

# C64 Boulder Dash Decoded Cave Data

- Cave A B C D Intermission 1
- Cave E F G H Intermission 2
- Cave I J K L Intermission 3
- Cave M N O P Intermission 4

Decoded cave data in human-readable text, including ascii representation.  
Warning: There may be mistakes in the decode. The C source code to generate the following decodes are available in the files decodecaves.c and cavedata.h). Note that when decoding the cave, the random objects are placed first, then a bounding rectangle of steel wall is put in (effectively an implicit DrawRect(0,2,40,22) before the cave data), then the cave data is decoded. For each cave, a graphical representation is given for difficulty level 1. The characters used in the graphical representation are the ones used by a implementation of BoulderDash on the Amiga.

## Cave 1 (Cave A: Intro)

Pick up jewels and exit before time is up

```
01          Cave 01
14          Magic wall/amoeba slow growth for: 20 seconds
0A          Diamonds worth: 10 points
0F          Extra diamonds worth: 15 points
0A 0B 0C 0D 0E Randomiser seed values for difficulty levels 1-5
0C 0C 0C 0C 0C Diamonds needed: 12, 12, 12, 12, 12 (for difficulty
levels 1-5)
96 6E 46 28 1E Cave time: 150, 110, 70, 40, 30 seconds
08          Background color 1: Orange
0B          Background color 2: Gray 1
09          Foreground color: Brown
D4 20       Unused
00 10 14 00 Random objects:
3C 32 09 00   zSpace : 60/256 = 23%
               zBouS  : 50/256 = 19%
               zDiaS  : 9/256 = 3%
               fourth code unused (0%)

Cave layout:
42 01 09 1E 02 Line of zBrick from ( 1, 9); length = 30; direction =
right
42 09 10 1E 02 Line of zBrick from ( 9,16); length = 30; direction =
right
25 03 04       StoreChar zPRFd1 at ( 3, 4)
04 26 12       StoreChar zPreOut at (38,18)
FF            End of cave data.
```

Map #1

```
002 WWWWXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
003 W..... ..d.r .....r.r..... ..r...W
004 W.rXr..... .....rd..r.... ..W
005 W..... ..r.....r.r.r.....r...W
006 Wr.rr.....r.....r.r.r.....r...W
007 Wr. r..... r..r.....r.....r.rr.W
008 W... ..r.....r.....r. r.....r.rr.W
009 WXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX...r..r.W
```

```

010 W. . . . r . . d . . . r . r . . . . . . . . . . d . r d . . . . . . . . . . . W
011 W . . d . . . . . r . . . . . . . . . . . . . . . . r r r . . r . . . . . r . . . W
012 W . . . . . r . r . r . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . W
013 W . r . . . . . r . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . W
014 W . d . . . . r . . . . . . . . . . . r . d . . . . . r . . . . . d . . . . . W
015 W . r . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . W
016 W . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . W
017 W r . . . . . . . . . . . r . . . . . d . . . . . r . . . . . r . . . . . . . . . . W
018 W r . . . . . . . . . . . r . . . . . . . . . . . r . . . . . . . . . . r . r . . . PW
019 W . . . r . . . . . . . . . . . r . . . . . . . . . . . . . . . . . . . . . . . . W
020 W . . . . . r d . . r . . . . . . . . . . . r . . . . . r d . . . . . r . . . . . W
021 W . . . . . r . . . r . r . . . . . . . . . . r . r d . . . . . . . . . . . . . . r W
022 W . d . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . W
023 W . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . W

```

## Cave 2 (Cave B: Rooms)

Pick up jewels, but you must move boulders to get all jewels

```

02          Cave 02
14          Magic wall/amoeba slow growth for: 20 seconds
14          Diamonds worth: 20 points
32          Extra diamonds worth: 50 points
03 00 01 57 58      Randomiser seed values for difficulty levels 1-5
0A 0C 09 0D 0A      Diamonds needed: 10, 12, 9, 13, 10 (for difficulty
levels 1-5)
96 6E 46 46 46      Cave time: 150, 110, 70, 70, 70 seconds
0A          Background color 1: Light red
04          Background color 2: Purple
09          Foreground color: Brown
00 00          Unused
00 10 14 08      Random objects:
3C 32 09 02          zSpace : 60/256 = 23%
                   zBouS  : 50/256 = 19%
                   zDiaS  : 9/256 = 3%
                   zFFly1 : 2/256 = 0%

```

Cave layout:

```

42 01 08 26 02      Line of zBrick from ( 1, 8); length = 38; direction =
right
42 01 0F 26 02      Line of zBrick from ( 1,15); length = 38; direction =
right
42 08 03 14 04      Line of zBrick from ( 8, 3); length = 20; direction =
down
42 10 03 14 04      Line of zBrick from (16, 3); length = 20; direction =
down
42 18 03 14 04      Line of zBrick from (24, 3); length = 20; direction =
down
42 20 03 14 04      Line of zBrick from (32, 3); length = 20; direction =
down
40 01 05 26 02      Line of zSpace from ( 1, 5); length = 38; direction =
right
40 01 0B 26 02      Line of zSpace from ( 1,11); length = 38; direction =
right
40 01 12 26 02      Line of zSpace from ( 1,18); length = 38; direction =
right
40 14 03 14 04      Line of zSpace from (20, 3); length = 20; direction =
down
25 12 15          StoreChar zPRFd1 at (18,21)
04 12 16          StoreChar zPreOut at (18,22)
FF          End of cave data.

