
                00610
                                LDA #0
66CE: 8D 38 67 00620
                                STA H.COORD
```

```
66D1: C0 0A
               00630 .1
                               CPY #10
66D3: B0 07
               00640
                               BCS .2
66D5: A0 0A
               00650
                               LDY #10
66D7: A9 00
               00660
                               LDA #0
66D9: 8D 39 67 00670
                               STA V.COORD
66DC: E0 64
               00680 .2
                               CPX #100
                               BCC .3
66DE: 90 07
               00690
66E0: A2 63
               00700
                               LDX #99
66E2: A9 03
               00710
                               LDA #3
66E4: 8D 38 67 00720
                               STA H.COORD
               00730 .3
66E7: C0 32
                               CPY #50
66E9: 90 07
               00740
                               BCC .4
                               LDY #49
66EB: A0 31
               00750
66ED: A9 07
               00760
                               LDA #7
66EF: 8D 39 67 00770
                               STA V.COORD
66F2: 8A
               00780 .4
                               TXA
66F3: 38
               00790
                               SEC
66F4: E9 14
               00800
                               SBC #20
66F6: 8D 34 67 00810
                               STA LF.COORD
66F9: 18
               00820
                               CLC
66FA: 69 27
               00830
                               ADC #39
66FC: 8D 35 67 00840
                               STA RT.COORD
66FF: 98
               00850
                               TYA
6700: 38
               00860
                               SEC
6701: E9 0A
                               SBC #10
               00870
6703: 8D 33 67 00880
                               STA UP.COORD
6706: 18
                               CLC
               00890
6707: 69 13
               00900
                               ADC #19
6709: 8D 36 67 00910
                               STA DN.COORD
670C: A9 03
                               LDA #3
               00920
670E: 38
               00930
                               SEC
670F: ED 38 67 00940
                               SBC H.COORD
6712: 8D 38 67 00950
                               STA H.COORD
6715: A9 00
               00960
                               LDA #0
6717: 8D 37 67 00970
                               STA DIRTY.COORD
                00980 ; CHECK DUNGEON. VIEW
671A: AD C3 69 00990
                               LDA DUNGEON.VIEW
671D: D0 13
               01000
                               BNE .99
               01010 ;O.K. WAIT A JIFFY AND UN-BLANK
               01020 ;THE SCREEN
671F: A5 14
               01030
                               LDA JIFFY
6721: C5 14
                               CMP JIFFY
               01040 .98
6723: F0 FC
               01050
                               BEQ .98
6725: A9 22
               01060
                               LDA #$22
6727: 8D 2F 02 01070
                               STA SDMCTL
672A: 8D 00 D4 01080
                               STA DMACTL
672D: A9 FF
               01090
                               LDA #$FF
672F: 8D C3 69 01100
                               STA DUNGEON.VIEW
6732: 60
               01110 .99
                               RTS
6733:
               01120 UP.COORD .BS 1
6734:
               01130 LF.COORD .BS 1
               01140 RT.COORD .BS 1
6735:
6736:
               01150 DN.COORD .BS 1
6737:
               01160 DIRTY.COORD .BS 1
6738:
               01170 H.COORD
                              .BS 1
6739:
               01180 V.COORD
                               .BS 1
673A:
               01190 C.X.L
                               .BS 1
                               .BS 1
               01200 C.X.H
673B:
673C:
               01210 C.Y.L
                               .BS 1
               01220 C.Y.H
673D:
                               .BS 1
               01230 ; WHATS.AT [X,Y]
               01240 ; RETURN 0-11 (CHAR CODE)
               01250 DUNGEON.WHATS.AT
673E: 20 8D 66 01260
                               JSR TIMES.TWO
6741: 20 9E 67 01270
                               JSR D.S.SAVE
6744: 20 80 66 01280
                              JSR T.120
```

```
6747: 86 F0
                01290
                                STX AL
6749: 84 F1
                01300
                                STY AH
674B: A0 00
                                LDY #0
                01310
674D: B1 F0
                01320
                                LDA (AL),Y
674F: 4A
                01330
                                LSR
6750: 4A
                01340
                                LSR
6751: 4C AB 67 01350
                                JMP D.S.RESTORE
                01360 ; PLOT
                              [X,Y] \leftarrow A
6754:
                01370 D.P.Y
                                .BS 1
6755:
                01380 D.P.X
                                .BS 1
                01390 DUNGEON.PLOT
6756: 20 8D 66 01400
                                JSR TIMES.TWO
6759: 20 9E 67 01410
                                JSR D.S.SAVE
675C: 8C 54 67 01420
                                STY D.P.Y
675F: 8E 55 67 01430
                                STX D.P.X
6762: 48
                01440
                                PHA
6763: 20 80 66 01450
                                JSR T.120
6766: 86 F0
                01460
                                STX AL
6768: 84 F1
                01470
                                STY AH
676A: 68
                01480
                                PLA
676B: 0A
                01490
                                ASL
676C: 0A
                01500
                                ASL
676D: A0 00
                01510
                                LDY #0
676F: 91 F0
                01520
                                STA (AL), Y
6771: 18
                01530
                                CLC
6772: 69 02
                01540
                                ADC #2
6774: C8
                01550
                                INY
                                STA (AL),Y
6775: 91 F0
                01560
6777: AC 54 67 01570
                                LDY D.P.Y
677A: AE 55 67 01580
                                LDX D.P.X
677D: C8
                01590
                                             ;2ND ROW
                                INY
677E: 48
                01600
                                PHA
677F: 20 80 66 01610
                                JSR T.120
6782: 86 F0
                01620
                                STX AL
6784: 84 F1
                01630
                                STY AH
                                PLA
6786: 68
                01640
6787: A0 00
                01650
                                LDY #0
6789: 38
                01660
                                SEC
678A: E9 01
                01670
                                SBC #1
678C: 91 F0
                01680
                                STA (AL), Y
678E: C8
                01690
                                INY
678F: 18
                01700
                                CLC
6790: 69 02
                01710
                                ADC #2
6792: 91 F0
                01720
                                STA (AL),Y
6794: 4C AB 67 01730
                                JMP D.S.RESTORE
                01740 ;DELETE [X,Y] <- 0
                01750 DUNGEON.DELETE
6797: A9 00
                01760
                                LDA #0
6799: 4C 56 67 01770
                                JMP DUNGEON.PLOT
                01780 ;SAVE AL, AH
679C:
                01790 D.S.SPACE
                                    .BS 2
679E: 48
                01800 D.S.SAVE PHA
679F: A5 F0
                01810
                                LDA AL
67A1: 8D 9C 67 01820
                                STA D.S.SPACE
67A4: A5 F1
                01830
                                LDA AH
67A6: 8D 9D 67 01840
                                STA D.S.SPACE+1
67A9: 68
                01850
                                PLA
67AA: 60
                01860
                                RTS
                01870 D.S.RESTORE
67AB: 48
                01880
                                PHA
67AC: AD 9C 67 01890
                                LDA D.S.SPACE
67AF: 85 F0
                01900
                                STA AL
67B1: AD 9D 67 01910
                                LDA D.S.SPACE+1
67B4: 85 F1
                01920
                                STA AH
67B6: 68
                01930
                                PLA
67B7: 60
                01940
                                RTS
```

```
.IN "D2:MONS"
               00250
               00010 ; MONSTER CODE
67B8:
               00020 D.X
                               .BS 1
                                           ;BASE
67B9:
               00030 D.Y
                               .BS 1
                                           ;BASE
               00040 D.IX
67BA:
                               .BS 1
                               .BS 1
67BB:
               00050 D.IY
67BC:
               00060 D.AX
                               .BS 1
               00070 D.AY
67BD:
                               .BS 1
67BE:
               00080 D.C
                               .BS 1
               00090 D.NX
                               .BS 1
67BF:
               00100 D.NY
67C0:
                               .BS 1
67C1:
               00110 D.COUNT
                               .BS 1
                               .BS 1
67C2:
               00120 D.WAIT
                               .BS 1
67C3:
               00130 D.STICK
0015:
               00140 D.MAXX
                               .EQ 21
               00150 D.MAXY
                               .EQ 11
000B:
67C4: A9 03
               00160 D.INIT
                               LDA #3
67C6: 8D C1 67 00170
                               STA D.COUNT
67C9: A9 01
               00180
                               LDA #1
67CB: 8D C2 67 00190
                               STA D.WAIT
               00200 ;SET UP MONSTER SPEED
               00210 ; ACCORDING TO DIFF. TYPE
67CE: AE 4C 73 00220
                              LDX DIFF.TYPE
67D1: BD D9 67 00230
                               LDA DELAY.TAB,X
67D4: 8D D8 67 00240
                               STA DELAY
67D7: 60
               00250
               00260 DELAY
67D8:
                               .BS 1
67D9: 0D 08 05
67DC: 02
               00270 DELAY.TAB
                                   .HS 0D080502
               00280 ; MOVE ALL DE MONSTERS
67DD: CE C2 67 00290 D.TICK
                             DEC D.WAIT
67E0: F0 01
               00300
                               BEQ .90
67E2: 60
               00310
                               RTS
67E3: AD D8 67 00320 .90
                             LDA DELAY
67E6: 8D C2 67 00330
                               STA D.WAIT
67E9: EE C1 67 00340
                              INC D.COUNT
67EC: AD C1 67 00350
                              LDA D.COUNT
67EF: 29 03
               00360
                              AND #3
67F1: 8D C1 67 00370
                               STA D.COUNT
67F4: D0 0E
               00380
                              BNE .1
67F6: AD 33 67 00390
                              LDA UP.COORD
67F9: 4A
               00400
                              LSR
67FA: 8D B9 67 00410
                               STA D.Y
67FD: AD 34 67 00420
                              LDA LF.COORD
6800: 4A
               00430
                              LSR
6801: 8D B8 67 00440
                               STA D.X
6804: AD C1 67 00450 .1
                              LDA D.COUNT
6807: 4A
               00460
                               LSR
6808: 8D BB 67 00470
                               STA D.IY
               00480 ;-OUTER LOOP-
680B: AD C1 67 00490 D.LOOP.Y LDA D.COUNT
680E: 29 01
               00500
                              AND #1
6810: 8D BA 67 00510
                               STA D.IX
6813: AD B9 67 00520
                               LDA D.Y
6816: 18
               00530
                               CLC
6817: 6D BB 67 00540
                               ADC D.IY
681A: 8D BD 67 00550
                               STA D.AY
681D: AD B8 67 00560 D.LOOP.X LDA D.X
6820: 18
               00570
                               CLC
6821: 6D BA 67 00580
                               ADC D.IX
6824: 8D BC 67 00590
                               STA D.AX
               00600 ; CHECK IF MONSTER THERE
6827: AE BC 67 00610
                              LDX D.AX
682A: AC BD 67 00620
                               LDY D.AY
682D: 20 3E 67 00630
                               JSR DUNGEON.WHATS.AT
6830: C9 09 00640
                              CMP #9
```

```
BCC .1
6832: 90 0D
               00650
6834: C9 0C
               00660
                               CMP #12
                               BCC .2
6836: 90 OC
               00670
6838: F0 07
               00680
                               BEQ .1
683A: C9 10
               00690
                               CMP #16
683C: B0 03
               00700
                               BCS .1
               00710 ;SPAWNER
683E: 20 86 69 00720
                               JSR SPAWNER
6841: 4C EC 68 00730 .1
                               JMP D.LOOP.Q
               00740 ; YEP, IT'S A MONSTER
                00750 ; SEE WHO TO KILL
6844: 8D BE 67 00760 .2
                               STA D.C
6847: A0 04
               00770
                               LDY #4 ; NONE
6849: A9 C8
               00780
                               LDA #200
684B: 85 F1
               00790
                               STA AH
684D: AE 4D 73 00800
                               LDX G.N.P
6850: CA
               00810
                               DEX
6851: 20 C4 62 00820 .20
                               JSR CHECK.PLAYER
6854: 90 39
               00830
                               BCC .25 ; DEAD
6856: BD AF 5E 00840
                               LDA P.X.H,X
6859: CD BC 67 00850
                               CMP D.AX
685C: 90 07
               00860
                               BCC .21
685E: 38
               00870
                               SEC
685F: ED BC 67 00880
                               SBC D.AX
6862: 4C 6C 68 00890
                               JMP .22
6865: AD BC 67 00900 .21
                               LDA D.AX
6868: 38
               00910
                               SEC
6869: FD AF 5E 00920
                               SBC P.X.H,X
686C: 85 F0
               00930 .22
                               STA AL
686E: BD B7 5E 00940
                               LDA P.Y.H,X
6871: CD BD 67 00950
                               CMP D.AY
6874: 90 07
               00960
                               BCC .23
6876: 38
               00970
                               SEC
6877: ED BD 67 00980
                               SBC D.AY
687A: 4C 84 68 00990
                               JMP .24
687D: AD BD 67 01000 .23
                               LDA D.AY
6880: 38
               01010
                               SEC
6881: FD B7 5E 01020
                               SBC P.Y.H,X
6884: 18
               01030 .24
                               CLC
6885: 65 F0
               01040
                               ADC AL
6887: C5 F1
               01050
                               CMP AH
6889: B0 04
               01060
                               BCS .25
               01070 ; FOUND NEARER PLAYER
688B: 85 F1
               01080
                               STA AH
688D: 8A
               01090
                               TXA
688E: A8
               01100
                               TAY
               01110 .25
688F: CA
                               DEX
6890: 10 BF
               01120
                               BPL .20
               01130 ; FOUND NEAREST PLAYER
6892: 98
               01140
                               TYA
6893: C9 04
               01150
                               CMP #4
6895: 90 03
               01160
                               BCC .30
               01170 ; NO PLAYERS ALIVE
6897: 4C EC 68 01180
                               JMP D.LOOP.Q
               01190 ; FIGURE OUT WHERE TO GO
689A: AA
               01200 .30
                               TAX
689B: AD BC 67 01210
                               LDA D.AX
689E: A0 0C
                               LDY #$C
               01220
68A0: DD AF 5E 01230
                               CMP P.X.H,X
               01240
                               BEQ .31
68A3: F0 09
68A5: B0 05
               01250
                               BCS .32
                               LDY #4
68A7: A0 04
               01260
68A9: 4C AE 68 01270
                               JMP .31
68AC: A0 08
               01280 .32
                               LDY #8
68AE: 8C C3 67 01290 .31
                               STY D.STICK
68B1: AD BD 67 01300
                               TDA DAY
```

