LOCATION OBJECT CODE LINE   SOURCE LINE

```
142C 21BA00         5288              LD   HL,8A00H            ;DISPLAY 60 SECONDS
142F CD19GB         5289              CALL TIMER_1
                    5290    * TURN OFF DISPLAY
1432 0601           5291              LD   B,1
1434 0EB0           5292              LD   C,10000000B        ;BLANK SCREEN
1436 CD1FD9         5293              CALL WRITE_REGISTER
1439 1BFE           5294              JR   $                  ;SOFT HALT
                    5295
                    5296    *****************************************
                    5297    *                                       *
                    5298    *              DATA TABLES              *
                    5299    *                                       *
                    5300    *****************************************
                    5301
                    5302    *********** COLOR_NAME_TABLE ***********
                    5303
143B 000000F0F0     5304    LOGO_COLORS   HEX 00,00,00,F0,F0,F0,F0,F0,F0,F0
1440 F0F0F0F0F0
1445 F0F0
1447 D080908030     5305              HEX D0,80,90,B0,30,40
144C 40
                    5306
                    5307    ********** PATTERN_NAME_TABLE **********
                    5308
<144D>              5309    LOGO_NAMES    EQU $
                    5310
144D 6061686970     5311              HEX 60,61,68,69,70,71,78,79,80,81,88,89
1452 7178798081
1457 8889
1459 646566C7475     5312              HEX 64,65,6C,74,75,7C,84,85,8C,8D
145E 7C84858C8D
1463 62636A6B72     5313              HEX 62,63,6A,6B,72,73,7A,7B,82,83,8A
1468 737A7B8283     5314
146D 8A
146E 8B66676D76     5315              HEX 8B,66,67,6D,76,77,7D,86,87,8E,8F
1473 77706D878E
1478 8F
                    5316
1479 5455524E20     5317              DEFB "TURN GAME OFF"
147E 47414D4520     5318
1483 4F4646
1486 4245464F52     5318              DEFB "BEFORE INSERTING CARTRIDGE"
148B 4520494E53
1490 45525449494E45
1495 4720434152
149A 5452494447
149F 45
14A0 4F52204558     5319              DEFB "OR EXPANSION MODULE."
14A5 50414E5349
14AA 4F4E204D4F
14AF 44554C452E
14B4 1D20311938     5320              DEFB 1DH," 1982 COLECO"
14B9 3220434F4C
14BE 45434F
                    5321
14C1 1E1F           5322    TRADEMARK     HEX 1E,1F
```

OCATION OBJECT CODE LINE   SOURCE LINE

```
                              5323
                              5324
                              5325
                              5326
                              5327  ************************* PATTERN GENERATOR TABLES *************************
                              5328
        <14C3>                5329  LOGO_GEN  EQU  $
                              5330
14C3 0000000000000            5331  *GR0
14C8 000000                   5332            HEX  00,00,00,00,00,00,00,00
14CB 3F7FFFFFF3               5333  *GR1
1400 F3F0F0                   5334            HEX  3F,7F,FF,FF,F3,F3,F0,F0
1403 0080C0C0C0               5335  *GR2
1408 C00000                   5336            HEX  00,80,C0,C0,C0,C0,00,00
1408 3F7FFFFFF3               5337  *GR3
14E0 F3F3F3                   5338            HEX  3F,7F,FF,FF,F3,F3,F3,F3
14E3 0080C0C0C0               5339  *GR4
14E8 C0C0C0                   5340            HEX  00,80,C0,C0,C0,C0,C0,C0
14EB F0F0F0F0F0               5341  *GR5
14F0 F0F0F0                   5342            HEX  F0,F0,F0,F0,F0,F0,F0,F0
14F3 FFFFFF0F0                5343  *GR6
14F8 FFFFFF                   5344            HEX  FF,FF,FF,F0,F0,FF,FF,FF
14FB C0C0C00000               5345  *GR7
1500 000000                   5346            HEX  C0,C0,C0,00,00,00,00,00
1503 F1F1F17B7B               5347  *GR8
1508 7B3F3F                   5348            HEX  F1,F1,F1,7B,7B,7B,3F,3F
1508 E0E0E0C0C0               5349  *GR9
1510 C08080                   5350            HEX  E0,E0,E0,C0,C0,C0,80,80
1513 1F3F7F7978               5351  *GR10
1518 7F7F3F                   5352            HEX  1F,3F,7F,79,7B,7F,7F,3F
151B 80C0E0E000               5353  *GR11
1520 80C0E0                   5354            HEX  80,C0,E0,E0,00,80,C0,E0
1523 F3F3FBFBFB               5355  *GR12
1528 FFFFFF                   5356            HEX  F3,F3,FB,FB,FB,FF,FF,FF
152B C0C0C0C0C0               5357  *GR13