```

```

Map #2
002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 W.r...r..w.r...d.w... .r.wr.....w..rr..W
004 W.....w.....rwrr. ...w ..d...w....r.W
005 W
006 Wd.....w.r....rw.r. .. w..r..d.w..r.r.W
007 W.....w.r....rw.r. r..w.....r.w... ..W
008 Wwwwwwwwwwwwwwwwwww wwwwwwwwwwwwwwwwwwwwwW
009 W....rr.w..r....w... ..rw....r..w....rW
010 W.....w.. ....w... ...w....r. w.....rW
011 W
012 Wr..r...w....r..w..r ...w.....dwr.....W
013 Wr....r.w..r..r.w... . rw.....wr...r.W
014 W.r....w..r...w... . rw.....w r..r.W
015 Wwwwwwwwwwwwwwwwwww wwwwwwwwwwwwwwwwwwwwwW
016 Wr. q..w....r.rw... ...w.rd..r.w.....W
017 W.....r.wr.....w..d ...w ..r...w.r.rr.W
018 W
019 Wd.. .r.wr....r.w.r. ..rw.r.r...w.....W
020 W.....r.wr..d...w... r..w..r...w...rr W
021 W.d... rw..r....w.Xd r..w. ....w...rr W
022 W.r.... w.. ..r.w.P. ...w....r.rw.... .W
023 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW

```

## Cave 3 (Cave C: Maze)

Pick up jewels. You must get every jewel to exit

```

03          Cave 03
00          Magic wall/amoeba slow growth for: 0 seconds
0F          Diamonds worth: 15 points
00          Extra diamonds worth: 0 points
00 32 36 34 37 Randomiser seed values for difficulty levels 1-5
18 17 18 17 15 Diamonds needed: 24, 23, 24, 23, 21 (for difficulty
levels 1-5)
96 64 5A 50 46 Cave time: 150, 100, 90, 80, 70 seconds
09          Background color 1: Brown
08          Background color 2: Orange
09          Foreground color: Brown
04 00       Unused
02 10 14 00 Random objects:
64 32 09 00      zBrick : 100/256 = 39%
                  zBouS  :  50/256 = 19%
                  zDiaS  :   9/256 =  3%
                  fourth code unused (0%)

```

Cave layout:

```

25 03 04      StoreChar zPRFd1 at ( 3, 4)
04 27 14      StoreChar zPreOut at (39,20)
FF           End of cave data.

```

```

Map #3
002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 Wr.ww.wrr.w...rwr..r....w...r.....rw.d.W
004 W..Xw.d.r.w...www..w.r....r..r.r...w.wrW
005 W....w..rd..r....w.....r.wwr.....w.wwW
006 Wd.w..wrwr..r....w....r.....r.rr.....wW
007 Wr.w...w..r.wv..r.wvd.....r.rr.....wW
008 Wrr..r....w...r.....r.rr.....r..dww..W
009 W..r.wv..r.rr...w....r.rr.....w..r.w.rW
010 W..w...d.....d.r..wwr..r.w.wr..wr..d.rW
011 Wr.r....w.wv..d.r..wwr..r..d.w...w..r.wW

```

```

012 W.r.ww.....rrwr..d.w.wr..wr...wr..d.r..W
013 Ww.ww.....rrwr..r.w.wv...w..r.wv..r.wvW
014 W.w.r.r.w...wv..r...w...r...wv.r.wvW
015 W.w.r.r.w.d.w.wr..wr....r..r.rv...w...W
016 Ww..wrwr..r...w...d...w.rv.....w.wv.dW
017 Ww...wv..w.d...wr..r.r...r.wv.....w..W
018 Ww.d....r.wv..r.wv.....r.wv.....w..W
019 W..r...w...r...r.rv.....w..r.w...wvW
020 Wr.wv..r.wv...w...r.rv.....w..rd..r..W
021 Ww...r...r.rv.....r...wv..wr..d.w..W
022 Wrr...w...r.rv.....w..r.wd.d.rv.r...W
023 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW

```

## Cave 4 (Cave D: Butterflies)

### Drop boulders on butterflies to create jewels

```

04          Cave 04
14          Magic wall/amoeba slow growth for: 20 seconds
05          Diamonds worth: 5 points
14          Extra diamonds worth: 20 points
00 6E 70 73 77      Randomiser seed values for difficulty levels 1-5
24 24 24 24 24      Diamonds needed: 36, 36, 36, 36, 36 (for difficulty
levels 1-5)
78 64 50 3C 32      Cave time: 120, 100, 80, 60, 50 seconds
04          Background color 1: Purple
08          Background color 2: Orange
09          Foreground color: Brown
00 00          Unused
10 00 00 00      Random objects:
14 00 00 00      zBouS   : 20/256 = 7%
                  second code unused (0%)
                  third code unused (0%)
                  fourth code unused (0%)

```

### Cave layout:

```

25 01 03          StoreChar zPRFd1 at ( 1, 3)
04 26 16          StoreChar zPreOut at (38,22)
81 08 0A 04 04 00  FilledRect of zDirt from ( 8,10); length = 4; height =
4; fill = zSpace
30 0A 0B          StoreChar zBFly1 at (10,11)
81 10 0A 04 04 00  FilledRect of zDirt from (16,10); length = 4; height =
4; fill = zSpace
30 12 0B          StoreChar zBFly1 at (18,11)
81 18 0A 04 04 00  FilledRect of zDirt from (24,10); length = 4; height =
4; fill = zSpace
30 1A 0B          StoreChar zBFly1 at (26,11)
81 20 0A 04 04 00  FilledRect of zDirt from (32,10); length = 4; height =
4; fill = zSpace
30 22 0B          StoreChar zBFly1 at (34,11)
FF          End of cave data.