```
68B4: A0 03
               01310
                               LDY #3
68B6: DD B7 5E 01320
                               CMP P.Y.H,X
68B9: F0 09
               01330
                              BEQ .41
68BB: B0 05
               01340
                              BCS .42
68BD: A0 01
                              LDY #1
               01350
68BF: 4C C4 68 01360
                               JMP .41
68C2: A0 02
               01370 .42
                              LDY #2
               01380 .41
68C4: 98
                               TYA
68C5: 0D C3 67 01390
                               ORA D.STICK
68C8: A8
               01400
                               TAY
68C9: B9 D0 5E 01410
                               LDA STICK.DIR,Y
68CC: 8D C3 67 01420
                               STA D.STICK
               01430 ; NOW TRY ALL THREE DIRECTIONS
68CF: 20 0B 69 01440
                               JSR TRY.MOVE
68D2: B0 18
               01450
                              BCS D.LOOP.Q
68D4: AD C3 67 01460
                              LDA D.STICK
68D7: 18
               01470
                               CLC
68D8: 69 01
               01480
                             ADC #1
68DA: 29 07
               01490
                             AND #7
68DC: 20 0B 69 01500
                               JSR TRY.MOVE
68DF: B0 0B
               01510
                              BCS D.LOOP.Q
68E1: AD C3 67 01520
                              LDA D.STICK
68E4: 38
               01530
                               SEC
68E5: E9 01
               01540
                               SBC #1
68E7: 29 07
               01550
                               AND #7
68E9: 20 0B 69 01560
                               JSR TRY.MOVE
               01570 ; NEXT IX
68EC: AE BA 67 01580 D.LOOP.Q LDX D.IX
68EF: E8
               01590
                               INX
68F0: E8
               01600
                               INX
68F1: E0 15
               01610
                               CPX #D.MAXX
68F3: B0 06
               01620
                              BCS .1
68F5: 8E BA 67 01630
                             STX D.IX
68F8: 4C 1D 68 01640
                              JMP D.LOOP.X
68FB: AE BB 67 01650 .1
                              LDX D.IY
68FE: E8
               01660
                               INX
68FF: E8
               01670
                              INX
6900: E0 0B
               01680
                               CPX #D.MAXY
6902: B0 06
               01690
                              BCS .2
6904: 8E BB 67 01700
                               STX D.IY
6907: 4C 0B 68 01710
                               JMP D.LOOP.Y
690A: 60
               01720 .2
                              RTS
               01730 ; CHECK MOVE (A=POSIBLE DIREC)
690B: A8
               01740 TRY.MOVE TAY
690C: AD BC 67 01750
                              LDA D.AX
690F: 18
               01760
                               CLC
6910: 79 3F 70 01770
                              ADC M.DX,Y
6913: 8D BF 67 01780
                             STA D.NX
6916: AD BD 67 01790
                             LDA D.AY
6919: 18
               01800
                               CLC
691A: 79 47 70 01810
                             ADC M.DY, Y
691D: 8D C0 67 01820
                             STA D.NY
6920: AE BF 67 01830
                              LDX D.NX
                             LDY D.NY
6923: AC CO 67 01840
6926: 20 3E 67 01850
                             JSR DUNGEON.WHATS.AT CMP #0 ;SPACE?
6929: C9 00
               01860
692B: F0 3F
               01870
                              BEQ .50
692D: C9 14
               01880
                             CMP #20 ;ARROW?
692F: 90 03
               01890
                              BCC .4
               01900 ;
                             LDA DIFF.TYPE
               01910 ;
                               CMP #3
               01920 ;
                               BCS .49 ;GO AROUND
6931: 4C 6A 69 01930
                               JMP .48 ;HALT
               01940 ;HIT A PLAYER?
6934: C9 10
               01950 .4
                               CMP #16
6936: 90 30
               01960
                               BCC .49
```

```
6938: C9 14
                01970
                                CMP #20
693A: B0 2C
                01980
                               BCS .49
                01990 ;HIT A PLAYER!
693C: 38
                02000
                               SEC
693D: E9 10
                02010
                               SBC #16
693F: AA
                               TAX
                02020
6940: AD BE 67 02030
                               LDA D.C
6943: 38
                02040
                                SEC
6944: E9 09
                02050
                               SBC #9
6946: A8
                02060
                               TAY
6947: A9 0C
                02070
                               LDA #Z.MONSTER.BITE
6949: 20 42 6B 02080
                               JSR S.EFFECT
694C: DE A7 5E 02090 .46
                               DEC HEALTH, X
694F: D0 06
                02100
                               BNE .45
6951: 20 65 6E 02110
                               JSR KILL.PLAYER
6954: 4C 5A 69 02120
                               JMP .47
                02130 .45
6957: 88
                               DEY
6958: 10 F2
                02140
                               BPL .46
695A: AE BC 67 02150 .47
                               LDX D.AX
695D: AC BD 67 02160
                               LDY D.AY
6960: A9 00
                02170
                               LDA #0
6962: 20 56 67 02180
                               JSR DUNGEON.PLOT
6965: 4C 83 69 02190
                               JMP .99 ;GOOD MOVE
                02200 ; MOVEMENT BLOCKED
6968: 18
                               CLC
                02210 .49
6969: 60
                02220
                02230 ; MOVEMENT CANCLED
696A: 38
                02240 .48
                               SEC
696B: 60
                02250
                               RTS
                02260 ; MOVE TO NEW POS
696C: AE BC 67 02270 .50
                               LDX D.AX
696F: AC BD 67 02280
                               LDY D.AY
6972: A9 00
                02290
                               LDA #0
6974: 20 56 67 02300
                               JSR DUNGEON.PLOT
6977: AE BF 67 02310
                               LDX D.NX
697A: AC CO 67 02320
                               LDY D.NY
697D: AD BE 67 02330
                               LDA D.C
6980: 20 56 67 02340
                               JSR DUNGEON.PLOT
                02350 ; GOOD MOVE
6983: 38
                02360 .99
                               SEC
                02370
6984: 60
                               RTS
                02380 ; PROCESS A SPAWNER
                02390; D.AX, D.AY, A==13,14,15
6985:
                02400 SPAWN.C
                                .BS 1
6986: 18
                02410 SPAWNER
                               CLC
6987: 69 FC
                02420
                               ADC #9-13
6989: 8D 85 69 02430
                               STA SPAWN.C
698C: AD 0A D2 02440
                               LDA RANDOM
698F: 29 03
                02450
                               AND #3
6991: AA
                               TAX
                02460
6992: BD C7 5E 02470
                               LDA DISK.Y,X
6995: 18
                02480
                               CLC
6996: 6D BD 67 02490
                               ADC D.AY
6999: 85 F1
                02500
                               STA AH
699B: A8
                02510
                               TAY
                               LDA DISK.X,X
699C: BD C3 5E 02520
699F: 18
                02530
                               CLC
69A0: 6D BC 67 02540
                               ADC D.AX
69A3: 85 F0
                02550
                               STA AL
69A5: AA
                02560
                               TAX
69A6: 20 3E 67 02570
                               JSR DUNGEON.WHATS.AT
69A9: C9 00
                02580
                               CMP #0
69AB: D0 15
                02590
                               BNE .1
69AD: A6 F0
                               LDX AL
                02600
69AF: A4 F1
                02610
                               LDY AH
69B1: AD 85 69 02620
                               LDA SPAWN.C
```

```
DUNGEON.PLOT
LDA RANDOM

02650 AND #3

02660 CLC

02670 ADC #Z.SPAWNING.1

02680 JSR S.EFFECT

02690 .1 RTS

00260 TN "-
69B4: 20 56 67 02630
69B7: AD 0A D2 02640
69BA: 29 03
69BC: 18
               02670
69BD: 69 10
69BF: 20 42 6B 02680
69C2: 60
                   00010 ; VBI HANDLER MODULE
69C3:
                   00020 DUNGEON.VIEW .BS 1
                   00030 DISPLAY.DATA
69C4: 70 70 F0
                   00040 .HS 7070F0C2
00050 .DA PLAY.PIC
69C7: C2
69C8: E8 4E
69CA: 00 82 00
69CD: 82 00 82
                                      .HS 0082008200820074
69D0: 00 74
                   00060
4E7D:
                   00070 DISPLAY.INSERT .EQ DISPLAY.LIST+*-DISPLAY.DATA
69D2: 00 00 74
69D5: 00 00 74
69D8: 00 00 74 00080
                           .HS 000074000074000074
69DB: 00 00 74
69DE: 00 00 74
69E1: 00 00 74 00090
                                      .HS 000074000074000074
69E4: 00 00 74
69E7: 00 00 74
                                   .HS 000074000074000074
69EA: 00 00 74 00100
69ED: 00 00 74
69F0: 00 00 74
                              .HS 000074000074000074
69F3: 00 00 74 00110
69F6: 00 00 74
69F9: 00 00 74
69FC: 00 00 74 00120
                                    .HS 000074000074000074
69FF: 00 00 74
6A02: 00 00 74
6A05: 00 00 74 00130
                                      .HS 000074000074000074
6A08: 00 00 D4
6A0B: 00 00 00
                                    .HS 0000D400000042
6A0E: 42
                   00140
6A0F: C0 4E
                                      .DA NAME.PIC
                  00150
6A11: 41
                 00160
                                      .HS 41
6A12: 6F 4E
                   00170
                                      .DA DISPLAY.LIST
                   00180 ;DLI HANDLER HAS TO FIDDLE
                   00190 ; WITH COLOR2 AND CHACTL
                   00200 DLI.HANDLER
6A14: 48 00210 PHA
6A15: 8E 32 6A 00220 STX DLI.X
6A18: AE 33 6A 00230 LDX DLI.COUNT
6A1B: EE 33 6A 00240 INC DLI.COUNT
6A1E: BD 34 6A 00250 LDA DLI.COLOR2,X
6A21: 8D 0A D4 00260 STA WSYNC
6A24: 8D 18 D0 00270 STA COLPF0+2
6A27: BD 40 6A 00280 LDA DLI.CHAR.SET,X
6A2A: 8D 09 D4 00290 STA CHBASE
6A2D: AE 32 6A 00300 .1 LDX DLI.X
6A30: 68 00310 PLA
6A31: 40 00320 RTT
6A31: 40
                   00320
                                      RTI
                   00330 DLI.X .BS 1
6A32:
6A33:
                   00340 DLI.COUNT .BS 1
                   00350 DLI.COLOR2
6A34:
                                           .BS 6
6A3A: 22 62 A2
6A3D: C2 74 02 00360 DLI.COLOR2.INIT .HS 2262A2C27402
                   00370 DLI.CHAR.SET
6A40: E0 E0 E0
                   00380
6A43: E0
                                      .HS E0E0E0E0
6A44: 58
                  00390
                                    .DA /CHAR.SET
```

```
6A45: E0
               00400
                               .HS E0
6A46:
               00410 O.M.Y
                              .BS 4
               00420 ;INIT VBI
6A4A: A2 05
               00430 VBI.INIT LDX #5
6A4C: BD 3A 6A 00440 .1
                              LDA DLI.COLOR2.INIT,X
6A4F: 9D 34 6A 00450
                              STA DLI.COLOR2,X
                              DEX
6A52: CA
               00460
6A53: 10 F7
               00470
                              BPL .1
6A55: 60
               00480
                              RTS
               00490 ;HANDLE VBI
6A56:
               00500 VBI.COUNT
                                   .BS 1
               00510 VBI.HANDLER
6A57: AD C3 69 00520
                              LDA DUNGEON.VIEW
6A5A: D0 44
               00530
                              BNE VB.NORM
               00540 ;BLANK DUNGEON
6A5C: A2 3A
               00550
                             LDX #58
               00560 .1
6A5E: A9 6D
                              LDA #BLANK.DUNGEON-3
                             STA DISPLAY.INSERT-1,X
6A60: 9D 7C 4E 00570
6A63: A9 6A
               00580
                             LDA /BLANK.DUNGEON-3
6A65: 9D 7D 4E 00590
                             STA DISPLAY.INSERT,X
6A68: CA
               00600
                              DEX
6A69: CA
               00610
                              DEX
6A6A: CA
               00620
                              DEX
6A6B: 10 F1
               00630
                               BPL .1
6A6D: 4C DF 6A 00640
                               JMP PUNT.DISP
               00650 BLANK.DUNGEON
6A70: 00 00 00
6A73: 00 00 00
6A76: 00 00
               00660
                               .HS 0000000000000000
6A78: 00 00 00
6A7B: 00 00 00
6A7E: 00 00
                               .HS 0000000000000000
               00670
6A80: 00 00 00
6A83: 00 00 00
6A86: 00 00
               00680
                               .HS 0000000000000000
6A88: 00 00 00
6A8B: 00 00 00
6A8E: 00 00
               00690
                               .HS 0000000000000000
6A90: 00 00 00
6A93: 00 00 00
6A96: 00 00
               00700
                               .HS 0000000000000000
6A98: 00 00 00
6A9B: 00 00 00
6A9E: 00 00
               00710
                               .HS 0000000000000000
               00720 ; NORMAL DISPLAY
6AA0: AD 37 67 00730 VB.NORM LDA DIRTY.COORD
6AA3: D0 3A
               00740
                              BNE PUNT.DISP
6AA5: AD 38 67 00750
                             LDA H.COORD
6AA8: 8D 04 D4 00760
                              STA HSCROL
6AAB: AD 39 67 00770
                              LDA V.COORD
6AAE: 8D 05 D4 00780
                              STA VSCROL
               00790 ;FIDDLE WITH DISPLAY LIST
6AB1: A2 3A
                             LDX #58
               00800
6AB3: AC 36 67 00810
                              LDY DN.COORD
6AB6: B9 C4 4F 00820 .1
                             LDA T.120.L,Y
6AB9: 18
               00830
                             CLC
                             ADC LF.COORD
6ABA: 6D 34 67 00840
                             STA DISPLAY.INSERT-1,X
LDA T.120.H,Y
ADC #0
6ABD: 9D 7C 4E 00850
6AC0: B9 88 4F 00860
6AC3: 69 00
               00870
6AC5: 9D 7D 4E 00880
                              STA DISPLAY. INSERT, X
                              LDA DISPLAY.INSERT-1,X
6AC8: BD 7C 4E 00890
6ACB: 38
               00900
                              SEC
6ACC: E9 03
               00910
                              SBC #3 ;I DUNNO
6ACE: 9D 7C 4E 00920
                              STA DISPLAY.INSERT-1,X
6AD1: BD 7D 4E 00930
                             TDA DISPLAY.INSERT.X
```