1530 C0C0C0                   5358            HEX  C0,C0,C0,C0,C0,C0,C0,C0
1533 F3F3FFF7F                5359  *GR14
1538 3F0000                   5360            HEX  F3,F3,FF,FF,7F,3F,00,00
1538 C0C0C0C080               5361  *GR15
1540 000000                   5362            HEX  C0,C0,C0,C0,80,00,00,00
                                    *GR16
```

```
LOCATION OBJECT CODE LINE     SOURCE LINE

1543 F0F0FFFFFF
1548 FF0000      5364   HEX       F0,F0,FF,FF,FF,FF,00,00

                 5365   *GR17
1548 0000C0C0C0
1550 C00000      5366   HEX       00,00,C0,C0,C0,C0,00,00

                 5367   *GR18
1553 3F1F1F1F0E
1558 0E0000      5368   HEX       3F,1F,1F,1F,0E,0E,00,00

                 5369   *GR19
155B 8000000000
1560 000000      5370   HEX       80,00,00,00,00,00,00,00

                 5371   *GR20
1563 F0F0F0F0F0
1568 F00000      5372   HEX       F0,F0,F0,F0,F0,F0,00,00

                 5373   *GR21
1568 1F01797F3F
1570 1F0000      5374   HEX       1F,01,79,7F,3F,1F,00,00

                 5375   *GR22
1573 E0E0E0E0C0
1578 800000      5376   HEX       E0,E0,E0,E0,C0,80,00,00

                 5377   *GR23
157B FFF7F7F7F3
1580 F30000      5378   HEX       FF,F7,F7,F7,F3,F3,00,00

                 5379   *GR24
1583 C0C0C0C0C0
1588 C00000      5380   HEX       C0,C0,C0,C0,C0,C0,00,00

                 5381
    <1588>       5382   ASC_TABLE  EQU $
                 5383   * c=1D
1588 7E81BDA1A1
1590 BD817E      5384   HEX       7E,81,BD,A1,A1,BD,81,7E   ;COPYRIGHT

                 5385   * t=1E
1593 1F04040400
1598 000000      5386   HEX       1F,4,4,4,0,0,0,0          ;tRADE

                 5387   * m=1F
1598 446C545400
15A0 000000      5388   HEX       44,6C,54,54,0,0,0,0       ;mARK

                 5389   *  =20
15A3 0000000000
15A8 000000      5390   SPACE  DEFB  0,0,0,0,0,0,0,0

                 5391   * !=21
15AB 2020202020
15B0 002000      5392   DEFB   20H,20H,20H,20H,0,20H,00H

                 5393   * "=22
15B3 5050500000
15B8 000000      5394   DEFB   50H,50H,50H,0,0,0,0,0

                 5395   * #=23
15BB 5050F850F8
15C0 505000      5396   DEFB   50H,50H,0F8H,50H,0F8H,50H,50H,0

                 5397   * $=24
15C3 2078A07028
15C8 F02000      5398   DEFB   20H,78H,0A0H,70H,28H,0F0H,020H,0

                 5399   * %=25
15CB C0C8102040
15D0 981800      5400   DEFB   0C0H,0C8H,10H,20H,40H,98H,18H,0

                 5401   * &=26
15D3 40A0A040A8  5402   DEFB   40H,0A0H,0A0H,40H,0A8H,90H,68H,0
```

```
LOCATION  OBJECT CODE  LINE   SOURCE LINE

15D8 9D66800

15D8 2020200000       5403  *   '=27
15E0 000000           5404          DEFB    20H,20H,20H,0,0,0,0,0

15E3 2040808080       5405  *   (=28
15E8 402000           5406          DEFB    20H,40H,80H,80H,80H,40H,20H,0

15EB 2010080808       5407  *   )=29
15F0 102000           5408          DEFB    20H,10H,08H,08H,08H,10H,20H,0

15F3 20A8702070       5409  *   *=2A
15F8 AD2000           5410          DEFB    20H,0A8H,70H,20H,70H,0A8H,20H,0

15FB 002020F820       5411  *   +=2B
1600 200000           5412          DEFB    0,20H,20H,0F8H,20H,20H,0,0

1603 0000000020       5413  *   ,=2C
1608 204000           5414          DEFB    0,0,0,0,20H,20H,40H,0

160B 000000F800       5415  *   -=2D
1610 000000           5416          DEFB    0,0,0,0F8H,0,0,0,0

1613 0000000000       5417  *   .=2E
1618 002000           5418          DEFB    0,0,0,0,0,0,20H,0

161B 0008102040       5419  *   /=2F
1620 800000           5420          DEFB    0,8,10H,20H,40H,80H,0,0

                      5421
        <1623>        5422  NUMBER_TBL
                      5423          EQU $
                      5424  *   0=30
1623 7088988AC0       5423          DEFB    70H,88H,98H,0A8H,0C8H,088H,70H,0
1628 887000

1628 2060202020       5425  *   1=31
1630 207000           5426          DEFB    20H,60H,20H,20H,20H,20H,70H,0

1633 7088083040       5427  *   2=32
1638 80FB00           5428          DEFB    70H,88H,08,30H,40H,80H,0F8H,0

163B F808103008       5429  *   3=33
1640 887000           5430          DEFB    0F8H,08,10H,30H,08,88H,70H,0

1643 103050P0F8       5431  *   4=34
1648 101000           5432          DEFB    10H,30H,50H,90H,0F8H,10H,10H,0

164B F850F00808       5433  *   5=35