```

### Map #4

```

002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 WX.....r.....r.....r.....r.W
004 W.....r.....r.....r.....r.W
005 W.....r..r.....r.....r.....r.W
006 Wr.....r.....r.....r.....r.W
007 W.....r.....r.....r.....r.W
008 W.r.....r.....r.....r.....r.W
009 W..r.....r.....r.....r.....r.W
010 W.....r.....r.....r.....r.....r.W

```



```

3; fill = zSpace
14 09 12      StoreChar zDiaS at ( 9,18)
08 0A 10      StoreChar zFFly1 at (10,16)
14 11 12      StoreChar zDiaS at (17,18)
08 12 10      StoreChar zFFly1 at (18,16)
14 19 12      StoreChar zDiaS at (25,18)
08 1A 10      StoreChar zFFly1 at (26,16)
14 21 12      StoreChar zDiaS at (33,18)
08 22 10      StoreChar zFFly1 at (34,16)
FF           End of cave data.

```

```

Map #5
002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 WX.....W
004 W.....W
005 W.....W
006 W.....W
007 W.....W
008 W.....W
009 W.....W
010 W..... q..... q..... q..... q....W
011 W.....      .....      .....      .....      ....W
012 W..... d ..... d ..... d ..... d ....W
013 W.....W
014 W.....W
015 W.....W
016 W..... q..... q..... q..... q....W
017 W.....      .....      .....      .....      ....W
018 W..... d ..... d ..... d ..... d ....W
019 W.....W
020 W.....W
021 W.....W
022 W.....W
023 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW

```

## Cave 6 (Cave F: Firefly dens)

### Each firefly is guarding a jewel

```

06           Cave 06
14           Magic wall/amoeba slow growth for: 20 seconds
28           Diamonds worth: 40 points
3C           Extra diamonds worth: 60 points
00 14 15 16 17 Randomiser seed values for difficulty levels 1-5
04 06 07 08 08 Diamonds needed: 4, 6, 7, 8, 8 (for difficulty levels
1-5)
96 78 64 5A 50 Cave time: 150, 120, 100, 90, 80 seconds
0E           Background color 1: Light blue
0A           Background color 2: Light red
09           Foreground color: Brown
00 00       Unused
10 00 00 00 Random objects:
32 00 00 00      zBouS : 50/256 = 19%
                second code unused (0%)
                third code unused (0%)
                fourth code unused (0%)

```

### Cave layout:

```

82 01 03 0A 04 00 FilledRect of zBrick from ( 1, 3); length = 10; height
= 4; fill = zSpace
82 01 06 0A 04 00 FilledRect of zBrick from ( 1, 6); length = 10; height
= 4; fill = zSpace

```



# Cave 7 (Cave G: Amoeba)

Surround the amoeba with boulders, so it can't grow anymore. Pick up jewels that are created when it suffocates

```
07          Cave 07
4B          Magic wall/amoeba slow growth for: 75 seconds
0A          Diamonds worth: 10 points
14          Extra diamonds worth: 20 points
02 07 08 0A 09 Randomiser seed values for difficulty levels 1-5
0F 14 19 19 19 Diamonds needed: 15, 20, 25, 25, 25 (for difficulty
levels 1-5)
78 78 78 78 78 Cave time: 120, 120, 120, 120, 120 seconds
09          Background color 1: Brown
0A          Background color 2: Light red
0D          Foreground color: Light green
00 00          Unused
00 10 08 00 Random objects:
64 28 02 00    zSpace : 100/256 = 39%
                zBouS  :  40/256 = 15%
                zFFly1  :   2/256 =  0%
                fourth code unused (0%)
```

Cave layout:

```
42 01 07 0C 02 Line of zBrick from ( 1, 7); length = 12; direction =
right
42 1C 05 0B 02 Line of zBrick from (28, 5); length = 11; direction =
right
7A 13 15 02 02 Line of zAmoe from (19,21); length = 2; direction =
right
14 04 06      StoreChar zDiaS at ( 4, 6)
14 04 0E      StoreChar zDiaS at ( 4,14)
14 04 16      StoreChar zDiaS at ( 4,22)
14 22 04      StoreChar zDiaS at (34, 4)
14 22 0C      StoreChar zDiaS at (34,12)
14 22 16      StoreChar zDiaS at (34,22)
25 14 03      StoreChar zPRFd1 at (20, 3)
04 27 07      StoreChar zPreOut at (39, 7)
FF            End of cave data.
```

Map #7

```
002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 W.  . . .rr..... .r. X.... rr r..r. .  .W
004 W .r. . . . . . . .r.r. . . . r..r.d.. .W
005 Wr..... .q. . . .r.r. . . . wwwwwwwwwwwW
006 W.r.d... . . . . .rr..r.... . . . . W
007 Wwwwwwwwwwwww.r. . . . r.. . . . .r....W
008 Wr. r..... .r. . . .r. .r. q.....W
009 Wr. r..... . r..r.... .r.....r.rr.W
010 W... .r . . . .r. .r. . . . .r.rr.W
011 W... .r. .r.... .q.....r.r.. r..r.W
012 W . . r.... .r.r.... . . . . . d.. .W
013 W. . . . . . . . . . .rr r..r. . r.. W
014 W.. d..r.r.... . . . . .r r..r. . . .W
015 W.r. .r. . . .r.r. . . . r.. . . . .W
016 W.... .r. . . .r.r. .r. . r.. r.... .W
017 W. . . . . . . . r r..r.... .r.... .rW
018 W..... . .rr. . . . r.. .r... r..r.r...W
019 W r..... .r. .r.... . .r. r.....W
020 W r..... . r..r.... .r.....r.rr...W
021 W. .r. . . .r. .aa. . . . .r.rr...W
```





```

015 Wwwwwwwwwwwwwr..... .r.....r.rr..W
016 W..r... ..d..r. .r.rr.....r.rr..W
017 W.. .r. .r...mmmmmmmm..... r..r..W
018 Wr.. r....r..r r...d .. ..... r..r..W
019 W ... .r. .r.r. ....rrrr.r. . r.. rW
020 W. r..q.r.... . ....rr r..r... ..rW
021 Wr. .r. ....r.r. ... r..r.... ..rW
022 W... .r.r .....r.r..... ..r....r..W
023 Wwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwww

```

## Cave 9 (Cave I: Greed)

You have to get a lot of jewels here, lucky there are so many

```

09          Cave 09
14          Magic wall/amoeba slow growth for: 20 seconds
05          Diamonds worth: 5 points
0A          Extra diamonds worth: 10 points
64 89 8C FB 33  Randomiser seed values for difficulty levels 1-5
4B 4B 50 55 5A  Diamonds needed: 75, 75, 80, 85, 90 (for difficulty
levels 1-5)
96 96 82 82 78  Cave time: 150, 150, 130, 130, 120 seconds
08          Background color 1: Orange
04          Background color 2: Purple
09          Foreground color: Brown
00 00       Unused
10 14 00 00  Random objects:
F0 78 00 00  zBouS   : 240/256 = 93%
              zDiaS   : 120/256 = 46%
              third code unused (0%)
              fourth code unused (0%)

```

Cave layout:

```

82 05 0A 0D 0D 00  FilledRect of zBrick from ( 5,10); length = 13; height
= 13; fill = zSpace
01 0C 0A          StoreChar zDirt at (12,10)
82 19 0A 0D 0D 00  FilledRect of zBrick from (25,10); length = 13; height
= 13; fill = zSpace
01 1F 0A          StoreChar zDirt at (31,10)
42 11 12 09 02    Line of zBrick from (17,18); length = 9; direction =
right
40 11 13 09 02    Line of zSpace from (17,19); length = 9; direction =
right
25 07 0C          StoreChar zPRFd1 at ( 7,12)
04 08 0C          StoreChar zPreOut at ( 8,12)
FF              End of cave data.

```

Map #9

```

002 Wwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwww
003 Wddrrdrdrdr.rrrrrdd. ddrdrdddrdrdrW
004 Wdrdddrdrdrdrdrdrdrdr. ddrdrdrdrdrW
005 Wdrdrdrdrdrdrdr. rrrdrdddrdr. rrrdrdrW
006 Wrrdrdrdrdrdrdrdd. ddrdrdrdrdrdr. rrrW
007 Wrrdrdrdrdrdrdrdr. ddrdrdrdrdrdrdrdrdrW
008 Wddrrdrdr. ddrdrdrdrdrdrdr. ddrdrdrW
009 Wrrdrdrdrdrdr. rrrdrdr. rrrdr. rrrdrdrW
010 Wdrddwwwwww. wwwwdrdrdrwwwwww. wwwwwwrW
011 Wd.dd          rdrdrdr          rW
012 Wdrdr  XP      rdrdrdr          rW
013 Wdrdr          r. rrrdr          rW
014 Wdrdr          ddrdrdr          dW
015 Wrddd          drdr.dr          dW

```

```

016 Wrrrrr          drrddrr          rW
017 Wdrdd          .rdrdr          rW
018 Wdrdd          wwwwwwwww          rW
019 Wrrrr          rW
020 Wrrrr          dd.rdr          rW
021 Wddrr          rrrdrdd          rW
022 Wdd..wwwwwwwwwwwwdrddwwwwwwwwwwwwdW
023 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW

```

## Cave 10 (Cave J: Tracks)

### Get the jewels, avoid the fireflies

```

0A          Cave 10
14          Magic wall/amoeba slow growth for: 20 seconds
19          Diamonds worth: 25 points
3C          Extra diamonds worth: 60 points
00 00 00 00 00 Randomiser seed values for difficulty levels 1-5
0C 0C 0C 0C 0C Diamonds needed: 12, 12, 12, 12, 12 (for difficulty
levels 1-5)
96 82 78 6E 64 Cave time: 150, 130, 120, 110, 100 seconds
06          Background color 1: Blue
08          Background color 2: Orange
09          Foreground color: Brown
00 00          Unused
00 00 00 00 Random objects:
00 00 00 00     first code unused (0%)
                second code unused (0%)
                third code unused (0%)
                fourth code unused (0%)

Cave layout:
25 0D 03     StoreChar zPRFd1 at (13, 3)
04 27 16     StoreChar zPreOut at (39,22)
54 05 04 11 03 Line of zDiaS from ( 5, 4); length = 17; direction =
down/right
54 15 04 11 05 Line of zDiaS from (21, 4); length = 17; direction =
down/left
80 05 0B 11 03 08 FilledRect of zSpace from ( 5,11); length = 17; height
= 3; fill = zFFly1
C2 01 04 15 11 Rect of zBrick from ( 1, 4); length = 21; height = 17
00 0D 04     StoreChar zSpace at (13, 4)
C2 07 06 0D 0D Rect of zBrick from ( 7, 6); length = 13; height = 13
00 0D 06     StoreChar zSpace at (13, 6)
C2 09 08 09 09 Rect of zBrick from ( 9, 8); length = 9; height = 9
00 0D 08     StoreChar zSpace at (13, 8)
C2 0B 0A 05 05 Rect of zBrick from (11,10); length = 5; height = 5
00 0D 0A     StoreChar zSpace at (13,10)
82 03 06 03 0F 08 FilledRect of zBrick from ( 3, 6); length = 3; height =
15; fill = zFFly1
00 04 06     StoreChar zSpace at ( 4, 6)
54 04 10 04 04 Line of zDiaS from ( 4,16); length = 4; direction =
down
FF          End of cave data.