```
6AD4: E9 00
               00940
                               SBC #0
6AD6: 9D 7D 4E 00950
                               STA DISPLAY. INSERT, X
6AD9: 88
               00960
                               DEY
6ADA: CA
               00970
                               DEX
6ADB: CA
               00980
                               DEX
6ADC: CA
               00990
                               DEX
6ADD: 10 D7
               01000
                               BPL .1
               01010;
               01020 PUNT.DISP
               01030 ; RESET DLI COUNT
6ADF: A9 00
               01040
                               LDA #0
                               STA DLI.COUNT
6AE1: 8D 33 6A 01050
6AE4: 4C 62 E4 01060
                               JMP XITVBL
               00270
                               .IN "D2:SOUND"
               00010 ;SOUND MODULE (FWEEP!)
               00020 ;S.INIT CALLED AFTER EACH I/O
               00030; AND AT BEGINNING OF GAME
               00040 S.INIT
6AE7: A2 03
                               LDX #3
6AE9: A9 00
               00050
                               LDA #0
6AEB: 9D 10 6B 00060 .1
                               STA Z.SOUND, X
6AEE: CA
               00070
                               DEX
6AEF: 10 FA
               08000
                               BPL .1
               00090 ; INIT SOUND REGISTERS
6AF1: A2 07
               00100
                               LDX #7
               00110
6AF3: A9 00
                               LDA #0
                               STA AUDF1,X
6AF5: 9D 00 D2 00120 .2
6AF8: CA
               00130
                               DEX
                               BPL .2
6AF9: 10 FA
               00140
               00150 ; INIT SOUND CONTROL
6AFB: A9 00
               00160
                              LDA #0
6AFD: 8D 08 D2 00170
                               STA AUDCTL
6B00: A9 03
               00180
                               LDA #$3
6B02: 8D 32 02 00190
                               STA SSKCTL
6B05: 8D 0F D2 00200
                               STA SKCTL
6B08: 60
               00210
                               RTS
               00220 ;S.QUIT CALLED BEFORE EACH I/O
               00230; AND AT END OF GAME
6B09: 4C E7 6A 00240 S.QUIT
                               JMP S.INIT
6B0C: 00 28 50
               00250 Z.SOUND.OFF .DA #0,#40,#80,#120
6B0F: 78
6B10:
               00260 Z.SOUND .BS 4
               00270 Z.ADDR.L .BS 4
6B14:
6B18:
               00280 Z.ADDR.H .BS 4
               00290 Z.DUR
                               .BS 4
6B1C:
6B20:
               00300 Z.FREQ.L .BS 4
6B24:
               00310 Z.FREQ.H .BS 4
               00320 Z.FINC.L .BS 4
6B28:
6B2C:
               00330 Z.FINC.H .BS 4
6B30:
               00340 Z.VOL.L
                               .BS 4
               00350 Z.VOL.H .BS 4
6B34:
6B38:
               00360 Z.VINC.L .BS 4
6B3C:
               00370 Z.VINC.H .BS 4
               00380 ;S.EFFECT -- MAKE A SOUND
               00390 ; A=SOUND #
               00400 ; X=SOUND REGISTER
6B40:
               00410 S.EFFECT.Y .BS 1
6B41:
               00420 S.EFFECT.X .BS 1
6B42: 8C 40 6B 00430 S.EFFECT STY S.EFFECT.Y
6B45: 8E 41 6B 00440
                             STX S.EFFECT.X
6B48: AA
               00450
                               TAX
6B49: 48
               00460
                               PHA
6B4A: 0A
               00470
                               ASL
6B4B: A8
               00480
                               TAY
6B4C: BD 55 6C 00490
                               LDA Z.PRIOR,X
6B4F: AA
               00500
                               TAX
6B50: 68
               00510
                               PI_{i}A
```

```
6B51: 9D 10 6B 00520
                               STA Z.SOUND, X
6B54: B9 2B 6C 00530
                               LDA Z.BASE, Y
6B57: 9D 14 6B 00540
                               STA Z.ADDR.L,X
6B5A: B9 2C 6C 00550
                               LDA Z.BASE+1,Y
6B5D: 9D 18 6B 00560
                               STA Z.ADDR.H,X
                               LDA #0
6B60: A9 00
               00570
6B62: 9D 1C 6B 00580
                               STA Z.DUR, X
6B65: AC 40 6B 00590
                               LDY S.EFFECT.Y
6B68: AE 41 6B 00600
                               LDX S.EFFECT.X
6B6B: 60
               00610
                               RTS
                00620 ;S.TICK -- CALLED EVERY JIFFY
               00630 S.TICK
6B6C: A9 04
                               LDA #4
6B6E: 8D CB 5E 00640
                               STA P
                               DEC P
6B71: CE CB 5E 00650 ST.LOOP
6B74: 10 01
               00660
                               BPL .1
6B76: 60
               00670
                               RTS
6B77: AE CB 5E 00680 .1
                               LDX P
6B7A: AD 2F 75 00690
                               LDA TESTING
6B7D: F0 0A
               00700
                               BEQ .2
6B7F: BD 0C 6B 00710
                               LDA Z.SOUND.OFF,X
                               TAY
6B82: A8
               00720
6B83: BD 10 6B 00730
                               LDA Z.SOUND,X
6B86: 99 E8 4E 00740
                               STA PLAY.PIC,Y
6B89: BD 10 6B 00750 .2
                               LDA Z.SOUND,X
6B8C: F0 E3
               00760
                               BEQ ST.LOOP
                00770 ; SOUND IN PROGRESS
                00780 ;START OF NEW FRAGMENT?
6B8E: BD 1C 6B 00790
                               LDA Z.DUR,X
6B91: D0 5D
               00800
                               BNE .3
6B93: BD 18 6B 00810
                               LDA Z.ADDR.H,X
6B96: 85 F1
               00820
                               STA AH
6B98: BD 14 6B 00830
                               LDA Z.ADDR.L,X
6B9B: 85 F0
               00840
                               STA AL
6B9D: 18
               00850
                               CLC
6B9E: 69 07
               00860
                               ADC #7
6BA0: 9D 14 6B 00870
                               STA Z.ADDR.L,X
6BA3: A5 F1
               00880
                               LDA AH
                               ADC #0
6BA5: 69 00
               00890
6BA7: 9D 18 6B 00900
                               STA Z.ADDR.H,X
6BAA: A0 00
               00910
                               LDY #0
6BAC: B1 F0
               00920
                               LDA (AL),Y
6BAE: D0 11
                               BNE .4
               00930
               00940 ; END OF EFFECT
6BB0: 8A
               00950
                               TXA
6BB1: 0A
               00960
                               ASL
6BB2: A8
               00970
                               TAY
6BB3: A9 00
               00980
                               LDA #0
6BB5: 9D 10 6B 00990
                               STA Z.SOUND, X
6BB8: 99 01 D2 01000
                               STA AUDC1, Y
6BBB: 99 00 D2 01010
                               STA AUDF1,Y
6BBE: 4C 71 6B 01020
                               JMP ST.LOOP
               01030 ;LOAD NEW FRAGMENT
6BC1: 9D 1C 6B 01040 .4
                               STA Z.DUR,X
6BC4: C8
               01050
                               INY
6BC5: B1 F0
               01060
                               LDA (AL),Y
6BC7: 9D 24 6B 01070
                               STA Z.FREQ.H,X
6BCA: A9 00
               01080
                               LDA #0
6BCC: 9D 20 6B 01090
                               STA Z.FREQ.L,X
6BCF: 9D 30 6B 01100
                               STA Z.VOL.L,X
6BD2: C8
               01110
                               INY
6BD3: B1 F0
               01120
                               LDA (AL),Y
6BD5: 9D 28 6B 01130
                               STA Z.FINC.L,X
6BD8: C8
               01140
                               INY
6BD9: B1 F0
                               LDA (AL),Y
               01150
6BDB: 9D 2C 6B 01160
                               STA Z.FINC.H,X
6BDE: C8
               01170
```

```
6BDF: B1 F0
               01180
                               LDA (AL),Y
6BE1: 9D 34 6B 01190
                               STA Z.VOL.H,X
6BE4: C8
               01200
                               INY
6BE5: B1 F0
               01210
                               LDA (AL),Y
6BE7: 9D 38 6B 01220
                               STA Z.VINC.L,X
6BEA: C8
                01230
                               INY
6BEB: B1 F0
               01240
                               LDA (AL),Y
6BED: 9D 3C 6B 01250
                               STA Z.VINC.H,X
                01260 ; PROCESS NORMAL FRAGMENT
6BF0: DE 1C 6B 01270 .3
                               DEC Z.DUR, X
6BF3: 8A
               01280
                               TXA
6BF4: 0A
               01290
                               ASL
6BF5: A8
               01300
                               TAY
6BF6: BD 24 6B 01310
                               LDA Z.FREQ.H,X
6BF9: 99 00 D2 01320
                               STA AUDF1,Y
6BFC: BD 34 6B 01330
                               LDA Z.VOL.H,X
6BFF: 99 01 D2 01340
                               STA AUDC1, Y
               01350 ; UPDATE COUNTERS
6C02: BD 20 6B 01360
                               LDA Z.FREQ.L,X
6C05: 18
                01370
                               CLC
6C06: 7D 28 6B 01380
                               ADC Z.FINC.L,X
6C09: 9D 20 6B 01390
                               STA Z.FREQ.L,X
6C0C: BD 24 6B 01400
                               LDA Z.FREQ.H,X
6C0F: 7D 2C 6B 01410
                               ADC Z.FINC.H,X
6C12: 9D 24 6B 01420
                               STA Z.FREQ.H,X
6C15: BD 30 6B 01430
                               LDA Z.VOL.L,X
6C18: 18
                               CLC
                01440
6C19: 7D 38 6B 01450
                               ADC Z.VINC.L,X
6C1C: 9D 30 6B 01460
                               STA Z.VOL.L,X
6C1F: BD 34 6B 01470
                               LDA Z.VOL.H,X
6C22: 7D 3C 6B 01480
                               ADC Z.VINC.H,X
6C25: 9D 34 6B 01490
                               STA Z.VOL.H,X
                01500 ; AND LOOP
6C28: 4C 71 6B 01510
                               JMP ST.LOOP
                                .IN "D2:EFFECTS"
                00280
0000:
               00100 Z.SILENCE .EQ 0
0001:
               00110 Z.HIT.PLAYER .EQ 1
0002:
               00120 Z.SHOOT .EQ 2
0003:
               00130 Z.EXPLODE.BOMB .EQ 3
0004:
               00140 Z.OPEN.DOOR .EQ 4
0005:
               00150 Z.PICKUP.OBJECT .EQ 5
               00160 Z.EAT.FOOD .EQ 6
0006:
0007:
               00170 Z.PICK.MONEY .EQ 7
0008:
               00180 Z.HAVE.NONE .EQ 8
0009:
               00190 Z.HIT.MONSTER.1 .EQ 9
000A:
               00200 Z.HIT.MONSTER.2 .EQ 10
000B:
               00210 Z.HIT.MONSTER.3 .EQ 11
000C:
               00220 Z.MONSTER.BITE .EQ 12
000D:
               00230 Z.DEAD.PLAYER .EQ 13
               00240 Z.WARP.OUT .EQ 14
000E:
000F:
               00250 Z.WARP.IN .EQ 15
0010:
               00260 Z.SPAWNING.1 .EQ 16
0011:
               00270 Z.SPAWNING.2 .EQ 17
0012:
               00280 Z.SPAWNING.3 .EQ 18
0013:
                00290 Z.SPAWNING.4 .EQ 19
0014:
                00300 Z.TO.HAND .EQ 20
6C2B: 6A 6C 6B
6C2E: 6C 73 6C
6C31: 7B 6C
                00310 Z.BASE .DA S.0,S.1,S.2,S.3
6C33: 8A 6C 99
6C36: 6C A8 6C
6C39: BE 6C
                00320
                       .DA S.4,S.5,S.6,S.7
6C3B: CD 6C D5
6C3E: 6C DD 6C
6C41: E5 6C
               00330
                       .DA S.8,S.9,S.10,S.11
6C43: ED 6C FC
```

```
6C46: 6C 0B 6D
6C49: 13 6D
                00340
                       .DA S.12,S.13,S.14,S.15
6C4B: 1B 6D 23
6C4E: 6D 2B 6D
6C51: 33 6D
                00350
                        .DA S.16,S.17,S.18,S.19
6C53: 3B 6D
                00360
                       .DA S.20
6C55: 04 01 00
                00370 Z.PRIOR .DA #4,#1,#0,#3
6C58: 03
6C59:
      00
         00 00
                       .DA #0,#0,#0,#0
6C5C: 00
                00380
6C5D: 00 01 01
6C60: 01
                00390
                       .DA #0,#1,#1,#1
6C61: 02 03 03
6C64: 03
                00400
                       .DA #2,#3,#3,#3
6C65: 01 01 01
                       .DA #1,#1,#1,#1
                00410
6C68: 01
6C69: 00
                00420
                       .DA #0
6C6A: 00
                00430 S.O .DA #0
6C6B: 03 FA 00
      00 AF 00
6C6E:
6C71: 00
                00440 S.1 .DA #3,#250,0,#175,0
                00450
                       .DA #0
6C72: 00
6C73: 05 00 00
6C76: 0A 2A 00
6C79: FE
                00460 S.2 .DA #5,#0,2560,#42,-512
6C7A: 00
                00470
                       .DA #0
6C7B: 0A 0A 00
6C7E: 00
         8F 00
6C81: 00
                00480 S.3 .DA #10,#10,0,#143,0
6C82: OF OA 00
         8F 00
6C85: 18
6C88: FF
                00490
                       .DA #15,#10,6144,#143,-256
6C89: 00
                00500
                       .DA #0
6C8A: 05 31 00
6C8D: 00 A4 00
6C90: 00
                00510 S.4 .DA #5,#49,0,#164,0
6C91: 05 59 00
6C94: 00 A4 C0
6C97: FF
                00520
                       .DA #5,#89,0,#164,-64
6C98: 00
                00530
                       .DA #0
6C99: 05 FA 00
6C9C: 00 A4 00
                00540 S.5 .DA #5,#250,0,#164,0
6C9F: 00
6CA0: 05 FA 00
6CA3: D8 A4 00
6CA6: 00
                00550
                       .DA #5,#250,-10240,#164,0
                       .DA #0
6CA7: 00
                00560
6CA8: 0A C7 00
6CAB: 00 AF 00
                00570 S.6 .DA #10,#199,0,#175,-256
6CAE: FF
6CAF: 0A 63 00
6CB2: 00 AF 00
6CB5: FF
                00580
                       .DA #10,#99,0,#175,-256
6CB6: 0A 31 00
6CB9: 00 AF 00
6CBC: FF
                00590
                       .DA #10,#49,0,#175,-256
6CBD: 00
                00600
                       .DA #0
6CBE: 0A C8 00
6CC1: 00 CA 00
6CC4: 00
                00610 S.7 .DA #10,#200,0,#202,0
6CC5: 05 32 00
6CC8: 00
         CA 00
6CCB: FE
                00620
                        .DA #5,#50,0,#202,-512
                00630
                       .DA #0
6CCC: 00
6CCD: 05 64 00
6CD0: 00 AF 00
```