1650 887000           5434          DEFB    0F8H,80H,0F0H,08H,08H,88H,70H,0

1653 384080F088       5435  *   6=36
1658 887000           5436          DEFB    38H,40H,80H,0F0H,88H,88H,70H,0

165B F808102040       5437  *   7=37
1660 404000           5438          DEFB    0F8H,08H,10H,20H,40H,40H,40H,0

1663 7088887088       5439  *   8=38
1668 887000           5440          DEFB    70H,88H,88H,70H,88H,88H,70H,0
```

LOCATION OBJECT CODE LINE   SOURCE LINE

```
1668 7088887808          5441 * 9=39        DEFB    70H,88H,88H,78H,08H,10H,0E0H,0
1670 10E000              5442

1673 0000200020          5443 * :=3A        DEFB    0,0,20H,0,20H,0,0,0
1678 000000              5444

1678 0000200020          5445 * ;=3B        DEFB    0,0,20H,0,20H,20H,40H,0
1680 204000              5446

1683 1020408040          5447 * <=3C        DEFB    10H,20H,40H,80H,40H,20H,10H,0
1688 201000              5448

1688 0000F800F8          5449 * ==3D        DEFB    0,0,0F8H,0,0F8H,0,0,0
1690 000000              5450

1693 4020100810          5451 * >=3E        DEFB    40H,20H,10H,08H,10H,20H,40H,0
1698 204000              5452

1698 7088102020          5453 * ?=3F        DEFB    70H,88H,10H,20H,20H,0,20H,0
16A0 002000              5454

16A3 7088A88B80          5455 * @=40        DEFB    70H,88H,0A8H,0B8H,0B0H,080H,078H,0
16A8 807800              5456

          <16AB>         5457              EQU  $
                         5458 ASCII_TBL
16AB 205088888F8         5459 * A=41        DEFB    20H,50H,88H,88H,0F8H,88H,88H,0
16B0 888800              5460

16B3 F08888F088          5461 * B=42        DEFB    0F0H,88H,88H,0F0H,88H,88H,0F0H,0
16B8 88F000              5462

16BB 7088808080          5463 * C=43        DEFB    70H,88H,80H,80H,80H,88H,70H,0
16C0 887000              5464

16C3 F088888888          5465 * D=44        DEFB    0F0H,88H,88H,88H,88H,88H,0F0H,0
16C8 88F000              5466

16CB F88080F080          5467 * E=45        DEFB    0F8H,80H,80H,0F0H,080H,80H,0F8H,0
16D0 80F800              5468

16D3 F88080F080          5469 * F=46        DEFB    0F8H,80H,80H,0F0H,80H,80H,80H,0
16D8 808000              5470

16DB 7880808098          5471 * G=47        DEFB    78H,80H,80H,80H,98H,88H,78H,0
16E0 887800              5472

16E3 888888F888          5473 * H=48        DEFB    88H,88H,88H,0F8H,88H,88H,88H,0
16E8 888800              5474

16EB 7020202020          5475 * I=49        DEFB    70H,20H,20H,20H,20H,20H,70H,0
16F0 207000              5476

16F3 0808080808          5477 * J=4A        DEFB    8,8,8,8,8,88H,70H,0
16F8 887000              5478

                         5479 * K=4B
```

LOCATION OBJECT CODE LINE SOURCE LINE

```
16FB 8890A0C0A0   5480           DEFB   88H,90H,0A0H,0C0H,0A0H,90H,88H,0
1700 90B000
1703 8080808080   5481 * L=4C
1708 80F800       5482           DEFB   80H,80H,80H,80H,80H,80H,0F8H,0
1708 8506A6A8B8   5483 * M=4D
1710 B8B000       5484           DEFB   88H,0C8H,0A8H,0A8H,88H,88H,88H,0
1713 88C8C8A898   5485 * N=4E
1718 888000       5486           DEFB   88H,88H,0C8H,0A8H,98H,88H,88H,0
171B 7088888888   5487 * O=4F
1720 887000       5488           DEFB   70H,88H,88H,88H,88H,88H,70H,0
1723 F088888F080   5489 * P=50
1728 808000       5490           DEFB   0F0H,88H,88H,0F0H,80H,80H,80H,00
172B 7088888BA8   5491 * Q=51
1730 906800       5492           DEFB   70H,88H,88H,0A8H,90H,68H,0
1733 F088888F0A0   5493 * R=52
1738 908800       5494           DEFB   0F0H,88H,88H,0F0H,0A0H,90H,88H,0
173B 7088807008   5495 * S=53
1740 887000       5496           DEFB   70H,88H,80H,70H,08H,88H,70H,0
1743 F820202020   5497 * T=54
1748 202000       5498           DEFB   0F8H,20H,20H,20H,20H,20H,20H,0
174B 8888888888   5499 * U=55
1750 887000       5500           DEFB   88H,88H,88H,88H,88H,88H,70H,0
1753 8888888888   5501 * V=56
1758 502000       5502           DEFB   88H,88H,88H,88H,88H,50H,20H,0
175B 888888A8A8   5503 * W=57
1760 D88800       5504           DEFB   88H,88H,88H,0A8H,0A8H,0D8H,88H,0
1763 8888502050   5505 * X=58
1768 888800       5506           DEFB   88H,88H,50H,20H,50H,88H,88H,0
176B 8888502020   5507 * Y=59
1770 202000       5508           DEFB   88H,88H,50H,20H,20H,20H,20H,0
1773 F808102040   5509 * Z=5A
1778 80F800       5510           DEFB   0F8H,08H,10H,20H,40H,80H,0F8H,0