```

### Map #10

```

002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 W.....X.....W
004 Wwwwwwwwww wwwwww.....W
005 Ww...d.....dw.....W
006 Ww.w w.wwwwww wwwwww.w.....W
007 Ww.qqq.wd.....dw.w.....W

```

```

008 Ww.qqq.w.www www.w.w.....W
009 Ww.qqq.w.wd.....dw.w.w.....W
010 Ww.qqq.w.w.w www.w.w.w.....W
011 Ww.qqq w w w w w w.....W
012 Ww.qqqqwwqwwqwwqwwqww.....W
013 Ww.qqq w w w w w w.....W
014 Ww.qqq.w.w.wwwww.w.w.w.....W
015 Ww.qqq.w.wd.....dw.w.w.....W
016 Ww.qdq.w.wwwwwwwww.w.w.....W
017 Ww.qdq.wd.....dw.w.....W
018 Ww.qdq.wwwwwwwwwwww.w.....W
019 Ww.qdq.....dw.....W
020 Wwwwwwwwwwwwwwww.....W
021 W.....W
022 W.....W
023 Wwwwwwwwwwwwwwww.....W

```

## Cave 11 (Cave K: Crowd)

You must move a lot of boulders around in some tight spaces

```

0B Cave 11
14 Magic wall/amoeba slow growth for: 20 seconds
32 Diamonds worth: 50 points
00 Extra diamonds worth: 0 points
00 04 66 97 64 Randomiser seed values for difficulty levels 1-5
06 06 06 06 06 Diamonds needed: 6, 6, 6, 6, 6 (for difficulty levels
1-5)
78 78 96 96 F0 Cave time: 120, 120, 150, 150, 240 seconds
0B Background color 1: Gray 1
08 Background color 2: Orange
09 Foreground color: Brown
00 00 Unused
00 10 08 00 Random objects:
64 50 02 00 zSpace : 100/256 = 39%
zBouS : 80/256 = 31%
zFFly1 : 2/256 = 0%
fourth code unused (0%)

```

Cave layout:

```

42 0A 03 09 04 Line of zBrick from (10, 3); length = 9; direction =
down
42 14 03 09 04 Line of zBrick from (20, 3); length = 9; direction =
down
42 1E 03 09 04 Line of zBrick from (30, 3); length = 9; direction =
down
42 09 16 09 00 Line of zBrick from ( 9,22); length = 9; direction = up
42 0C 0F 11 02 Line of zBrick from (12,15); length = 17; direction =
right
42 05 0B 09 02 Line of zBrick from ( 5,11); length = 9; direction =
right
42 0F 0B 09 02 Line of zBrick from (15,11); length = 9; direction =
right
42 19 0B 09 02 Line of zBrick from (25,11); length = 9; direction =
right
42 1C 13 0B 01 Line of zBrick from (28,19); length = 11; direction =
up/right
14 04 03 StoreChar zDiaS at ( 4, 3)
14 0E 03 StoreChar zDiaS at (14, 3)
14 18 03 StoreChar zDiaS at (24, 3)
14 22 03 StoreChar zDiaS at (34, 3)
14 04 16 StoreChar zDiaS at ( 4,22)

```

```

14 23 15      StoreChar zDiaS at (35,21)
25 14 14      StoreChar zPRFd1 at (20,20)
04 26 11      StoreChar zPreOut at (38,17)
FF            End of cave data.

```

```

Map #11
002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 Wr.rd.rrr.w...drr..rw...d...r.w...dr.r.W
004 W... .r.r.w...r r..rwr....r..rwr...r.rrW
005 W.... .rrw.r....r..w..r. rr..w....r.rrW
006 Wr.r.. rrrw.r.... .wr.....r.wr.....rW
007 Wr. ...r..w. .r.rrw.....r.wr..... W
008 Wrr..r...w...r....wr.rr....wr..r r..W
009 W..r.rr..rwr...r...wr.rr....wr..r. .wW
010 W..r...r..w...r.r..rwr..r. .rrw. r..qwrW
011 Wr.r.wwwwwwwwwqwwwwwwwrwwwwwwwww..w. W
012 W.r. ....rrrr..r.r.rr..rr... r..rwr..W
013 Wr.rr.....rrrr..r. . r...r..r.rr.wr.rrW
014 W. .r.r. w..rrr..r.... .r....rw.r.rrW
015 W. .r.r. wr.wwwwwwwwwwwwwwwrr.w..r...W
016 Wr.. rrr.wr....r...r... .rr....w.r.rr.rW
017 Wr...rrr.wr.r... r..r.r...r.rrw....r.PW
018 W .r....rw .r.rrr.....r.rw..... .W
019 W..r.... w..r.....r.rr....wr..r.r...rW
020 Wr.rr..r.wr...r....rXrr.....r..rq..r..W
021 Wr...r...w..r.rq.....r... r.. r..rdr..W
022 Wrr.d. .w..r.rr.....r..r. r.q.rr.r...W
023 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW

```

## Cave 12 (Cave L: Walls)

You must blast through walls to get at some of the jewels. Drop a boulder on a firefly at the right time and place to do this.

```

0C            Cave 12
14            Magic wall/amoeba slow growth for: 20 seconds
14            Diamonds worth: 20 points
00            Extra diamonds worth: 0 points
00 3C 02 3B 66 Randomiser seed values for difficulty levels 1-5
13 13 0E 10 15 Diamonds needed: 19, 19, 14, 16, 21 (for difficulty
levels 1-5)
B4 AA A0 A0 A0 Cave time: 180, 170, 160, 160, 160 seconds
0C            Background color 1: Gray 2
0A            Background color 2: Light red
09            Foreground color: Brown
00 00         Unused
00 10 14 00   Random objects:
3C 32 09 00   zSpace : 60/256 = 23%
               zBouS  : 50/256 = 19%
               zDiaS  : 9/256 = 3%
               fourth code unused (0%)