```
6CD3: FD
                00640 S.8 .DA #5,#100,0,#175,-768
6CD4: 00
                00650
                       .DA #0
6CD5: 0A C1 00
6CD8: 00 AA 00
6CDB: FF
                00660 S.9 .DA #10,#193,0,#170,-256
                00670
                       .DA #0
6CDC: 00
6CDD: 0A D9 00
6CE0: 00 AA 00
                00680 S.10 .DA #10,#217,0,#170,-256
6CE3: FF
6CE4: 00
                00690
                       .DA #0
6CE5: 0A F3 00
6CE8: 00 AA 00
6CEB: FF
                00700 S.11 .DA #10,#243,0,#170,-256
6CEC: 00
                00710
                       .DA #0
6CED: 05 0A 00
6CF0: 00 AF 00
6CF3: 00
                00720 S.12 .DA #5,#10,0,#175,0
6CF4: 0A 0A 00
6CF7: 14 AF 80
6CFA: FE
                00730
                       .DA #10,#10,5120,#175,-384
6CFB: 00
                00740
                       .DA #0
6CFC: 3C 00 00
6CFF: 04 4F D5
6D02: FF
                00750 S.13 .DA #60,#0,1024,#79,-43
6D03: 1E F0 00
6D06: F8 A5 D5
                       .DA #30, #240, -2048, #165, -43
6D09: FF
                00760
6D0A: 00
                00770
                       .DA #0
6D0B: 1E F0 00
6D0E: F8 AF E6
6D11: FF
                00780 S.14 .DA #30,#240,-2048,#175,-26
6D12: 00
                00790
                       .DA #0
6D13: 1E 00 00
6D16: 08 AB 19
6D19: 00
                00800 S.15 .DA #30,#0,2048,#171,25
                00810
                       .DA #0
6D1A: 00
6D1B: 05 40 00
6D1E: 00 E0 00
6D21: 03
                00820 S.16 .DA #5,#64,0,#224,768
6D22: 00
                00830
                       .DA #0
6D23: 05 51 00
6D26: 00 E0 00
                00840 S.17 .DA #5,#81,0,#224,768
6D29: 03
                00850
                       .DA #0
6D2A: 00
6D2B: 05 60 00
6D2E: 00 E0 00
6D31: 03
                00860 S.18 .DA #5,#96,0,#224,768
6D32: 00
                00870
                       .DA #0
6D33: 05 79 00
6D36: 00 E0 00
6D39: 03
                00880 S.19 .DA #5,#121,0,#224,768
6D3A: 00
                00890
                       .DA #0
6D3B: 05 79 00
6D3E: 00 AA 00
                00900 S.20 .DA #5,#121,0,#170,0
6D41: 00
6D42: 05 79 00
6D45: 00 AA 00
                00910
6D48: FE
                       .DA #5,#121,0,#170,-512
6D49: OF 5B 00
6D4C: 00 AA 00
6D4F: 00
                00920
                       .DA #15,#91,0,#170,0
6D50: 05 5B 00
6D53: 00 AA 00
6D56: FE
                00930
                       .DA #5,#91,0,#170,-512
                00940
6D57: 00
                       .DA #0
                                .IN "D2:SCORE"
                00290
```

```
00010 ;SCORE MODULE
6D58:
                00020 SC.A
                                .BS 6
6D5E:
                00030 SC.SLOP
                                .BS 1
6D5F:
                00040 RES.LIST .BS 5
                00050 SCORE.INIT
6D64: A9 10
                00060
                               LDA #$10
6D66: A2 05
                00070
                               LDX #5
6D68: 9D 0A 4F 00080 .1
                                STA P.SCORE, X
6D6B: 9D 32 4F 00090
                                STA P.SCORE+40,X
6D6E: 9D 5A 4F 00100
                               STA P.SCORE+80,X
6D71: 9D 82 4F 00110
                                STA P.SCORE+120,X
6D74: CA
                00120
                               DEX
6D75: 10 F1
                00130
                                BPL .1
                00140 ; NO DEAD YET
6D77: A2 04
                00150
                               LDX #4
6D79: A9 FF
                00160
                               LDA #$FF
6D7B: 9D 5F 6D 00170 .9
                                STA RES.LIST, X
6D7E: CA
                00180
                               DEX
6D7F: 10 FA
                00190
                               BPL .9
                00200 ; REMOVE SCORE LINES OF NON-
                00210 ; PLAYERS
6D81: AE 4D 73 00220
                               LDX G.N.P
6D84: E0 04
                00230
                                CPX #4
6D86: B0 11
                00240
                                BCS .3 ; ERASE NONE
6D88: BD 9A 6D 00250
                               LDA SC.REM.T,X
6D8B: AA
                00260
                               TAX
6D8C: A9 00
                00270
                               LDA #0
                00280 .2
6D8E: E0 A0
                               CPX #160
6D90: F0 07
                00290
                               BEQ .3
6D92: 9D E8 4E 00300
                                STA PLAY.PIC,X
6D95: E8
                00310
                                INX
6D96: 4C 8E 6D 00320
                                JMP .2
6D99: 60
                00330 .3
                                RTS
6D9A: 00 28 50
6D9D: 78
                00340 SC.REM.T .DA #0,#40,#80,#120
6D9E: 05 2D 55
6DA1: 7D
                00350 SC.OFF
                                .DA #5,#45,#85,#125
                00360 ; INCREMENT SCORE
                00370; A == 0-255, SCORE INCREMENT
                00380 ; X == PLAYER TO INC
                00390 SCORE.INC
6DA2: 48
                00400
                                PHA
6DA3: BD 9E 6D 00410
                                LDA SC.OFF, X
6DA6: AA
                00420
                                TAX
                00430 ; CONVERT TO A 3 CHAR #
6DA7: A9 00
                00440
                                LDA #0
6DA9: A0 05
                00450
                                LDY #5
6DAB: 99 58 6D 00460 .55
                                STA SC.A, Y
6DAE: 88
                00470
                               DEY
6DAF: 10 FA
                00480
                               BPL .55
                               PLA
6DB1: 68
                00490
6DB2: C9 64
                00500 .1
                                CMP #100
6DB4: 90 09
                               BCC .2
                00510
6DB6: EE 5B 6D 00520
                                INC SC.A+3
                00530
6DB9: 38
                                SEC
6DBA: E9 64
                00540
                                SBC #100
6DBC: 4C B2 6D 00550
                                JMP .1
6DBF: C9 0A
                                CMP #10
                00560 .2
6DC1: 90 09
                00570
                               BCC .3
6DC3: EE 5C 6D 00580
                                INC SC.A+4
6DC6: 38
                00590
                                SEC
6DC7: E9 0A
                00600
                                SBC #10
6DC9: 4C BF 6D 00610
                                JMP .2
6DCC: 8D 5D 6D 00620 .3
                                STA SC.A+5
                00630 ; ADD TO SCORE
6DCF: A9 00
                00640
                             T<sub>1</sub>DA #0
```

```
6DD1: 8D 5E 6D 00650
                               STA SC.SLOP
6DD4: A0 05
               00660
                               LDY #5
6DD6: B9 58 6D 00670 .4
                               LDA SC.A,Y
6DD9: 18
               00680
                               CLC
6DDA: 6D 5E 6D 00690
                               ADC SC.SLOP
6DDD: 7D 0A 4F 00700
                               ADC P.SCORE, X
6DE0: 48
               00710
                               PHA
6DE1: C9 1A
                               CMP #$1A
               00720
6DE3: 90 0A
               00730
                               BCC .41
6DE5: 68
               00740
                               PLA
               00750
6DE6: 38
                               SEC
6DE7: E9 0A
               00760
                               SBC #10
6DE9: 48
               00770
                               PHA
6DEA: A9 01
               00780
                               LDA #1
6DEC: 4C F1 6D 00790
                               JMP .42
6DEF: A9 00
               00800 .41
                               LDA #0
6DF1: 8D 5E 6D 00810 .42
                               STA SC.SLOP
6DF4: 68
               00820
                               PLA
6DF5: 9D 0A 4F 00830
                               STA P.SCORE, X
6DF8: CA
               00840
                               DEX
6DF9: 88
               00850
                               DEY
6DFA: 10 DA
               00860
                               BPL .4
6DFC: 60
               00870
                               RTS
                00880 ; PUT MESSAGE ON SCREEN
6DFD: 26 6F 6F
6E00: 64 1A 03
6E03: 00 22 6F
6E06: 6D 62 73
6E09: 1A 03 00
6E0C: 2B 65 79
6E0F: 73 1A 03 00890 SC.MSG .AT "Food:# Bombs:# Keys:#"
6E12: 1C 1C 30
6E15: 6C 61 79
6E18: 65 72 07
6E1B: 73 00 69
6E1E: 6E 00 2C
6E21: 69 6D 62
6E24: 6F 1E 1E 00900
                             .AT "<<Player's in Limbo>>"
6E27: 0D 0D 30
6E2A: 6C 61 79
6E2D: 65 72 0D
6E30: 69 73 0D
6E33: 69 6E 0D
6E36: 37 61 72
                                .AT "--Player-is-in-Warp--"
6E39: 70 OD OD 00910
6E3C: 14 29 3E 00920 SC.MS.OF .DA #20,#41,#62
               00930 SC.MS.X
6E3F:
                                .BS 1
                00940 SCORE.MSG
6E40: 8E 3F 6E 00950
                               STX SC.MS.X
6E43: A8
               00960
                               TAY
6E44: B9 3C 6E 00970
                               LDA SC.MS.OF, Y
6E47: A8
               00980
                               TAY
6E48: A9 14
               00990
                               LDA #20
6E4A: 8D 5E 6D 01000
                               STA SC.SLOP
6E4D: BD CC 5E 01010
                               LDA SCORE.OFF,X
6E50: 18
                               CLC
               01020
6E51: 69 14
               01030
                               ADC #20
6E53: AA
               01040
                               TAX
6E54: B9 FD 6D 01050 .1
                               LDA SC.MSG, Y
6E57: 9D F4 4E 01060
                               STA P.HAND,X
6E5A: CA
               01070
                               DEX
6E5B: 88
                               DEY
               01080
6E5C: CE 5E 6D 01090
                               DEC SC.SLOP
6E5F: 10 F3
                               BPL .1
               01100
6E61: AE 3F 6E 01110
                               LDX SC.MS.X
6E64: 60
               01120
                               RTS
```

```
01130 ; KILL A PLAYER
               01140 KILL.PLAYER
6E65: A9 00
               01150
                              LDA #0
6E67: 9D A7 5E 01160
                              STA HEALTH, X
6E6A: 8A
               01170
                              TXA
6E6B: 48
               01180
                              PHA
6E6C: A9 01
               01190
                              LDA #1
6E6E: 20 40 6E 01200
                              JSR SCORE.MSG
6E71: 68
               01210
                              PLA
6E72: 48
               01220
                              PHA
6E73: A2 03
               01230
                              LDX #3
                              LDA RES.LIST,X
6E75: BD 5F 6D 01240 .9
6E78: 9D 60 6D 01250
                              STA RES.LIST+1,X
6E7B: CA
               01260
                              DEX
6E7C: 10 F7
               01270
                              BPL .9
6E7E: 68
               01280
                              PLA
6E7F: 8D 5F 6D 01290
                              STA RES.LIST
6E82: AA
               01300
                              TAX
6E83: BD B7 5E 01310
                              LDA P.Y.H,X
6E86: A8
               01320
                              TAY
6E87: BD AF 5E 01330
                              LDA P.X.H,X
6E8A: AA
               01340
                              TAX
6E8B: A9 00
               01350
                              LDA #0
6E8D: 20 56 67 01360
                              JSR DUNGEON.PLOT
6E90: A9 0D
               01370
                              LDA #Z.DEAD.PLAYER
6E92: 20 42 6B 01380
                              JSR S.EFFECT
               01390 ; RIGHT! -- CHECK IF WE OUGHT
               01400 ; TO WARP NOW BY SEEING IF ALL
               01410 ;LIVE PLAYERS ARE IN WARP.
6E95: AE 4D 73 01420
                             LDX G.N.P
6E98: A0 00
               01430
                              LDY #0 ; NO LIFE YET
6E9A: CA
               01440 .90
                              DEX
6E9B: 30 0D
                              BMI .91
            01450
6E9D: BD A7 5E 01460
                             LDA HEALTH,X
6EA0: F0 F8
               01470
                              BEQ .90
                             LDY #1 ;SEEN LIFE
6EA2: A0 01
               01480
6EA4: BD AB 5E 01490
                              LDA P.IN.WARP,X
               01500
                              BNE .90
6EA7: D0 F1
               01510 ; SOMEONE ALIVE AND ON LEVEL
6EA9: 60
               01520
                              RTS
               01530 ; DID WE SEE ANYBODY LEFT ALIVE?
6EAA: C0 00
               01540 .91
                              CPY #0
               01550
                              BEQ .92 ;ALL DEAD
6EAC: F0 05
               01560 ; PEOPLE IN WARP, SO START IT
6EAE: A9 28
               01570
                              LDA #40
6EB0: 8D 86 5E 01580
                              STA WARP.TIMER
               01590 .92
6EB3: 60
                              RTS
               01600 ; RESERECT OLDEST DEAD PLAYER
6EB4:
               01610 R.O.X
                              .BS 1
6EB5:
               01620 R.O.Y
                              .BS 1
               01630 RESERECT.OLD
6EB6: 8E B4 6E 01640
                             STX R.O.X
6EB9: 8C B5 6E 01650
                              STY R.O.Y
6EBC: A2 03
              01660
                              LDX #3
6EBE: BD 5F 6D 01670 .1
                             LDA RES.LIST,X
6EC1: C9 FF
              01680
                             CMP #$FF
6EC3: D0 0B
               01690
                              BNE .2
6EC5: CA
               01700
                              DEX
6EC6: 10 F6
               01710
                              BPL .1
               01720 ; NO DEAD
6EC8: AE B4 6E 01730
                              LDX R.O.X
6ECB: AC B5 6E 01740
                              LDY R.O.Y
6ECE: 38
               01750
                              SEC
6ECF: 60
               01760
                              RTS
               01770 ; FOUND DEAD
6ED0: A8
               01780 .2 TAY
```