177B F8C0C0C0C0   5511 * [=5B
1780 C0F800       5512           DEFB   0F8H,0C0H,0C0H,0C0H,0C0H,0C0H,0F8H,0
1783 0080402010   5513 * \=5C
1788 080000       5514           DEFB   0,80H,40H,20H,10H,08H,0,0
178B F818181818   5515 * ]=5D
1790 18F800       5516           DEFB   0F8H,18H,18H,18H,18H,18H,0F8H,0
                  5517 * ^=5E
```

LOCATION OBJECT CODE LINE   SOURCE LINE

```
1793 0000205088   5518        DEFB    0,0,20H,50H,88H,0,0,0
1798 000000

1798 0000000000   5519 * _=5f
17A0 0000F8       5520        DEFB    0,0,0,0,0,0,0F8H

17A3 4020100000   5521 * `=60
17A8 000000       5522        DEFB    40H,20H,10H,0,0,0,0,0

17AB 00007088F8   5523 * a=61
17B0 888800       5524        DEFB    0,0,70H,88H,0F8H,88H,88H,0

17B3 0000F04870   5525 * b=62
17B8 48F000       5526        DEFB    0,0,0F0H,48H,70H,48H,0F0H,0

17BB 0000788080   5527 * c=63
17C0 807800       5528        DEFB    0,0,78H,80H,80H,80H,78H,0

17C3 0000F04848   5529 * d=64
17C8 48F000       5530        DEFB    0,0,0F0H,048H,048H,048H,0F0H,0

17CB 0000F080E0   5531 * e=65
17D0 80F000       5532        DEFB    0,0,0F0H,080H,0E0H,080H,0F0H,0

17D3 0000F080E0   5533 * f=66
17D8 808000       5534        DEFB    0,0,0F0H,080H,0E0H,080H,80H,0

17DB 00007880B8   5535 * g=67
17E0 887000       5536        DEFB    0,0,78H,80H,0B8H,88H,70H,0

17E3 00008888F8   5537 * h=68
17E8 888800       5538        DEFB    0,0,88H,88H,0F8H,88H,88H,0

17EB 0000F82020   5539 * i=69
17F0 20F800       5540        DEFB    0,0,0F8H,20H,20H,20H,0F8H,0

17F3 0000702020   5541 * j=6A
17F8 A0E000       5542        DEFB    0,0,70H,20H,20H,0A0H,0E0H,0

17FB 000090A0C0   5543 * k=6B
1800 A09000       5544        DEFB    0,0,90H,0A0H,0C0H,0A0H,90H,0

1803 0000808080   5545 * l=6C
1808 80F800       5546        DEFB    0,0,80H,80H,80H,80H,0F8H,0

1806 000088D8A8   5547 * m=6D
1810 888800       5548        DEFB    0,0,88H,0D8H,0A8H,88H,88H,0

1813 000088C8A8   5549 * n=6E
1818 98B800       5550        DEFB    0,0,88H,0C8H,0A8H,98H,88H,0

181B 0000F88888   5551 * o=6F
1820 88F800       5552        DEFB    0,0,0F8H,088H,88H,88H,0F8H,0

1823 0000F088F0   5553 * p=70
1828 808000       5554        DEFB    0,0,0F0H,88H,0F0H,80H,80H,0

                  5555 * q=71
```

LOCATION OBJECT CODE LINE   SOURCE LINE

```
182B 0000F888A8  5556              DEFB   0,0,0F8H,88H,0A8H,90H,0E0H,0
1830 90E000

1833 0000F888F8  5557 * r=72
1838 A09000      5558              DEFB   0,0,0F8H,88H,0F8H,0A0H,90H,0

1838 0000788070  5559 * s=73
1840 08F000      5560              DEFB   0,0,78H,80H,70H,08H,0F0H,0

1843 0000F82020  5561 * t=74
1848 202000      5562              DEFB   0,0,0F8H,20H,20H,20H,0

1848 0000888888  5563 * u=75
1850 887000      5564              DEFB   0,0,88H,88H,88H,88H,70H,00

1853 0000888890  5565 * v=76
1858 A04000      5566              DEFB   0,0,88H,88H,90H,0A0H,40H,0

1858 0000888888  5567 * w=77
1860 D8B800      5568              DEFB   0,0,88H,88H,0A8H,0D8H,88H,00

1863 0000885020  5569 * x=78
1868 608800      5570              DEFB   0,0,88H,60H,20H,60H,88H,0

1868 0000885020  5571 * y=79
1870 202000      5572              DEFB   0,0,88H,50H,20H,20H,20H,0

1873 0000F81020  5573 * z=7A
1878 40F800      5574              DEFB   0,0,0F8H,10H,20H,40H,0F8H,0

1878 384020C020  5575 * (=7B
1880 403800      5576              DEFB   38H,40H,20H,0C0H,20H,40H,38H,0

1883 4020100810  5577 * >=7C
1888 204000      5578              DEFB   40H,20H,10H,08H,10H,20H,40H,0

1888 E010201820  5579 * )=7D
1890 10E000      5580              DEFB   0E0H,10H,20H,18H,20H,10H,0E0H,0

1893 40A8100000  5581 * ~=7E
1898 000000      5582              DEFB   40H,0A8H,10H,0,0,0,0,0

1898 A850A850A8  5583 * ■=7F
18A0 50A800      5584              DEFB   0A8H,50H,0A8H,50H,0A8H,50H,0A8H,0

             5585
      <18A3>  5586 OBJ_TABLE     EQU $
18A3 01020E0F08 5587              DEFB 1,2,14,15,8,9,18,19
18A8 091213
18A8 03040E0F05 5588              DEFB 3,4,14,15,5,20,0,0
18B0 140000
18B3 050010110A 5589              DEFB 5,0,16,17,10,11,21,22
18B8 0B1516
18BB 0607101105 5590              DEFB 6,7,16,17,5,20,0,0
18C0 140000
18C3 01020E0F03 5591              DEFB 1,2,14,15,3,4,14,15
18C8 040E0F
18CB 03040E0F0C 5592              DEFB 3,4,14,15,12,13,23,24
```