```
6ED1: A9 FF
               01790
                               LDA #$FF
6ED3: 9D 5F 6D 01800
                               STA RES.LIST, X
6ED6: 98
               01810
                               TYA
6ED7: 48
               01820
                               PHA
6ED8: AA
                               TAX
               01830
                              LDA R.O.X
6ED9: AD B4 6E 01840
6EDC: 9D AF 5E 01850
                              STA P.X.H,X
6EDF: AD B5 6E 01860
                             LDA R.O.Y
6EE2: 9D B7 5E 01870
                               STA P.Y.H,X
6EE5: A9 05
               01880
                              LDA #5
6EE7: 9D A7 5E 01890
                              STA HEALTH, X
6EEA: A9 00
               01900
                              LDA #0
6EEC: 20 40 6E 01910
                               JSR SCORE.MSG
               01920 ; UPDATE INVENTORY
6EEF: 20 0B 6F 01930
                               JSR INVENTORY
6EF2: 68
               01940
                               PLA
                               LDX R.O.X
6EF3: AE B4 6E 01950
6EF6: AC B5 6E 01960
                               LDY R.O.Y
6EF9: 18
               01970
                               CLC
6EFA: 60
               01980
                               RTS
               01990 ; CHECK BREAK KEY FLAG -- IF SET
               02000; AND IF TESTING, THEN CLEAR IT
               02010; AND BRK (TO DEBUGGER).
               02020 CHECK.BREAK
6EFB: A9 80
               02030
                              LDA #$80
6EFD: C5 11
               02040
                               CMP BRKKEY
6EFF: D0 01
               02050
                              BNE .1
6F01: 60
               02060
                               RTS
6F02: 85 11
               02070 .1
                               STA BRKKEY
6F04: AD 2F 75 02080
                              LDA TESTING
6F07: F0 01
               02090
                               BEQ .2
6F09: 00
               02100
                               BRK
6F0A: 60
               02110 .2
                               RTS
               02120 ; DISPLAY INVENTORY FOR PLAYER X
               02130 INVENTORY
6F0B: BD CC 5E 02140
                               LDA SCORE.OFF, X
6F0E: A8
               02150
                               TAY
6F0F: BD A3 5E 02160
                               LDA N.FOOD,X
6F12: 09 10
               02170
                               ORA #$10
6F14: 99 F9 4E 02180
                               STA P.HAND+5,Y
6F17: BD 9B 5E 02190
                             LDA N.BOMBS,X
6F1A: 09 10
               02200
                               ORA #$10
6F1C: 99 01 4F 02210
                               STA P.HAND+13,Y
6F1F: BD 9F 5E 02220
                              LDA N.KEYS,X
6F22: 09 10
               02230
                               ORA #$10
6F24: 99 08 4F 02240
                               STA P.HAND+20,Y
6F27: 60
               02250
                               RTS
                               .IN "D2:HAND"
               00300
               00010 ; HAND MODULE
               00020 ; OPEN DOOR EXPECTS:
               00030 ; (NEW.X+1, NEW.Y+1) DOOR CENTER
               00040 ; X PLAYER #
               00050; OPENS DOORS, DECS KEYS
               00060 ; RETURNS CARRY CLEAR IF O.K.
               00070 OPEN.DOOR
6F28: BD 9F 5E 00080
                               LDA N.KEYS,X
6F2B: D0 02
               00090
                               BNE .10
               00100 ; NO KEYS -- CAN'T OPEN DOOR!
6F2D: 38
               00110
                               SEC
6F2E: 60
               00120
                               RTS
               00130 ;GOT SOME KEYS
6F2F: DE 9F 5E 00140 .10 DEC N.KEYS,X
6F32: AD 00 5F 00150
                              LDA NEW.X+1
6F35: 85 F0
                               STA AL
               00160
6F37: AD 02 5F 00170
                               LDA NEW.Y+1
6F3A: 85 F1 00180
                              STA AH
```

```
6F3C: A6 F0
               00190
                              LDX AL
6F3E: A4 F1
               00200
                              LDY AH
6F40: 20 3E 67 00210
                              JSR DUNGEON.WHATS.AT
6F43: C9 02
               00220
                              CMP #2 ; A DOOR?
6F45: F0 09
               00230
                              BEQ .2
               00240 ;IT ISN'T A DOOR?
6F47: AE CB 5E 00250
                              LDX P
6F4A: FE 9F 5E 00260
                               INC N.KEYS,X
6F4D: 4C 2F 6F 00270
                               JMP .10
               00280 ; IT'S A DOOR; ERASE IT
               00290 .2
6F50: A6 F0
                              LDX AL
6F52: A4 F1
               00300
                              LDY AH
6F54: A9 00
               00310
                              LDA #0
6F56: 20 56 67 00320
                              JSR DUNGEON.PLOT
6F59: A9 04
               00330
                              LDA #Z.OPEN.DOOR
6F5B: 20 42 6B 00340
                              JSR S.EFFECT
               00350 ; NOW ERASE DOORS IN ALL EIGHT
               00360 ; DIRECTIONS
6F5E: A9 07
               00370
                              LDA #7
6F60: 85 F2
               00380
                              STA BL
6F62: A5 F0
               00390 .3
                              LDA AL
6F64: 85 F4
               00400
                              STA DL
6F66: A5 F1
               00410
                              LDA AH
6F68: 85 F5
               00420
                              STA DH
6F6A: A6 F2
               00430 .4
                              LDX BL
6F6C: A5 F4
               00440
                              LDA DL
6F6E: 18
                              CLC
               00450
6F6F: 7D 3F 70 00460
                              ADC M.DX,X
6F72: 85 F4
               00470
                              STA DL
6F74: A5 F5
               00480
                              LDA DH
6F76: 18
               00490
                              CLC
6F77: 7D 47 70 00500
                              ADC M.DY, X
6F7A: 85 F5
               00510
                              STA DH
6F7C: A8
               00520
                              TAY
6F7D: A6 F4
               00530
                              LDX DL
6F7F: 20 3E 67 00540
                              JSR DUNGEON.WHATS.AT
6F82: C9 02
               00550
                              CMP #2
6F84: D0 0C
                              BNE .31 ; NOT A DOOR
               00560
6F86: A6 F4
               00570
                              LDX DL
6F88: A4 F5
               00580
                              LDY DH
6F8A: A9 00
               00590
                             LDA #0
6F8C: 20 56 67 00600
                              JSR DUNGEON.PLOT
6F8F: 4C 6A 6F 00610
                              JMP .4
6F92: C6 F2
               00620 .31
                              DEC BL ; NEXT DIR
6F94: 10 CC
               00630
                              BPL .3
6F96: 4C 9E 6F 00640
                              JMP INV.QUIT
               00650 DO.NOT.HAVE
6F99: A9 08
               00660
                              LDA #Z.HAVE.NONE
6F9B: 20 42 6B 00670
                              JSR S.EFFECT
6F9E: AE CB 5E 00680 INV.QUIT LDX P
6FA1: 4C 0B 6F 00690
                               JMP INVENTORY
               00700 EAT.HEALTH.FOOD
6FA4: BD A3 5E 00710
                              LDA N.FOOD, X
6FA7: F0 10
               00720
                              BEQ .1
6FA9: DE A3 5E 00730
                              DEC N.FOOD,X
6FAC: A9 09
               00740
                              LDA #9
6FAE: 9D A7 5E 00750
                              STA HEALTH, X
6FB1: A9 06
               00760
                              LDA #Z.EAT.FOOD
6FB3: 20 42 6B 00770
                              JSR S.EFFECT
6FB6: 4C 9E 6F 00780
                              JMP INV.QUIT
6FB9: 4C 99 6F 00790 .1
                              JMP DO.NOT.HAVE
               00800 FIRE.SMART.BOMB
6FBC: BD 9B 5E 00810
                              LDA N.BOMBS,X
6FBF: F0 09
               00820
                              BEQ .1
6FC1: DE 9B 5E 00830
                              DEC N.BOMBS,X
6FC4: 20 E0 6F 00840
                              JSR EXPLODE
```

```
6FC7: 4C 9E 6F 00850
                               JMP INV.QUIT
6FCA: 4C 99 6F 00860 .1
                               JMP DO.NOT.HAVE
               00870 ; EXPLODE -- X HAS PLAYER TO
               00880 ; CREDIT
6FCD: 00 00 00
6FD0: 00 00 00
6FD3: 00 00
               00890 EXP.FOF
                               .HS 0000000000000000
6FD5: 00 0A 14
6FD8: 1E 00 64
               00900
6FDB: C8 FF
                               .HS 000A141E0064C8FF
               00910 EXPLODE.P
6FDD:
                                   .BS 1
                               .BS 1
6FDE:
               00920 EXP.LF
                               .BS 1
6FDF:
               00930 EXP.UP
6FE0: 8E DD 6F 00940 EXPLODE STX EXPLODE.P
6FE3: A9 03
               00950
                               LDA #Z.EXPLODE.BOMB
6FE5: 20 42 6B 00960
                               JSR S.EFFECT
6FE8: AD 33 67 00970
                               LDA UP.COORD
6FEB: 4A
               00980
                               LSR
6FEC: 8D DF 6F 00990
                               STA EXP.UP
6FEF: AD 34 67 01000
                               LDA LF.COORD
6FF2: 4A
               01010
                               LSR
6FF3: 8D DE 6F 01020
                               STA EXP.LF
6FF6: A9 00
               01030
                               LDA #0
6FF8: 85 F1
               01040
                               STA AH ;Y
6FFA: A9 00
               01050 .1
                               LDA #0
                               STA AL ;X
6FFC: 85 F0
               01060
6FFE: AD DE 6F 01070 .2
                               LDA EXP.LF
7001: 18
               01080
                               CLC
7002: 65 F0
               01090
                               ADC AL
7004: AA
               01100
                               TAX
7005: 85 F4
               01110
                               STA DL ; SUM X
7007: AD DF 6F 01120
                               LDA EXP.UP
700A: 18
               01130
                               CLC
700B: 65 F1
               01140
                               ADC AH
700D: A8
               01150
                               TAY
700E: 85 F5
               01160
                               STA DH ; SUM Y
7010: 20 3E 67 01170
                               JSR DUNGEON.WHATS.AT
7013: AA
               01180
                               TAX
7014: E0 10
               01190
                               CPX #16
                               BCS .3 ; OUT OF RANGE
7016: B0 16
               01200
7018: BD CD 6F 01210
                               LDA EXP.FOF,X
701B: F0 11
               01220
                               BEQ .3
               01230 ; A MONSTER!
701D: 48
               01240
                               PHA
701E: A9 00
               01250
                               LDA #0
7020: A6 F4
               01260
                               LDX DL
7022: A4 F5
               01270
                               LDY DH
7024: 20 56 67 01280
                               JSR DUNGEON.PLOT
7027: 68
               01290
                               PLA
7028: AE DD 6F 01300
                               LDX EXPLODE.P
702B: 20 A2 6D 01310
                               JSR SCORE.INC
702E: E6 F0
               01320 .3
                               INC AL
7030: A5 F0
               01330
                               LDA AL
7032: C9 15
               01340
                               CMP #21
7034: 90 C8
               01350
                               BCC .2
7036: E6 F1
               01360
                               INC AH
7038: A5 F1
               01370
                               LDA AH
703A: C9 0B
                               CMP #11
               01380
703C: 90 BC
               01390
                               BCC .1
703E: 60
               01400
                               RTS
                               .IN "D2:MIS"
               00310
               00010 ;MIS - MISSILE HANDLER
               00020 MIS.BASE .EQ 20 ; TO 27
0014:
703F: 00 01 01
7042: 01 00 FF
               00030 M.DX
                             .HS 0001010100FFFFFF
7045: FF FF
```

```
7047: FF FF 00
704A: 01 01 01
704D: 00 FF
               00040 M.DY
                               .HS FFFF0001010100FF
704F:
               00050 MX
                               .BS 4
               00060 MY
7053:
                               .BS 4
                               .BS 4
7057:
               00070 M.ON
705B:
               00080 M.DIR
                               .BS 4
705F: AE 4D 73 00090 M.INIT
                               LDX G.N.P
7062: CA
               00100
                               DEX
7063: A9 00
                               LDA #0
               00110
7065: 9D 57 70 00120 .1
                               STA M.ON, X
7068: CA
               00130
                               DEX
7069: 10 FA
               00140
                               BPL .1
706B: 60
               00150
                               RTS
               00160 M.CLEAN.UP
706C: AE 4D 73 00170
                               LDX G.N.P
706F: CA
               00180
                               DEX
7070: 8E CB 5E 00190
                               STX P
7073: AE CB 5E 00200 .1
                               LDX P
7076: BD 57 70 00210
                               LDA M.ON, X
                               BEQ .2
7079: F0 0D
               00220
707B: BD 53 70 00230
                               LDA MY,X
707E: A8
               00240
                               TAY
707F: BD 4F 70 00250
                               LDA MX,X
7082: AA
               00260
                               TAX
7083: A9 00
               00270
                               LDA #0
7085: 20 56 67 00280
                               JSR DUNGEON.PLOT
7088: CE CB 5E 00290 .2
                               DEC P
708B: 10 E6
               00300
                               BPL .1
708D: 60
               00310
                               RTS
708E: AE 4D 73 00320 M.TICK
                               LDX G.N.P
7091: 8E CB 5E 00330
                               STX P
7094: CE CB 5E 00340 M.LOOP
                               DEC P
7097: 10 01
               00350
                               BPL .1
7099: 60
               00360
                               RTS
709A: AE CB 5E 00370 .1
                               LDX P
709D: BD 57 70 00380
                               LDA M.ON, X
70A0: F0 03
               00390
                               BEQ .2
70A2: 4C E2 70 00400
                               JMP M.FLY
70A5: 20 C4 62 00410 .2
                               JSR CHECK.PLAYER
                               BCC M.LOOP
70A8: 90 EA
               00420
70AA: BD 84 02 00430
                               LDA STRIGO, X
70AD: F0 03
               00440
                               BEQ .3
                00450 ; NO TRIG DOWN -- PUNT
70AF: 4C 94 70 00460 .20
                               JMP M.LOOP
70B2: BD 78 02 00490 .3
                               LDA STICKO,X
70B5: C9 0F
               00500
                               CMP #15
70B7: F0 F6
               00510
                               BEQ .20
70B9: A8
               00520
                               TAY
70BA: B9 D0 5E 00530
                               LDA STICK.DIR,Y
70BD: 9D 5B 70 00540
                               STA M.DIR, X
70C0: A8
               00550
                               TAY
                00560 ; FIRING NOW
70C1: A9 01
               00570
                               LDA #1
70C3: 9D 57 70 00580
                               STA M.ON, X
70C6: A9 02
               00590
                               LDA #Z.SHOOT
70C8: 20 42 6B 00600
                               JSR S.EFFECT
70CB: BD AF 5E 00610
                               LDA P.X.H,X
70CE: 18
               00620
                               CLC
70CF: 79 3F 70 00630
                               ADC M.DX,Y
70D2: 9D 4F 70 00640
                               STA MX,X
70D5: BD B7 5E 00650
                               LDA P.Y.H,X
70D8: 18
               00660
                               CLC
70D9: 79 47 70 00670
                               ADC M.DY, Y
70DC: 9D 53 70 00680
                               STA MY, X
70DF: 4C 13 71 00690
                               JMP M.CHECK
```

7000	7 F	1 /		00700	M DIX	T D 7	DEGI OK I 2
70E2:					M.FLY		RTCLOK+2
	29			00710		AND	
70E6:				00720		BEQ	
				00730			M.LOOP
				00740	• 1		MY,X
70EE:				00750		TAY	MV V
				00760		TAX	MX,X
70F2:				00770 00780		LDA	#0
70F3:				00780			DUNGEON.PLOT
				00800		LDX	
				00810			M.DIR,X
70FE:				00810		TAY	M.DIR, X
				00830			MX,X
7102:				00840		CLC	rix, x
				00850			M.DX,Y
				00860			MX,X
				00870			MY,X
710C:		55		00880		CLC	111 / 2
				00890			M.DY,Y
				00900			MY,X
					M.CHECK		MY,X
7116:				00920	H. CHECK	ASL	111 / 2
				00930			UP.COORD
711A:				00940		BCC	
				00950			DN.COORD
		02		00960		BEQ	
7121:				00970		BCS	
				00980			MX,X
			, 0	00990	• 2	ASL	1121 / 21
			67	01000			LF.COORD
712A:				01010		BCC	
				01020			RT.COORD
712F:		0D		01030			M.ON.SCR
7131:				01040		BCS	
							M.ON.SCR
7136:				01060		LDA	
				01070			M.ON, X
				01080			M.LOOP
					M.ON.SCR	LDA	MY,X
7141:				01100		TAY	•
7142:	BD	4F	70	01110		LDA	MX,X
7145:				01120		TAX	·
7146:	20	3E	67	01130		JSR	DUNGEON.WHATS.AT
7149:	C9	00		01140		CMP	#0
714B:	D0	19		01150		BNE	M.QUIT
714D:	ΑE	СВ	5E	01160		LDX	P
7150:	BD	5В	70	01170		LDA	M.DIR,X
7153:	18			01180		CLC	
7154:	69	14		01190		ADC	#MIS.BASE
7156:	48			01200		PHA	
7157:	BD	53	70	01210		LDA	MY,X
715A:	A8			01220		TAY	
715B:	BD	4F	70	01230		LDA	MX,X
715E:				01240		TAX	
715F:				01250		PLA	
				01260			DUNGEON.PLOT
7163:	4C	94	70	01270			M.LOOP
					-		SOMETHING
7166:					M.QUIT	PHA	" •
7167:				01300		LDA	
				01310		LDX	
		57	70	01320			M.ON,X
716F:				01330		PLA	" 0
7170:				01340		CMP	
7172:	90	υ4		01350		BCC	• 1

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7174: C9 14
               01360
                               CMP #20
                               BCC .2
7176: 90 03
               01370
7178: 4C 94 70 01380 .1
                               JMP M.LOOP ; WALLS
717B: 48
               01390 .2
                               PHA
717C: 38
                               SEC
               01400
               01410
                               SBC #8
717D: E9 08
717F: 0A
               01420
                               ASL
7180: A8
               01430
                               TAY
7181: B9 8F 71 01440
                               LDA M.H.TAB,Y
7184: 85 F0
               01450
                               STA AL
7186: B9 90 71 01460
                               LDA M.H.TAB+1,Y
                               STA AH
7189: 85 F1
               01470
718B: 68
               01480
                               PLA
718C: 6C F0 00 01490
                               JMP (AL)
718F: A7 71
               01500 M.H.TAB .DA M.SMART.BOMB ;8
7191: C0 71
               01510
                               .DA M.MONSTER
                                                 ;10
7193: C0 71
               01520
                               .DA M.MONSTER
7195: C0 71
               01530
                               .DA M.MONSTER
                                                 ;11
7197: 1D 72
               01540
                               .DA M.HEART.GOLD ;12
7199: F9 71
               01550
                               .DA M.SPAWNER
                                                ;13
719B: F9 71
               01560
                               .DA M.SPAWNER
                                                ;14
719D: F9 71
               01570
                                                ;15
                               .DA M.SPAWNER
719F: F1 71
               01580
                               .DA M.PLAYER
                                                 ;16
71A1: F1 71
               01590
                               .DA M.PLAYER
                                                 ;17
71A3: F1 71
               01600
                               .DA M.PLAYER
                                                 ;18
71A5: F1 71
               01610
                               .DA M.PLAYER
                                                 ;19
               01620 M.SMART.BOMB
71A7: AE CB 5E 01630
                               LDX P ; ERASE ENTRY
71AA: BD 53 70 01640
                               LDA MY, X
71AD: A8
               01650
                               TAY
71AE: BD 4F 70 01660
                               LDA MX,X
71B1: AA
               01670
                               TAX
71B2: A9 00
               01680
                               LDA #0
71B4: 20 56 67 01690
                              JSR DUNGEON.PLOT
71B7: AE CB 5E 01700
                               LDX P
71BA: 20 E0 6F 01710
                               JSR EXPLODE
71BD: 4C 94 70 01720 .11
                               JMP M.LOOP
               01730 M.MONSTER
71C0: 48
               01740
                               PHA
71C1: A9 0A
               01750
                               LDA #10
71C3: AE CB 5E 01760
                               LDX P
71C6: 20 A2 6D 01770
                               JSR SCORE.INC
71C9: AE CB 5E 01780
                               LDX P
71CC: BD 53 70 01790
                               LDA MY,X
71CF: A8
               01800
                               TAY
71D0: BD 4F 70 01810
                               LDA MX,X
71D3: AA
               01820
                               TAX
71D4: 68
               01830
                               PLA
71D5: 48
               01840
                               PHA
71D6: 18
                               CLC
               01850
71D7: 69 00
               01860
                               ADC #Z.HIT.MONSTER.1-9
71D9: 20 42 6B 01870
                               JSR S.EFFECT
71DC: 68
               01880
                               PLA
71DD: C9 0A
               01890
                               CMP #10
71DF: B0 05
               01900
                               BCS .21
                               LDA #0
71E1: A9 00
               01910
71E3: 4C E9 71 01920
                               JMP .22
               01930 .21
71E6: 38
                               SEC
71E7: E9 01
               01940
                               SBC #1
71E9: 20 56 67 01950 .22
                               JSR DUNGEON.PLOT
71EC: 4C 94 70 01960
                               JMP M.LOOP
71EF: C9 10
               01970 .3
                               CMP #16
               01980 M.PLAYER
71F1: A9 01
               01990
                               LDA #Z.HIT.PLAYER
71F3: 20 42 6B 02000
                               JSR S.EFFECT
71F6: 4C 94 70 02010
                              JMP M.T.OOP
```

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02020 M.SPAWNER
71F9: 48
               02030
                               PHA
71FA: AE CB 5E 02040
                               LDX P
71FD: BD 53 70 02050
                               LDA MY, X
7200: A8
               02060
                               TAY
7201: BD 4F 70 02070
                               LDA MX,X
7204: AA
               02080
                               TAX
7205: 68
               02090
                               PLA
7206: 38
               02100
                               SEC
7207: E9 01
               02110
                               SBC #1
7209: C9 0D
                               CMP #13
               02120
720B: B0 02
               02130
                               BCS .1
720D: A9 00
               02140
                               LDA #0
720F: 20 56 67 02150 .1
                               JSR DUNGEON.PLOT
7212: A9 C8
               02160
                               LDA #200
7214: AE CB 5E 02170
                               LDX P
7217: 20 A2 6D 02180
                               JSR SCORE.INC
721A: 4C 94 70 02190
                               JMP M.LOOP
               02200 M.HEART.GOLD
721D: AE CB 5E 02210
                               LDX P
7220: BD 53 70 02220
                               LDA MY, X
7223: A8
               02230
                               TAY
7224: BD 4F 70 02240
                               LDA MX,X
7227: AA
               02250
                               TAX
7228: 20 B6 6E 02260
                               JSR RESERECT.OLD
722B: 90 05
               02270
                               BCC .1
722D: A9 0B
               02280
                               LDA #11 ; Monster (ha!)
722F: 4C 35 72 02290
                               JMP .2
7232: 18
               02300 .1
                               CLC
7233: 69 10
                               ADC #16
               02310
7235: 20 56 67 02320 .2
                               JSR DUNGEON.PLOT
7238: A9 OF
               02330
                               LDA #Z.WARP.IN
723A: 20 42 6B 02340
                               JSR S.EFFECT
723D: 4C 94 70 02350
                               JMP M.LOOP
                               .IN "D2:SETUP"
               00320
               00010 ;SETUP GAME
               00020 ;SET UP INITIAL CONFIGURATION
               00030 ;GAME 1 EASY
0070:
               00040 KEY.IOCB .EQ $70
               00050 KEYBOARD .AS "K:"
7240: 4B 3A
7242: 9B
               00060
                               .DA #EOL
7243: 20 A3 74 00070 START
                               JSR TITLE
7246: A9 00
               08000
                               LDA #0
7248: 8D 4B 73 00090
                               STA GAME.TYPE
724B: A9 01
               00100
                               LDA #1
724D: 8D 4C 73 00110
                               STA DIFF.TYPE
7250: A2 70
               00120
                               LDX #KEY.IOCB
7252: A9 03
               00130
                               LDA #OPEN
7254: 9D 42 03 00140
                               STA ICCOM, X
7257: A9 40
               00150
                               LDA #KEYBOARD
7259: 9D 44 03 00160
                               STA ICBAL, X
725C: A9 72
               00170
                               LDA /KEYBOARD
725E: 9D 45 03 00180
                               STA ICBAH, X
7261: A9 04
               00190
                               LDA #4
7263: 9D 4A 03 00200
                               STA ICAX1,X
7266: 20 56 E4 00210
                               JSR CIOV
               00220 RESTART LDA #1
7269: A9 01
726B: 8D 82 5B 00230
                               STA E.LEVEL
726E: 20 09 63 00240
                               JSR DUNGEON.INIT
7271: A9 00
               00250
                               LDA #0
7273: 8D 4D 73 00260
                               STA G.N.P
7276: 20 64 6D 00270
                               JSR SCORE.INIT
7279: AD 82 5B 00280 NEW.LEV LDA E.LEVEL
727C: A2 00
               00290
                               LDX #0 ; NEW
727E: A0 00
               00300
                               LDY #0 ; GOING DOWN
7280: 20 BC 65 00310
                               JSR DUNGEON.SWAP.IN
```

```
7283: 8E 3B 67 00320
                               STX C.X.H
7286: 8C 3D 67 00330
                               STY C.Y.H
7289: A9 00
               00340
                               LDA #0
728B: 8D 3A 67 00350
                               STA C.X.L
728E: 8D 3C 67 00360
                               STA C.Y.L
7291: 20 96 66 00370
                               JSR DUNGEON.SHOW
               00380 ;LOAD IN DIRECTIONS
7294: A2 A0
               00390
                               LDX #160
7296: BD D6 73 00400 .1
                               LDA DIRECTIONS-1,X
7299: 9D E7 4E 00410
                               STA PLAY.PIC-1,X
729C: CA
               00420
                               DEX
729D: D0 F7
               00430
                               BNE .1
               00440 ; WAIT FOR BUTTON PRESS
729F: 20 77 74 00450 WAIT
                               JSR MODE.SHOW
               00460 ; WAIT FOR BUTTON PRESS
72A2: AD 1F D0 00470 .3
                               LDA CONSOL
72A5: 29 07
               00480
                               AND #7
72A7: C9 07
               00490
                               CMP #7
72A9: D0 16
               00500
                               BNE .40
72AB: 20 D6 62 00510
                               JSR GET.CHAR
               00520
72AE: B0 F2
                               BCS .3
               00530 ;LEVEL SHIFT
                               CMP #'A
72B0: C9 41
               00540
                               BCC .3
72B2: 90 EE
               00550
72B4: C9 5B
               00560
                               CMP #'Z+1
72B6: B0 EA
               00570
                               BCS .3
               00580 ; NEW START LEVEL -- READ IT IN
72B8: 38
               00590
                               SEC
72B9: E9 40
               00600
                               SBC #64
72BB: 8D 82 5B 00610
                               STA E.LEVEL
72BE: 4C 79 72 00620
                               JMP NEW.LEV
               00630;
               00640;
               00650 ;SAVE PRESS, DEBOUNCE
72C1: AD 1F D0 00660 .40
                               LDA CONSOL
72C4: 48
               00670
                               PHA
72C5: AD 1F D0 00680 .4
                               LDA CONSOL
72C8: 29 07
               00690
                               AND #7
72CA: C9 07
               00700
                               CMP #7
72CC: D0 F7
               00710
                               BNE .4
72CE: A5 14
               00720
                               LDA JIFFY
72D0: 18
               00730
                               CLC
               00740
                               ADC #10
72D1: 69 0A
72D3: C5 14
               00750 .5
                               CMP JIFFY
72D5: D0 FC
               00760
                               BNE .5
72D7: 68
               00770
                               PLA
               00780 ; DISPATCH
               00790 ; ALSO, LUSER'S ALIVE SO CANCLE
               00800 ;ATRACT MODE
72D8: A2 00
               00810
                               LDX #0
72DA: 86 4D
               00820
                               STX ATRACT
72DC: C9 03
               00830
                               CMP #3
72DE: D0 10
                               BNE .61
               00840
72E0: AE 4C 73 00850
                               LDX DIFF.TYPE
72E3: E8
               00860
                               INX
72E4: E0 04
               00870
                               CPX #4
72E6: 90 02
               00880
                               BCC .62
72E8: A2 00
               00890
                               LDX #0
72EA: 8E 4C 73 00900 .62
                               STX DIFF.TYPE
72ED: 4C 9F 72 00910
                               JMP WAIT
               00920 .61
72F0: C9 05
                               CMP #5
72F2: D0 19
               00930
                               BNE .63
               00940 ;SELECT GAME TYPE
               00950 ;LUSERS GET 0..4
               00960 ;TESTERS GET 0..6.
72F4: EE 4B 73 00970
                          TNC GAME, TYPE
```

```
72F7: A2 04 00980 LDX #4
72F9: AD 2F 75 00990 LDA TESTING
72FC: F0 02 01000 BEQ .69
72FE: A2 06 01010 LDX #6
7300: EC 4B 73 01020 .69 CPX GAME.TYPE
7303: B0 05 01030 BCS .68
7305: A2 00 01040 LDX #0
7307: 8E 4B 73 01050 STX GAME.TYPE
730A: 4C 9F 72 01060 .68 JMP WAIT
730D: C9 06 01070 .63 CMP #6
730F: F0 03 01080 BEQ START.SOMETHING
7311: 4C 9F 72 01090 JMP WAIT ;BOGUS BUTTON
01100 START.SOMETHING
                    01320 ;START AN -EDIT-
7340: A9 00 01330 .3 LDA #0
7342: 8D 4D 73 01340 STA G.N.P
7345: 4C 84 5B 01350 JMP EDIT
                    01360 ;SAVE THE OBJECT CODE
                     01370 ; (MY, AREN'T WE LAZY!)
7348: 4C 30 75 01380 .4 JMP MAKE.LOAD.FILE
                    01390 ; TABLES, ETC.
            01390 ;TABLES, ETC.
01400 GAME.TYPE .BS 1
01410 DIFF.TYPE .BS 1
01420 G.N.P .BS 1
734B:
734C:
734D:
                     01430 GAME.TYPE.OFF
734E: 00 0E 1C
7351: 2A 38 46
                   .DA #0,#14,#28,#42,#56,#70,#84
7354: 54
                     01450 GAME.TYPE.TAB
                     01460 ; 12345678901234
7355: 2F 6E 65
7358: 00 30 6C
735B: 61 79 65
735E: 72 00 00
7361: 00 00 01470 .AT "One Player "
7363: 34 77 6F
7366: 00 30 6C
7369: 61 79 65
736C: 72 73 00
736F: 00 00 01480 .AT "Two Players "
7371: 34 68 72
7374: 65 65 00
7377: 30 6C 61
737A: 79 65 72
                                .AT "Three Players "
737D: 73 00 01490
```