LOCATION OBJECT CODE LINE   SOURCE LINE

```
1BD0 001718
1BD3 FF      5593              HEX FF                      ;END OF TABLE INDICATOR
             5594
             5595    ****************************************
             5596    *                                      *
             5597    *              SUBROUTINES             *
             5598    *                                      *
             5599    ****************************************
             5600
             5601    ************** OS SUBROUTINES **************
             5602
             5603    * FILL_VRAM_  WRITES TO VRAM ADDRESS POINTED TO BY HL THE VALUE IN A
             5604    *             DE TIMES.
             5605
             5606    *             VRAM STARTING ADDRESS IN HL
             5607    *             NO OF BYTES IN DE
             5608    *             VALUE TO BE WRITTEN IN A
             5609
1BD4 4F      5610 FILL_VRAM_    LD   C,A
1BD5 7D      5611              LD   A,L
1BD6 D38F    5612              OUT  [MODE_1_PORT],A
1BD8 7C      5613              LD   A,H
1BD9 F640    5614              OR   40H
1BDB D38F    5615              OUT  [MODE_1_PORT],A
1BDD 79      5616 FILL         LD   A,C
1BDE D38E    5617              OUT  [MODE_0_PORT],A
1BE0 1B      5618              DEC  DE
1BE1 7A      5619              LD   A,D
1BE2 B3      5620              OR   E
1BE3 20F8    5621              JR   NZ,FILL
1BE5 CD1FDC  5622              CALL READ_REGISTER
1BE8 C9      5623              RET
             5624
             5625
             5626    * MODE_1_  SETS UP GRAPHICS MODE 1 WITH VRAM ADDRESSES AS IN THE TABLE
             5627    *          BELOW AND EXITS WITH THE VIDEO BLANKED AND A BLACK BACKGROUND.
             5628    *
             5629    *                     VDP MEMORY MAP
             5630    *          3800H-3FFFH  SPRITE GENERATOR TABLE
             5631    *          2000H-37FFH  PATTERN COLOR TABLE
             5632    *          1B00H-1B7FH  SPRITE ATTRIBUTE TABLE
             5633    *          1800H-1AFFH  PATTERN NAME TABLE
             5634    *          0000H-17FFH  PATTERN GENERATOR TABLE
             5635
1BE9 0600    5636 MODE_1_       LD   B,0
1BEB 0E00    5637              LD   C,0
1BED CD1FD9  5638              CALL WRITE_REGISTER
             5639
1BF0 0601    5640              LD   B,1
1BF2 0E80    5641              LD   C,10000000B
1BF4 CD1FD9  5642              CALL WRITE_REGISTER
             5643
             5644    * SET UP TABLE ADDRESSES IN VRAM
             5645
             5646    * PATTERN NAME TABLE
1BF7 3E02    5647              LD   A,2
1BF9 211800  5648              LD   HL,1800H
```

```
LOCATION OBJECT CODE  LINE    SOURCE LINE

1BFC CD1FB8           5649             CALL INIT_TABLE
                      5650
                      5651    * PATTERN COLOR TABLE
18FF 3E04             5652             LD A,4
1901 212000           5653             LD HL,2000H
1904 CD1FB8           5654             CALL INIT_TABLE
                      5655
                      5656    * PATTERN GENERATOR TABLE
1907 3E03             5657             LD A,3
1909 210000           5658             LD HL,0
190C CD1FB8           5659             CALL INIT_TABLE
                      5660
                      5661    * SPRITE ATTRIBUTE TABLE
190F 3E00             5662             LD A,0
1911 211B00           5663             LD HL,1B00H
1914 CD1FB8           5664             CALL INIT_TABLE
                      5665
                      5666    * SPRITE GENERATOR TABLE
1917 3E01             5667             LD A,1
1919 213800           5668             LD HL,3800H
191C CD1FB8           5669             CALL INIT_TABLE
                      5670
                      5671    * SET UP BLACK BACKGROUND
191F 0607             5672             LD B,7
1921 0E00             5673             LD C,0
1923 CD1FD9           5674             CALL WRITE_REGISTER
1926 C9               5675             RET
                      5676    * LOAD_ASCII_ WRITES OUT ASCII CHARACTER GENERATORS TO THE PATTERN
                      5677    *            GENERATOR TABLE.  INIT_TABLE MUST BE USED TO SET UP
                      5678    *            THE TABLE ADDRESS.