```
737F: 26 6F 75
7382: 72 00 30
7385: 6C 61 79
7388: 65 72 73
              01500 .AT "Four Players "
738B: 00 00
738D: 24 75 6E
7390: 67 65 6F
7393: 6E 00 25
7396: 64 69 74
              01510 .AT "Dungeon Editor"
7399: 6F 72
739B: 2D 61 6B
739E: 65 00 2C
73A1: 6F 61 64
73A4: 00 26 69
                     .AT "Make Load File"
73A7: 6C 65
              01520
73A9: 25 78 69
73AC: 74 00 74
73AF: 6F 00 33
73B2: 79 73 74
              01530 .AT "Exit to System"
73B5: 65 6D
              01540 DIFF.TYPE.OFF
73B7: 00 07 0E
              01550
73BA: 15
                             .DA #0,#7,#14,#21
              01560 DIFF.TYPE.TAB
73BB: 34 72 69
73BE: 76 69 61
73C1: 6C 25 61
73C4: 73 79 00
73C7: 00 00 28
73CA: 61 72 64
73CD: 00 00 00
73D0: 24 65 61
73D3: 64 6C 79
73D6: 00
              01570 .AT "TrivialEasy Hard Deadly "
              01580 DIRECTIONS
73D7: 00 00 2C
73DA: 65 74 74
73DD: 65 72 00
73E0: 21 0D 3A
73E3: 00 73 74
73E6: 61 72 74
73E9: 73 00 67
73EC: 61 6D 65
73EF: 00 61 74
73F2: 00 74 68
73F5: 61 74 00
73F8: 6C 65 76
73FB: 65 6C 00
73FE: 00
              01590 .AT " Letter A-Z starts game at that level "
73FF: 00 00 00
7402: 2F 30 34
7405: 29 2F 2E
7408: 00 63 68
740B: 61 6E 67
740E: 65 73 00
7411: 64 65 67
7414: 72 65 65
7417: 00 6F 66
741A: 00 64 69
741D: 66 66 69
7420: 63 75 6C
7423: 74 79 00
7426: 00
              01600
                           .AT " OPTION changes degree of difficulty "
7427: 00 00 00
742A: 33 25 2C
742D: 25 23 34
```

```
7430: 00 63 68
7433: 61 6E 67
7436: 65 73 00
7439: 6E 75 6D
743C: 62 65 72
743F: 00 6F 66
7442: 00 70 6C
7445: 61 79 65
7448: 72 73 00
744B: 00 00 00
                               ·AT "
744E: 00
                01610
                                        SELECT changes number of players
744F: 00 00 00
7452: 33 34 21
7455: 32 34 00
7458: 00 62 65
745B: 67 69 6E
745E: 73 00 67
7461: 61 6D 65
7464: 00 00 00
7467: 00 00 00
746A: 00 00 00
746D: 00 00 00
7470: 00 00 00
7473: 00 00 00
7476: 00
                                .AT "
               01620
                                        START
                                              begins game
                01630 ;SHOW MODE
                01640 MODE.SHOW
7477: AE 4B 73 01650
                               LDX GAME.TYPE
747A: BD 4E 73 01660
                               LDA GAME.TYPE.OFF,X
747D: AA
               01670
                               TAX
                               LDY #0
747E: A0 00
               01680
7480: BD 55 73 01690 .1
                               LDA GAME.TYPE.TAB, X
7483: 99 C7 4E 01700
                               STA MODE.LABEL,Y
7486: E8
               01710
                               INX
7487: C8
                01720
                               INY
7488: CC 4F 73 01730
                               CPY GAME.TYPE.OFF+1
748B: 90 F3
               01740
                               BCC .1
748D: AE 4C 73 01750
                               LDX DIFF.TYPE
7490: BD B7 73 01760
                               LDA DIFF.TYPE.OFF,X
7493: AA
               01770
                               TAX
7494: A0 00
                               LDY #0
               01780
7496: BD BB 73 01790 .2
                               LDA DIFF.TYPE.TAB, X
7499: 99 D6 4E 01800
                               STA DIFF.LABEL, Y
749C: E8
               01810
                               INX
749D: C8
               01820
                               INY
749E: C0 07
               01830
                               CPY #7
74A0: 90 F4
               01840
                               BCC .2
74A2: 60
               01850
                               RTS
                00330
                                .IN "D2:TITLE"
                00010 ;TITLE
               00020 ; -- LOAD TITLE.FILE INTO
                00030 ; WHAT WILL LATER BECOME
                00040; THE PLAYFIELD, WAIT FOR
               00050; KEYPRESS, AND RETURN
74A3: A2 20
               00060 TITLE
                               LDX #FILE.IOCB
74A5: A9 0C
               00070
                               LDA #CLOSE
74A7: 9D 42 03 00080
                               STA ICCOM, X
74AA: 20 56 E4 00090
                               JSR CIOV
74AD: A9 03
               00100
                               LDA #OPEN
74AF: 9D 42 03 00110
                               STA ICCOM, X
74B2: A9 04
               00120
                               LDA #4
74B4: 9D 4A 03 00130
                               STA ICAX1,X
                               LDA #0
74B7: A9 00
               00140
74B9: 9D 4B 03 00150
                               STA ICAX2,X
74BC: A9 22
               00160
                               LDA #TITLE.FILE
74BE: 9D 44 03 00170
                               STA TCBALLX
```

```
LDA /TITLE.FILE
74C1: A9 75
                    00180
                             STA ICBAH,X
JSR CIOV
BMI PUNT.TITLE
LDA #GETCHR
STA ICCOM,X
LDA #BASE
STA ICBAL,X
LDA /BASE
STA ICBAH,X
LDA #BOC-BASE
STA ICBLL,X
LDA /BOC-BASE
STA ICBLH,X
JSR CIOV
CPY #136;EOF
BNE PUNT.TITLE
LDA #CLOSE
STA ICCOM,X
JSR CIOV
BMI PUNT.TITLE
;SAVE SDLST & POINT TO N
74C3: 9D 45 03 00190
                                        STA ICBAH, X
74C6: 20 56 E4 00200
74C9: 30 4D
                    00210
74CB: A9 07
                    00220
74CD: 9D 42 03 00230
74D0: A9 00
                    00240
74D2: 9D 44 03 00250
74D5: A9 30
                    00260
74D7: 9D 45 03 00270
74DA: A9 00
                   00280
74DC: 9D 48 03 00290
74DF: A9 28 00300
74E1: 9D 49 03 00310
74E4: 20 56 E4 00320
74E7: C0 88
                    00330
                    00340
74E9: D0 2D
                00350
74EB: A9 0C
74ED: 9D 42 03 00360
74F0: 20 56 E4 00370
74F3: 30 23
                    00380
                    00390 ;SAVE SDLST & POINT TO NEW DISP
74F5: AE 03 30 00400 LDX BASE+3
74FB: 20 81 64 00420
74FE: 20 00 30 00430
                                        LDY BASE+4
                                        JSR SET.DLIST
                                       JSR BASE
                    00440 ; WAIT FOR KEYPRESS
7501: A9 FF
                    00450 .1 LDA #255
7503: CD FC 02 00460
                                      CMP CH
7506: F0 06
                    00470
                                      BEQ .8
7506: F0 06 00470 BEQ .8
7508: 8D FC 02 00480 STA CH
750B: 4C 15 75 00490 JMP .9
750E: AD 1F D0 00500 .8 LDA CONSOL
7511: C9 07 00510 CMP #7
7513: F0 EC 00520 BEQ .1
7515: 4C 94 64 00530 .9 JMP RESET.DLIST
                    00540 PUNT.TITLE
7518: A2 20
                    00550
                                     LDX #FILE.IOCB
751A: A9 0C
                    00560
                                      LDA #CLOSE
751C: 9D 42 03 00570
                                      STA ICCOM, X
                            JMP CIOV
751F: 4C 56 E4 00580
                    00590 TITLE.FILE
7522: 44 31 3A
7525: 44 41 4E
7528: 44 59 2E
                                      .AS "D1:DANDY.PIC"
752B: 50 49 43 00600
752E: 9B
                00610
                                        .HS 9B
                   00340 TESTING .HS FF
752F: FF
752F:
                    00350 EOC
                                        .EQ *-1
                                        .IN "D2:MAKELF"
                    00360
                    00010 ; MAKELF - MAKE LOAD FILE
                    00020 MAKE.LOAD.FILE
7530: A9 00
                    00030 LDA #0
                             LDA #0
STA TESTING
LDX #0
LDA #PUTREC
STA ICCOM,X
LDA #MSG.MLF
STA ICBAL,X
LDA /MSG.MLF
STA ICBAH,X
LDA #$FF
STA ICBLL,X
STA ICBLH,X
JSR CIOV
7532: 8D 2F 75 00040
7535: A2 00
                    00050
7537: A9 09
                    00060
                    00070
00080
7539: 9D 42 03 00070
753C: A9 C1
753E: 9D 44 03 00090
7541: A9 75
                    00100
7543: 9D 45 03 00110
7546: A9 FF
                00120
7548: 9D 48 03 00130
754B: 9D 49 03 00140
754E: 20 56 E4 00150
                                        JSR CIOV
                    00160 :OPEN LOAD FILE
```

```
7551: A2 20
               00170
                              LDX #FILE.IOCB
7553: A9 0C
               00180
                              LDA #CLOSE
7555: 9D 42 03 00190
                             STA ICCOM, X
7558: 20 56 E4 00200
                             JSR CIOV
755B: A9 03
                             LDA #OPEN
               00210
755D: 9D 42 03 00220
                             STA ICCOM, X
7560: A9 08
               00230
                             LDA #8
7562: 9D 4A 03 00240
                             STA ICAX1,X
                              LDA #MLF.NAME
7565: A9 CB
               00250
7567: 9D 44 03 00260
                              STA ICBAL, X
756A: A9 75
               00270
                             LDA /MLF.NAME
756C: 9D 45 03 00280
                             STA ICBAH,X
756F: 20 56 E4 00290
                              JSR CIOV
               00300 ; WRITE HEADER INFO
                       LDA #PUTCHR
7572: A9 0B
               00310
7574: 9D 42 03 00320
                             STA ICCOM, X
7577: A9 B5
               00330
                              LDA #MLF.T
7579: 9D 44 03 00340
                             STA ICBAL,X
757C: A9 75
               00350
                            LDA /MLF.T
757E: 9D 45 03 00360
                             STA ICBAH, X
7581: A9 0C
               00370
                              LDA #MLF.T.L
7583: 9D 48 03 00380
                             STA ICBLL,X
7586: A9 00
               00390
                             LDA /MLF.T.L
7588: 9D 49 03 00400
                              STA ICBLH, X
758B: 20 56 E4 00410
                              JSR CIOV
               00420 ;WRITE CODE
758E: A9 00
               00430
                             LDA #BOC
7590: 9D 44 03 00440
                              STA ICBAL, X
                             LDA /BOC
7593: A9 58
               00450
7595: 9D 45 03 00460
                             STA ICBAH, X
7598: A9 30
                              LDA #EOC-BOC+1
               00470
759A: 9D 48 03 00480
                             STA ICBLL,X
759D: A9 1D
               00490
                             LDA /EOC-BOC+1
759F: 9D 49 03 00500
                              STA ICBLH, X
75A2: 20 56 E4 00510
                              JSR CIOV
               00520 ;CLOSE FILE
75A5: A9 0C
               00530
                              LDA #CLOSE
75A7: 9D 42 03 00540
                              STA ICCOM, X
75AA: 20 56 E4 00550
                              JSR CIOV
               00560 ;BACK TO TESTING
75AD: A9 FF
               00570
                             LDA #$FF
75AF: 8D 2F 75 00580
                              STA TESTING
75B2: 4C 69 72 00590
                              JMP RESTART
75B5: FF FF E0
75B8: 02 E1 02 00600 MLF.T .DA $FFFF,$2E0,$2E1
75BB: 43 72 00
75BE: 58 2F 75 00610
                              .DA START, BOC, EOC
000C:
               00620 MLF.T.L .EQ *-MLF.T
75C1: 53 61 76
75C4: 69 6E 67
75C7: 20 61 73
               00630 MSG.MLF .AS "Saving as "
75CA: 20
75CB: 44 3A 44
75CE: 41 4E 44
               00640 MLF.NAME .AS "D:DANDY"
75D1: 59
               00650
                              .HS 9B
75D2: 9B
    --- Symbol table ---
00F1: AH
00F0: AL
D208: ALLPOT
000E: APPMHI
004D: ATRACT
```

D201: AUDC1 D208: AUDCTL D200: AUDF1

```
3000: BASE
00F3: BH
00F2: BL
6A70: BLANK.DUNGEON
5800: BOC
65BB: BOGUS.SWAP.IN
0009: BOOT
0011: BRKKEY
5000: C.BASE
673B: C.X.H
673A: C.X.L
673D: C.Y.H
673C: C.Y.L
0218: CDTMV1
021A: CDTMV2
021C: CDTMV3
021E: CDTMV4
0220: CDTMV5
02FC: CH
02F3: CHACT
D401: CHACTL
5800: CHAR.SET
02F4: CHBAS
D409: CHBASE
6EFB: CHECK.BREAK
.01=6F02, .02=6F0A
6061: CHECK.CH
.03=6068, .02=6073, .05=6085, .09=609C
.01=60B0, .99=60BF
62C4: CHECK.PLAYER
.01 = 62D2
E000: CHRORG
E456: CIOV
5BF0: CLIP
.02=5C00, .01=5C02, .04=5C15, .03=5C17
.05=5C57, .06=5C64, .07=5C7F
000C: CLOSE
02C4: COLOR0
D016: COLPF0
D012: COLPM0
004F: COLRSH
D01F: CONSOL
0042: CRITIC
02F0: CRSINH
5F05: CUR.LEVEL
67BC: D.AX
67BD: D.AY
67BE: D.C
67C1: D.COUNT
67C4: D.INIT
67BA: D.IX
67BB: D.IY
68EC: D.LOOP.Q
.01=68FB, .02=690A
681D: D.LOOP.X
.01=6841, .02=6844, .20=6851, .21=6865
.22=686C, .23=687D, .24=6884, .25=688F
.30=689A, .32=68AC, .31=68AE, .42=68C2
.41=68C4
680B: D.LOOP.Y
0015: D.MAXX
000B: D.MAXY
67BF: D.NX
67C0: D.NY
6755: D.P.X
6754: D.P.Y
```

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67AB: D.S.RESTORE
679E: D.S.SAVE
679C: D.S.SPACE
67C3: D.STICK
67DD: D.TICK
.90=67E3, .01=6804
67C2: D.WAIT
67B8: D.X
67B9: D.Y
030A: DAUX1
030B: DAUX2
0305: DBUFHI
0304: DBUFLO
0309: DBYTHI
0308: DBYTLO
0302: DCOMND
0300: DDEVIC
5D35: DEFAULT.DUNGEON
.81=5D39, .82=5D3D, .83=5D52, .84=5D6C
67D8: DELAY
67D9: DELAY.TAB
00F5: DH
4ED6: DIFF.LABEL
734C: DIFF.TYPE
73B7: DIFF.TYPE.OFF
73BB: DIFF.TYPE.TAB
73D7: DIRECTIONS
6737: DIRTY.COORD
5EC3: DISK.X
5EC7: DISK.Y
69C4: DISPLAY.DATA
4E7D: DISPLAY.INSERT
0051: DISPLAY.LENGTH
4E6F: DISPLAY.LIST
00F4: DL
6A40: DLI.CHAR.SET
6A34: DLI.COLOR2
6A3A: DLI.COLOR2.INIT
6A33: DLI.COUNT
6A14: DLI.HANDLER
.01=6A2D
6A32: DLI.X
D403: DLISTH
D402: DLISTL
D400: DMACTL
6736: DN.COORD
6F99: DO.NOT.HAVE
000C: DOSINI
000A: DOSVEC
004E: DRKMSK
0303: DSTATS
0306: DTIMLO
6797: DUNGEON.DELETE
6309: DUNGEON.INIT
.10=6310, .40=631B
3000: DUNGEON.PIC
6756: DUNGEON.PLOT
640E: DUNGEON.QUIT
.01 = 6424
6696: DUNGEON.SHOW
.01=66D1, .02=66DC, .03=66E7, .04=66F2
.98=6721, .99=6732
0384: DUNGEON.SIZE
65BC: DUNGEON.SWAP.IN
.80=65D6, .81=65EB, .01=661B, .02=661F
.03=6642
```

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64CE: DUNGEON.SWAP.OUT
.01=64DF, .02=64E3, .03=6504
69C3: DUNGEON.VIEW
673E: DUNGEON.WHATS.AT
0301: DUNIT
0307: DUNUSE
02EA: DVSTAT
4F84: E.C.C
5BB7: E.C.P
5B83: E.CHAR
5B82: E.LEVEL
4F7E: E.O.C
4F76: E.X.C
4F79: E.Y.C
5CDD: E2INT
.71=5CDF, .72=5CE9, .09=5CF2
6FA4: EAT.HEALTH.FOOD
.01=6FB9
5DA5: ED.INST
6307: ED.MS
5B84: EDIT
.01=5B91
5BBC: EDIT.LOOP
.02 = 5BC1
5CD7: EDIT.QUIT
5B80: EDIT.X
5B81: EDIT.Y
664E: END.DECODE
752F: EOC
009B: EOL
6FCD: EXP.FOF
6FDE: EXP.LF
6FDF: EXP.UP
6FE0: EXPLODE
.01=6FFA, .02=6FFE, .03=702E
6FDD: EXPLODE.P
6544: FILE.DIR
.01=6566, .17=65BA
64C2: FILE.EXT
0020: FILE.IOCB
64BA: FILE.NAME
000A: FILE.NAME.L
6FBC: FIRE.SMART.BOMB
.01=6FCA
734D: G.N.P
5F06: GAME
.17=5F18, .18=5F25, .01=5F29
5F4E: GAME.DUN
.10=5F6A, .11=5F7C, .01=5F90, .02=5FC0
62BB: GAME.QUIT
734B: GAME.TYPE
734E: GAME.TYPE.OFF
7355: GAME.TYPE.TAB
62D6: GET.CHAR
.01=62DF, .02=6301
62D5: GET.CHAR.X
0007: GETCHR
0005: GETREC
026F: GPRIOR
D01D: GRACTL
D011: GRAFM
D00D: GRAFP0
6738: H.COORD
5EA7: HEALTH
000F: HIGH.TRANS
623D: HTT.BOMB
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6202: HIT.DOOR
625B: HIT.DOWN
.01=6283, .02=628E
621D: HIT.FOOD
620D: HIT.KEY
622D: HIT.MONEY
619C: HIT.OBJ
61BC: HIT.WALL
.01=61C9, .12=61DC, .11=61EB
D01E: HITCLR
D004: HPOSM0
D000: HPOSP0
D404: HSCROL
034A: ICAX1
034B: ICAX2
0345: ICBAH
0344: ICBAL
0349: ICBLH
0348: ICBLL
0342: ICCOM
0341: ICDNO
0340: ICHID
0347: ICPTH
0346: ICPTL
034C: ICSPR
0343: ICSTA
5E87: IN.FLIGHT
0020: INC
6F9E: INV.QUIT
6F0B: INVENTORY
6541: IO.DIR
6542: IO.DIR.T
D20E: IRQEN
D20E: IRQST
0014: JIFFY
D209: KBCODE
0070: KEY.IOCB
5E7D: KEY.TAB
7240: KEYBOARD
6E65: KILL.PLAYER
.09=6E75, .90=6E9A, .91=6EAA, .92=6EB3
63D8: LABEL.LINE
4EE4: LEVEL.LABEL
6734: LF.COORD
0234: LPENH
0235: LPENV
5300: M.BASE
7113: M.CHECK
.02=7123, .01=7136
706C: M.CLEAN.UP
.01=7073, .02=7088
705B: M.DIR
703F: M.DX
7047: M.DY
70E2: M.FLY
.01=70EB
718F: M.H.TAB
721D: M.HEART.GOLD
.01=7232, .02=7235
705F: M.INIT
.01=7065
7094: M.LOOP
.01=709A, .02=70A5, .20=70AF, .03=70B2
71C0: M.MONSTER
.21=71E6, .22=71E9, .03=71EF
5F79: M.OFF
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7057: M.ON
713E: M.ON.SCR
5E6D: M.P.X
71F1: M.PLAYER
7166: M.QUIT
.01=7178, .02=717B
71A7: M.SMART.BOMB
.11=71BD
71F9: M.SPAWNER
.01=720F
708E: M.TICK
5E8B: M.X
5E93: M.X.V
5E8F: M.Y
5E97: M.Y.V
7530: MAKE.LOAD.FILE
02E7: MEMLO
02E5: MEMTOP
0014: MIS.BASE
75CB: MLF.NAME
75B5: MLF.T
000C: MLF.T.L
4EC7: MODE.LABEL
7477: MODE.SHOW
.01=7480, .02=7496
6151: MOVE.IT
60C8: MOVE.LOOP
.19=60D0
62AF: MOVE.LOOP.Q
60C2: MOVE.PLAYERS
.03 = 60C2
6133: MOVE.SAVE
6162: MOVE.TO
75C1: MSG.MLF
704F: MX
7053: MY
5E9B: N.BOMBS
5EA3: N.FOOD
5E9F: N.KEYS
5E71: N.M.P.Y
4EC0: NAME.PIC
7279: NEW.LEV
.01=7296
5F04: NEW.LEVEL
5EFF: NEW.X
5F01: NEW.Y
D40E: NMIEN
D40F: NMIRES
D40F: NMIST
5E75: O.M.P.Y
6A46: O.M.Y
0003: OPEN
6F28: OPEN.DOOR
.10=6F2F, .02=6F50, .03=6F62, .04=6F6A
.31=6F92
5ECB: P
5400: P.BASE
5EBF: P.DIR
4EF4: P.HAND
4EF0: P.HEALTH
5EAB: P.IN.WARP
63B0: P.L.LINE
5000: P.M.BASE
4F0A: P.SCORE
5EAF: P.X.H
5FDF: P.X.T
```

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5EB3: P.X.L
5CF5: P.X.TAB
5EB7: P.Y.H
5EEF: P.Y.I
5EBB: P.Y.L
5D15: P.Y.TAB
D302: PACTL
0270: PADDL0
5C82: PARSE.CHAR
.16=5C8E, .02=5C9B, .03=5CAC, .31=5CB0
.04=5CC4, .05=5CD3
D303: PBCTL
02C0: PCOLR0
D40C: PENH
D40D: PENV
624D: PICK.IT.UP
6184: PICK.UP
.01=618B
4EE8: PLAY.PIC
D407: PMBASE
0010: POKMSK
D300: PORTA
D301: PORTB
D200: POT0
D20B: POTGO
64B3: PRINT.L.NAME
64A1: PRINT.NAME
0019: PRINT.NAME.L
64CC: PRINT.NAME.O
64C4: PRINT.NAME.T
D018: PRIOR
027C: PTRIG0
6ADF: PUNT.DISP
7518: PUNT.TITLE
000B: PUTCHR
0009: PUTREC
6306: QUIET.QUIT
6EB4: R.O.X
6EB5: R.O.Y
02E4: RAMSIZ
006A: RAMTOP
D20A: RANDOM
6D5F: RES.LIST
6EB6: RESERECT.OLD
.01=6EBE, .02=6ED0
6494: RESET.DLIST
7269: RESTART
6735: RT.COORD
0012: RTCLOK
6C6A: S.0
6C6B: S.1
6CDD: S.10
6CE5: S.11
6CED: S.12
6CFC: S.13
6D0B: S.14
6D13: S.15
6D1B: S.16
6D23: S.17
6D2B: S.18
6D33: S.19
6C73: S.2
6D3B: S.20
6C7B: S.3
6C8A: S.4
6C99: S.5
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6CA8: S.6
6CBE: S.7
6CCD: S.8
6CD5: S.9
6B42: S.EFFECT
6B41: S.EFFECT.X
6B40: S.EFFECT.Y
6AE7: S.INIT
.01=6AEB, .02=6AF5
6B09: S.QUIT
6B6C: S.TICK
5F03: SAVE.DIR
6D58: SC.A
6E3C: SC.MS.OF
6E3F: SC.MS.X
6DFD: SC.MSG
6D9E: SC.OFF
6D9A: SC.REM.T
6D5E: SC.SLOP
6DA2: SCORE.INC
.55=6DAB, .01=6DB2, .02=6DBF, .03=6DCC
.04=6DD6, .41=6DEF, .42=6DF1
6D64: SCORE.INIT
.01=6D68, .09=6D7B, .02=6D8E, .03=6D99
6E40: SCORE.MSG
.01 = 6E54
5ECC: SCORE.OFF
0231: SDLSTH
0230: SDLSTL
022F: SDMCTL
667F: SEARCH.CHAR
6651: SEARCH.DISK
.01=6655, .02=6659, .03=666A
D20D: SEROUT
6409: SET.COLORS
6481: SET.DLIST
E45C: SETVBV
E459: SIOV
D00C: SIZEM
D008: SIZEPO
D20F: SKCTL
D20A: SKRES
D20F: SKSTAT
0041: SOUNDR
6985: SPAWN.C
6986: SPAWNER
.01=69C2
0232: SSKCTL
6B71: ST.LOOP
.01=6B77, .02=6B89, .04=6BC1, .03=6BF0
7243: START
642D: START.IO
.01=6448
7314: START.SOMETHING
.02=732E, .01=7331, .03=7340, .04=7348
000D: STATIS
5ED0: STICK.DIR
0278: STICKO
D209: STIMER
644D: STOP.IO
.40 = 6477
6404: STORE.COLORS
6402: STORE.SDLSTL
6400: STORE.VVBLKD
0284: STRIG0
6296: SWAP, LEVELS
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.10=629F
E45F: SYSVBV
6680: T.120
4F88: T.120.H
4FC4: T.120.L
632E: T.120.LOOP
.01=6355, .40=637D, .42=6394
752F: TESTING
5FC5: TICK
5FD2: TICK.NORMAL
.01=5FE2, .11=5FFF, .02=605D
668D: TIMES.TWO
74A3: TITLE
.01=7501, .08=750E, .09=7515
7522: TITLE.FILE
61FA: TOO.MANY
5D95: TRANS.EXT
5DAD: TRANS.INT
690B: TRY.MOVE
.04=6934, .46=694C, .45=6957, .47=695A
.49=6968, .48=696A, .50=696C, .99=6983
5E46: TYPE.NUMBER
.02=5E4C, .01=5E5F, .03=5E65
6733: UP.COORD
6739: V.COORD
6AA0: VB.NORM
.01=6AB6
6A56: VBI.COUNT
6A57: VBI.HANDLER
.01 = 6A5E
6A4A: VBI.INIT
.01 = 6A4C
D40B: VCOUNT
D01C: VDELAY
0200: VDSLST
D405: VSCROL
0224: VVBLKD
729F: WAIT
.03=72A2, .40=72C1, .04=72C5, .05=72D3
.62=72EA, .61=72F0, .69=7300, .68=730A
.63=730D
0008: WARMST
5E86: WARP.TIMER
6540: WHICH.WAY
D40A: WSYNC
E462: XITVBL
6B18: Z.ADDR.H
6B14: Z.ADDR.L
6C2B: Z.BASE
000D: Z.DEAD.PLAYER
6B1C: Z.DUR
0006: Z.EAT.FOOD
0003: Z.EXPLODE.BOMB
6B2C: Z.FINC.H
6B28: Z.FINC.L
6B24: Z.FREQ.H
6B20: Z.FREQ.L
0008: Z.HAVE.NONE
0009: Z.HIT.MONSTER.1
000A: Z.HIT.MONSTER.2
000B: Z.HIT.MONSTER.3
0001: Z.HIT.PLAYER
000C: Z.MONSTER.BITE
0004: Z.OPEN.DOOR
0007: Z.PICK.MONEY
0005: 7.PICKUP.OBJECT
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6C55: Z.PRIOR 0002: Z.SHOOT 0000: Z.SILENCE 6B10: Z.SOUND 6B0C: Z.SOUND.OFF 0010: Z.SPAWNING.1 0011: Z.SPAWNING.2 0012: Z.SPAWNING.3 0013: Z.SPAWNING.4 0014: Z.TO.HAND 6B3C: Z.VINC.H 6B38: Z.VINC.L 6B34: Z.VOL.H 6B30: Z.VOL.L 000F: Z.WARP.IN 000E: Z.WARP.OUT

Ok.