                      5679
                      5680
1927 2115B8           5681    LOAD_ASCII_  LD HL,ASC_TABLE   ;LOCATION OF GENERATORS
192A 11001D           5682             LD DE,1DH             ;OFFSET TO PLACE ASC TABLE
192D FD210060         5683             LD IY,96              ;IN THE CORRECT LOCATION
1931 3E03             5684             LD A,3
1933 CD1FBE           5685             CALL PUT_VRAM
                      5686
                      5687    * WRITE OUT A BLANK PATTERN FOR ASCII_0
1936 2115A3           5688             LD HL,SPACE
1939 110000           5689             LD DE,0
193C FD210001         5690             LD IY,1
1940 3E03             5691             LD A,3
1942 CD1FBE           5692             CALL PUT_VRAM
1945 C9               5693             RET
                      5694
                      5695    *********** LOCAL SUBROUTINES ***********
                      5696
1946 010000           5697    PARSE    LD BC,0
1949 7E               5698    P_LOOP   LD A,[HL]   ;FROM HL INCREMENT BC UNTIL
194A FE2F             5699             CP "/"      ;[HL] = "/"
194C C8               5700             RET Z
194D 23               5701             INC HL
194E 03               5702             INC BC
194F 18FB             5703             JR P_LOOP
                      5704
1951 C5                       CENTER_PRT   PUSH BC   ;BC=LENS
```

LOCATION OBJECT CODE LINE   SOURCE LINE

```
1952 FDE1         5706                 POP IY              ;IY= #ITEMS TO BE TRANSFERED IN PUT_VRAM
1954 3E20         5707                 LD A,32             ;DE= LOCATION OF START OF STRING
1956 99           5708                 SBC A,C             ; A=32-C
1957 1F           5709                 RRA                 ; DIV 2
1958 0600         5710                 LD B,0
195A 4F           5711                 LD C,A
195B 09           5712                 ADD HL,BC
195C 44           5713                 LD B,H
195D 4D           5714                 LD C,L
195E 62           5715                 LD H,D
195F 68           5716                 LD L,E
1960 50           5717                 LD D,B
1961 59           5718                 LD E,C
1962 3E02         5719                 LD A,2
1964 CD1FBE       5720                 CALL PUT_VRAM
1967 C9           5721                 RET
                  5722
1968 211700       5723 DELAY_10        LD HL,1700H
1968 1100FF       5724 TIMER_1         LD DE,255
196E 1B           5725 TIMER_2         DEC DE
196F 7A           5726                 LD A,D
1970 B3           5727                 OR E
1971 20FB         5728                 JR NZ,TIMER_2
1973 2B           5729                 DEC HL
1974 7C           5730                 LD A,H
1975 B5           5731                 OR L
1976 20F3         5732                 JR NZ,TIMER_1
1978 C9           5733                 RET
                  5734 PROG
```

LOCATION OBJECT CODE LINE   SOURCE LINE

```
                    5736    ******************* EXTERNAL SYMBOLS ******************************
                    5737    ****************************************************
                    5738
                    5739
                    5740    * EXTERNAL ROUTINES FROM OS
                    5741
                    5742              ;EXT INIT_TABLE
                    5743              ;EXT PUT_VRAM
                    5744              ;EXT WRITE_REGISTER
                    5745              ;EXT WRITE_VRAM
                    5746              ;EXT VRAM_ADDR TABLE
                    5747              ;EXT SPRITENAMETBL
                    5748              ;EXT SPRITEGENTBL
                    5749              ;EXT PATTRNNAMETBL
                    5750              ;EXT PATTRNGENTBL
                    5751              ;EXT COLORTABLE
                    5752              ;EXT LOAD_ASCII
                    5753              ;EXT FILL_VRAM
                    5754              ;EXT MODE_1
                    5755
                    5756    ****************** DEFINITIONS ********************************
                    5757    ****************** EXPORTS ***********************************
                    5758
                    5759
                    5760              GLB GAME_OPT_
                    5761
                    5762    ************* DISPLAY GAME OPTION SCREEN ************************
                    5763    * GAME_OPT_   DISPLAYS THE GAME OPTION SCREEN WITH WHITE LETTERS ON A
                    5764    *            BLUE BACKGROUND.  VDP IS LEFT IN MODE 1 WITH THE VRAM
                    5765    *            MEMORY MAP AS FOLLOWS.
                    5766    *
                    5767    *                        VDP MEMORY MAP
                    5768    *            3800H-3FFFH  SPRITE GENERATOR TABLE
                    5769    *            2000H-37FFH  PATTERN COLOR TABLE
                    5770    ;            1B00H-1B7FH  SPRITE ATTRIBUTE TABLE
                    5771    ;            1800H-1AFFH  PATTERN NAME TABLE
                    5772    ;            0000H-17FFH  PATTERN GENERATOR TABLE
                    5773    ;
1979 210000         5776    GAME_OPT_     PROG
197C 114000         5777                  LD HL,0                          ;ZERO VRAM
197F 3E00           5778                  LD DE,16384
1981 CD1F82         5779                  LD A,0
                    5780                  CALL FILL_VRAM
                    5781
                    5782    * SET UP VDP WITH MODE 1
1984 CD1F85         5783                  CALL MODE_1
                    5784
                    5785    * SET UP BACKGROUND COLOR
1987 060F           5786                  LD B,0FH
1989 0E04           5787                  LD C,4
198B CD1FD9         5788                  CALL WRITE_REGISTER
                    5789
                    5790    **************** WRITE OUT PATTERN GEN TABLE *******************
                    5791
198E CD1F7F         5792                  CALL LOAD_ASCII
```

LOCATION OBJECT CODE LINE   SOURCE LINE

```
                    5793
                    5794   *************** WRITE OUT PATTERN_NAME_TABLE ****************
                    5795
                    5796   *  WRITE OUT PATTERN NAME TABLE
1991 211A7C         5797           LD HL,LINE_1
1994 110025         5798           LD DE,37
1997 FD210016       5799           LD IY,22,
199B 3E02           5800           LD A,2
199D CD1FBE         5801           CALL PUT_VRAM
                    5802
19A0 211A92         5803           LD HL,LINE_2
19A3 110065         5804           LD DE,101
19A6 FD210017       5805           LD IY,23
19AA 3E02           5806           LD A,2
19AC CD1FBE         5807           CALL PUT_VRAM
                    5808
19AF 1100C5         5809           LD DE,197
19B2 CD1ACA         5810           CALL WRITE_L3
                    5811
19B5 110105         5812           LD DE,261
19B8 CD1ACA         5813           CALL WRITE_L3
                    5814
19BB 110145         5815           LD DE,325
19BE CD1ACA         5816           CALL WRITE_L3
                    5817
19C1 110185         5818           LD DE,389
19C4 CD1ACA         5819           CALL WRITE_L3
                    5820
19C7 1101E5         5821           LD DE,485
19CA CD1ACA         5822           CALL WRITE_L3
                    5823
19CD 110225         5824           LD DE,549
19D0 CD1ACA         5825           CALL WRITE_L3
                    5826
19D3 110265         5827           LD DE,613
19D6 CD1ACA         5828           CALL WRITE_L3
                    5829
19D9 1102A5         5830           LD DE,677
19DC CD1ACA         5831           CALL WRITE_L3
                    5832
19DF 110105         5833           LD DE,261
19E2 CD1AD7         5834           CALL WRITE_L4
                    5835
19E5 110145         5836           LD DE,325
19E8 CD1ADC         5837           CALL WRITE_L5
                    5838
19EB 110185         5839           LD DE,389
19EE CD1AE1         5840           CALL WRITE_L6
                    5841
19F1 211AC2         5842           LD HL,LINE_7
19F4 1101E5         5843           LD DE,485
19F7 CD1AE4         5844           CALL WRITE_CHAR
                    5845
19FA 211AC3         5846           LD HL,LINE_8
19FD 110225         5847           LD DE,549
1A00 CD1AE4         5848           CALL WRITE_CHAR
                    5849
```

```
LOCATION OBJECT CODE LINE   SOURCE LINE

1A03  211AC4   5850         LD HL,LINE_9
1A06  110265   5851         LD DE,613
1A09  CD1AE4   5852         CALL WRITE_CHAR
               5853
1A0C  211AC5   5854         LD HL,LINE_10
1A0F  1102A5   5855         LD DE,677
1A12  CD1AE4   5856         CALL WRITE_CHAR
               5857
1A15  11010F   5858         LD DE,271
1A18  CD1AD7   5859         CALL WRITE_L4
               5860
1A1B  11014F   5861         LD DE,335
1A1E  CD1ADC   5862         CALL WRITE_L5
               5863
1A21  11018F   5864         LD DE,399
1A24  CD1AE1   5865         CALL WRITE_L6
               5866
1A27  1101F1   5867         LD DE,497
1A2A  CD1AEE   5868         CALL WRITE_L11
               5869
1A2D  110231   5870         LD DE,561
1A30  CD1AEE   5871         CALL WRITE_L11
               5872
1A33  110271   5873         LD DE,625
1A36  CD1AEE   5874         CALL WRITE_L11
               5875
1A39  1102B1   5876         LD DE,689
1A3C  CD1AEE   5877         CALL WRITE_L11
               5878
1A3F  11022F   5879         LD DE,559
1A42  CD1AD7   5880         CALL WRITE_L4
               5881
1A45  11026F   5882         LD DE,623
1A48  CD1ADC   5883         CALL WRITE_L5
               5884
1A4B  1102AF   5885         LD DE,687
1A4E  CD1AE1   5886         CALL WRITE_L6
               5887
1A51  1101FB   5888         LD DE,507
1A54  CD1AFB   5889         CALL WRITE_L12
               5890
1A57  11023B   5891         LD DE,571
1A5A  CD1AFB   5892         CALL WRITE_L12
               5893
1A5D  11027B   5894         LD DE,635
1A60  CD1AFB   5895         CALL WRITE_L12
               5896
1A63  1102BB   5897         LD DE,699
1A66  CD1AFB   5898         CALL WRITE_L12
               5899
               5900         ****************** WRITE OUT COLOR NAME_TABLE *****************
               5901
1A69  2A73FA   5902         LD HL,[COLORTABLE]
1A6C  110020   5903         LD DE,32
1A6F  3EF4     5904         LD A,0F4H
1A71  CD1FA2   5905         CALL FILL_VRAM
```

```
LOCATION OBJECT CODE LINE    SOURCE LINE

                      5907  ******************* ENABLE DISPLAY *******************
                      5908
                      5909  * ENABLE DISPLAY
1A74 0601             5910          LD B,1
1A76 0EC0             5911          LD C,11000000B
1A78 CD1FD9           5912          CALL WRITE_REGISTER
1A7B C9               5913          RET
                      5914
                      5915  *************************************************
                      5916  *                                              *
                      5917  *              DATA TABLES                     *
                      5918  *                                              *
                      5919  *                                              *
                      5920
                      5921  ********* PATTERN NAME TABLE *********
1A7C 544F205345345    5922  LINE_1 DEFB "TO SELECT GAME OPTION,"
1A81 4C45435420
1A86 4741404520
1A8B 4F5054494F
1A90 4E2C
1A92 5052455353       5923  LINE_2 DEFB "PRESS BUTTON ON KEYPAD."
1A97 2042555454
1A9C 4F4E204F4E
1AA1 204B455950
1AA6 41442E
1AA9 31203D2053       5924  LINE_3 DEFB "1 = SKILL 1/ONE PLAYER"
1AAE 4B494C4C20
1AB3 312F4F4E45
1AB8 20504C4159
1ABD 4552
1ABF 32               5925  LINE_4  DEFB "2"
1AC0 33               5926  LINE_5  DEFB "3"
1AC1 34               5927  LINE_6  DEFB "4"
1AC2 35               5928  LINE_7  DEFB "5"
1AC3 36               5929  LINE_8  DEFB "6"
1AC4 37               5930  LINE_9  DEFB "7"
1AC5 38               5931  LINE_10 DEFB "8"
1AC6 54574F           5932  LINE_11 DEFB "TWO"
1AC9 53               5933  LINE_12 DEFB "S"
                      5934
                      5935  *************************************************
                      5936  *                                              *
                      5937  *            LOCAL SUBROUTINES                 *
                      5938  *                                              *
                      5939  *                                              *
                      5940
1ACA 211AA9           5941  WRITE_L3   LD HL,LINE_3
1ACD FD210016         5942             LD IY,22
1AD1 3E02             5943             LD A,2
1AD3 CD1FBE           5944             CALL PUT_VRAM
1AD6 C9               5945             RET
                      5946
1AD7 211ABF           5947  WRITE_L4   LD HL,LINE_4
1ADA 1808             5948             JR WRITE_CHAR
                      5949
1ADC 211AC0           5950  WRITE_L5   LD HL,LINE_5
1ADF 1803             5951             JR WRITE_CHAR
```

LOCATION OBJECT CODE LINE   SOURCE LINE

```
                         5952
1AE1 211AC1              5953 WRITE_L6      LD HL,LINE_6
1AE4 FD210001            5954 WRITE_CHAR    LD IY,1
1AE8 3E02                5955              LD A,2
1AEA CD1FBE              5956              CALL PUT_VRAM
1AED C9                  5957              RET
                         5958
1AEE 211AC6              5959 WRITE_L11     LD HL,LINE_11
1AF1 FD210003            5960              LD IY,3
1AF5 3E02                5961              LD A,2
1AF7 CD1FBE              5962              CALL PUT_VRAM
1AFA C9                  5963              RET
                         5964
1AFB 211AC9              5965 WRITE_L12     LD HL,LINE_12
1AFE FD210001            5966              LD IY,1
1B02 3E02                5967              LD A,2
1B04 CD1FBE              5968              CALL PUT_VRAM
1B07 C9                  5969              RET
                         5970
                         5971 PROG
```