```

```

Cave layout:
42 0A 05 12 04 Line of zBrick from (10, 5); length = 18; direction =
down
42 0E 05 12 04 Line of zBrick from (14, 5); length = 18; direction =
down
42 12 05 12 04 Line of zBrick from (18, 5); length = 18; direction =
down
42 16 05 12 04 Line of zBrick from (22, 5); length = 18; direction =
down
42 02 06 0B 02 Line of zBrick from ( 2, 6); length = 11; direction =

```

```

right
42 02 0A 0B 02      Line of zBrick from ( 2,10); length = 11; direction =
right
42 02 0E 0F 02      Line of zBrick from ( 2,14); length = 15; direction =
right
42 02 12 0B 02      Line of zBrick from ( 2,18); length = 11; direction =
right
81 1E 04 04 04 00    FilledRect of zDirt from (30, 4); length = 4; height =
4; fill = zSpace
08 20 05              StoreChar zFFly1 at (32, 5)
81 1E 09 04 04 00    FilledRect of zDirt from (30, 9); length = 4; height =
4; fill = zSpace
08 20 0A              StoreChar zFFly1 at (32,10)
81 1E 0E 04 04 00    FilledRect of zDirt from (30,14); length = 4; height =
4; fill = zSpace
08 20 0F              StoreChar zFFly1 at (32,15)
25 03 14              StoreChar zPRFd1 at ( 3,20)
04 27 16              StoreChar zPreOut at (39,22)
FF                    End of cave data.

```

```

Map #12
002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 Wr. ...rr.....r.r.r.....r.....r...d.W
004 W.....d.r..... .rr.....r.r..... .rW
005 W.....rdw.r.w.. w...wr...r.. q . . W
006 Wdwwwwwwwwww.w...w..rw.....r. ....W
007 Wr.....w...w.r.w d.w.....r.....W
008 Wrr...r...w...w...w..rwrr.....r.d...W
009 W.r.....rwrr.w...w..rwrr.....r...rW
010 W.wwwwwwwwwww.w.r.w .rw.r....r q ..d.rW
011 Wr.r.....w...w.r.w..rw.r..d.. .r..W
012 W.r.....wrr w..dw.. w...r.....d.r..W
013 W .....wrr w..rw...w... .r.....r...W
014 W.wwwwwwwwwwwwwwwrww...w...r.....r. W
015 W...r.r...w...wr..wr..w.r..r.r q .....W
016 W....r r..w...w...wd..w..r ... ....dW
017 W.... .r..w.d.w..rw.r.w...r. r.....W
018 W.wwwwwwwwwww.w...w...w...r. r.....W
019 W.r.....w.r.w...wr.rw..... .r.....W
020 Wr.X...r. w...w...wr.rw.....rd..r..W
021 W....r...w.r.wd..w...w.... .r..d. ..W
022 Wrr.....w.r.wd..w...w..r..d.d.r..r...W
023 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW

```

## Cave 13 (Cave M: Apocalypse)

Bring the butterflies and amoeba together and watch the jewels fly

```

0D                    Cave 13
8C                    Magic wall/amoeba slow growth for: 140 seconds
05                    Diamonds worth: 5 points
08                    Extra diamonds worth: 8 points
00 01 02 03 04       Randomiser seed values for difficulty levels 1-5
32 37 3C 46 50       Diamonds needed: 50, 55, 60, 70, 80 (for difficulty
levels 1-5)
A0 9B 96 91 8C       Cave time: 160, 155, 150, 145, 140 seconds
06                    Background color 1: Blue
08                    Background color 2: Orange
0D                    Foreground color: Light green
00 00                Unused
10 00 00 00          Random objects:

```

```

28 00 00 00          zBouS   :  40/256 = 15%
                      second code unused (0%)
                      third code unused (0%)
                      fourth code unused (0%)

Cave layout:
25 12 03          StoreChar zPRFd1 at (18, 3)
04 0A 03          StoreChar zPreOut at (10, 3)
3A 14 03          StoreChar zAmoe at (20, 3)
42 05 12 1E 02   Line of zBrick from ( 5,18); length = 30; direction =
right
70 05 13 1E 02   Line of zBFly1 from ( 5,19); length = 30; direction =
right
50 05 14 1E 02   Line of zBouS from ( 5,20); length = 30; direction =
right
C1 05 15 1E 02   Rect of zDirt from ( 5,21); length = 30; height = 2
FF               End of cave data.

```

```

Map #13
002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 Wr.....rr.P.....r.Xra.....r.....r.W
004 W.....r.r.....r.....r.r.r.....W
005 W.....r.r.....r.....r.....W
006 Wr.....r.....r.....r.r.....W
007 Wr.....r.....r.....r.....r.....W
008 W.r.r.....r.....r.rr.....r...W
009 W.r.....r.....r.rr.....r...rW
010 W.....r.....r.r.....r.....r..W
011 Wr.r.....r.r.....r.....r.....W
012 W.....rr.r.r.....r.....r.r..W
013 W.....r.r.r.....r.....r...W
014 W..r.r.....r.....r.....r...W
015 W..r.r...r...r...r.....r.....W
016 W...r.r..r.....r.....r.....rW
017 W.....r...r...r...r.r.....r.....W
018 W..r.wwwwwwwwwwwwwwwwwwwwwwwwwwww...W
019 W..r.BBBBBBBBBBBBBBBBBBBBBBBBBBBB...W
020 Wr...rrrrrrrrrrrrrrrrrrrrrrrrrrrrr.r..W
021 W.....r.....r.....r.....r.....W
022 W.r.....r.....r.....r.....r...W
023 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW

```

## Cave 14 (Cave N: Zigzag)

Magically transform the butterflies into jewels, but don't waste any boulders and watch out the fireflies

```

0E               Cave 14
14               Magic wall/amoeba slow growth for: 20 seconds
0A               Diamonds worth: 10 points
14               Extra diamonds worth: 20 points
00 00 00 00 00  Randomiser seed values for difficulty levels 1-5
1E 23 28 2A 2D  Diamonds needed: 30, 35, 40, 42, 45 (for difficulty
levels 1-5)
96 91 8C 87 82  Cave time: 150, 145, 140, 135, 130 seconds
0C               Background color 1: Gray 2
08               Background color 2: Orange
09               Foreground color: Brown
00 00           Unused
10 00 00 00     Random objects:
00 00 00 00     first code unused (0%)
                  second code unused (0%)

```

third code unused (0%)  
fourth code unused (0%)

Cave layout:

```
81 0A 0A 0D 0D 00 FilledRect of zDirt from (10,10); length = 13; height =
13; fill = zSpace
70 0B 0B 0C 03 Line of zBFly1 from (11,11); length = 12; direction =
down/right
C1 0C 0A 03 0D Rect of zDirt from (12,10); length = 3; height = 13
C1 10 0A 03 0D Rect of zDirt from (16,10); length = 3; height = 13
C1 14 0A 03 0D Rect of zDirt from (20,10); length = 3; height = 13
50 16 08 0C 02 Line of zBouS from (22, 8); length = 12; direction =
right
48 16 07 0C 02 Line of zFFly1 from (22, 7); length = 12; direction =
right
C1 17 06 03 04 Rect of zDirt from (23, 6); length = 3; height = 4
C1 1B 06 03 04 Rect of zDirt from (27, 6); length = 3; height = 4
C1 1F 06 03 04 Rect of zDirt from (31, 6); length = 3; height = 4
25 03 03 StoreChar zPRFd1 at ( 3, 3)
04 27 14 StoreChar zPreOut at (39,20)
FF End of cave data.
```

Map #14

```
002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 W..X.....W
004 W.....W
005 W.....W
006 W.....W
007 W.....q.q.q.q.q.q.....W
008 W.....r.r.r.r.r.r.....W
009 W.....W
010 W.....W
011 W..... B. . . . .W
012 W..... . . . . .W
013 W..... .B. . . . .W
014 W..... . . . . .W
015 W..... .B. . . . .W
016 W..... . . . . .W
017 W..... . .B. . . . .W
018 W..... . . . . .W
019 W..... . . .B. . . . .W
020 W..... . . . . .W
021 W..... . . . .B. . . . .W
022 W..... . . . . .W
023 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
```

## Cave 15 (Cave 0: Funnel)

There is an enchanted wall at the bottom of the rock tunnel

```
0F Cave 15
08 Magic wall/amoeba slow growth for: 8 seconds
0A Diamonds worth: 10 points
14 Extra diamonds worth: 20 points
01 1D 1E 1F 20 Randomiser seed values for difficulty levels 1-5
0F 14 14 19 1E Diamonds needed: 15, 20, 20, 25, 30 (for difficulty
levels 1-5)
78 78 78 78 8C Cave time: 120, 120, 120, 120, 140 seconds
08 Background color 1: Orange
0E Background color 2: Light blue
09 Foreground color: Brown
00 00 Unused
```



```

00 10 08 00      Random objects:
64 50 02 00      zSpace : 100/256 = 39%
                  zBouS  :  80/256 = 31%
                  zFFly1 :   2/256 =  0%
                  fourth code unused (0%)

Cave layout:
42 02 04 0A 03   Line of zBrick from ( 2, 4); length = 10; direction =
down/right
42 0F 0D 0A 01   Line of zBrick from (15,13); length = 10; direction =
up/right
41 0C 0E 03 02   Line of zDirt from (12,14); length = 3; direction =
right
43 0C 0F 03 02   Line of zMagic from (12,15); length = 3; direction =
right
04 14 16         StoreChar zPreOut at (20,22)
25 14 03         StoreChar zPRFd1 at (20, 3)
FF              End of cave data.

```

```

Map #15
002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 Wr.rr.. r..r..r..r..Xr..r..rr..r..rr...r.W
004 W.w.rr.....r..r..r...w...r.....r.r.W
005 Wrrw.r... r.. r..r..r..rwr.... .. .r.rqW
006 W...wr..r. q.....r. .wr. ....rrrr..rW
007 W.rr.wrr... r..r..r...wr. r.....rrrr..rW
008 W. r..wr..r.r .r.r.rw... rrr. ...rrr..rW
009 W...rr.w. q..r..r.rw.....r..rr..r.r.r..W
010 W..r.r..w.rr.... .w...r.. rrr..r....r..W
011 W... .rr.w....r. wqrr. ...rrr..r.r... rW
012 Wr.r...r.rw....wr..r. .r....r. ..r.rrW
013 W.....r.rrw...w. .rr..r.... ..r.....W
014 W.rr.....r....r...r..r.r .r.rr... r..W
015 W.rr.....r.mmm..r....r...r.....r.rr..W
016 W..r... r...r..r.r..r.rr... ..r.rr..W
017 W..r..r. .r....r.....r. ....rrr..r. W
018 Wr.. r....r..r.r....r. ....rrr..r..W
019 Wr...r..r. .r. .... rrrr..r.r.rr..rrW
020 W. r..q r....r.rr.....rrrr..r. .rr.. rW
021 Wr.rr..r.rr... .r.r. ...rrr..r.... .rW
022 W...rr.r.rr... .r.r.P...r r..r.r....r..W
023 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW

```

## Cave 16 (Cave P: Enchanted boxes)

The top of each square room is an enchanted wall, but you'll have to blast your way inside

```

10      Cave 16
14      Magic wall/amoeba slow growth for: 20 seconds
0A      Diamonds worth: 10 points
14      Extra diamonds worth: 20 points
01 78 81 7E 7B Randomiser seed values for difficulty levels 1-5
0C 0F 0F 0F 0C Diamonds needed: 12, 15, 15, 15, 12 (for difficulty
levels 1-5)
96 96 96 96 96 Cave time: 150, 150, 150, 150, 150 seconds
09      Background color 1: Brown
0A      Background color 2: Light red
09      Foreground color: Brown
00 00   Unused
10 00 00 00 Random objects:
32 00 00 00   zBouS : 50/256 = 19%

```

```
second code unused (0%)
third code unused (0%)
fourth code unused (0%)
```

Cave layout:

```
25 01 03          StoreChar zPRFd1 at ( 1, 3)
04 27 04          StoreChar zPreOut at (39, 4)
81 08 13 04 04 00 FilledRect of zDirt from ( 8,19); length = 4; height =
4; fill = zSpace
08 0A 14          StoreChar zFFly1 at (10,20)
C2 07 0A 06 08   Rect of zBrick from ( 7,10); length = 6; height = 8
43 07 0A 06 02   Line of zMagic from ( 7,10); length = 6; direction =
right
81 10 13 04 04 00 FilledRect of zDirt from (16,19); length = 4; height =
4; fill = zSpace
08 12 14          StoreChar zFFly1 at (18,20)
C2 0F 0A 06 08   Rect of zBrick from (15,10); length = 6; height = 8
43 0F 0A 06 02   Line of zMagic from (15,10); length = 6; direction =
right
81 18 13 04 04 00 FilledRect of zDirt from (24,19); length = 4; height =
4; fill = zSpace
08 1A 14          StoreChar zFFly1 at (26,20)
81 20 13 04 04 00 FilledRect of zDirt from (32,19); length = 4; height =
4; fill = zSpace
08 22 14          StoreChar zFFly1 at (34,20)
FF               End of cave data.
```

Map #16

```
002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 WX..r.....r.....r.....r.r....W
004 W.r.rr.....r..r.....r.....r.r.W
005 W.r..r.....r..r....r.r.....r.rrW
006 W.....r..r.....r.....rrr.r..rW
007 W..r...r...r..r.r.....r..r..rW
008 W.....r.....r.....rrr.....r..W
009 W....r....r....r.....r.rr..r....W
010 W..r...mmmmmmmm..mmmmmmmm....r.r..r.....W
011 W.....rw...w..w..rrw.....r....r...rW
012 Wr.r...w..r.w..w...w...r....r....r...W
013 W.....w..r.w..w...wr..r.....r....W
014 W.rr...w...wr.w...w.r.....r.....r..W
015 W.rr...w...wrrw.r..w.....r.....r.rr..W
016 W..r...w...w..w...w.rr.....r.rr..W
017 W.....rwwwwww..wwwwww.....r..r..W
018 Wr...r...r..r.r.....r....r..r..W
019 W.....r.....r.....r.....r.....rW
020 W..r..r. q .... q ...r q .r.. q ..rW
021 Wr.....r      ....      .r..    ..rW
022 W.....r.....r.....r.....r..W
023 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
```

## Cave 17 (Intermission 1)

```
11               Cave 17
14               Magic wall/amoeba slow growth for: 20 seconds
1E               Diamonds worth: 30 points
00               Extra diamonds worth: 0 points
0A 0B 0C 0D 0E   Randomiser seed values for difficulty levels 1-5
06 06 06 06 06   Diamonds needed: 6, 6, 6, 6, 6 (for difficulty levels
1-5)
0A 0A 0A 0A 0A   Cave time: 10, 10, 10, 10, 10 seconds
```

```

0E           Background color 1: Light blue
02           Background color 2: Red
09           Foreground color: Brown
00 00       Unused
00 14 00 00 Random objects:
FF 09 00 00     zSpace : 255/256 = 99%
                zDiaS  :   9/256 =  3%
                third code unused (0%)
                fourth code unused (0%)

Cave layout:
87 00 02 28 16 07 FilledRect of zSteel from ( 0, 2); length = 40; height
= 22; fill = zSteel
87 00 02 14 0C 00 FilledRect of zSteel from ( 0, 2); length = 20; height
= 12; fill = zSpace
32 0A 0C         StoreChar zBFly3 at (10,12)
10 0A 04         StoreChar zBouS at (10, 4)
01 0A 05         StoreChar zDirt at (10, 5)
25 03 05         StoreChar zPRFd1 at ( 3, 5)
04 12 0C         StoreChar zPreOut at (18,12)
FF             End of cave data.

```

```

Map #17
002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 W                                     WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
004 W           r                         WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
005 W  X           .                       WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
006 W                                     WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
007 W                                     WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
008 W                                     WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
009 W                                     WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
010 W                                     WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
011 W                                     WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
012 W           b           P WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
013 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
014 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
015 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
016 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
017 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
018 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
019 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
020 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
021 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
022 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
023 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW

```

## Cave 18 (Intermission 2)

```

12           Cave 18
14           Magic wall/amoeba slow growth for: 20 seconds
0A           Diamonds worth: 10 points
00           Extra diamonds worth: 0 points
0A 0B 0C 0D 0E Randomiser seed values for difficulty levels 1-5
10 10 10 10 10 Diamonds needed: 16, 16, 16, 16, 16 (for difficulty
levels 1-5)
0F 0F 0F 0F 0F Cave time: 15, 15, 15, 15, 15 seconds
06           Background color 1: Blue
0F           Background color 2: Gray 3
09           Foreground color: Brown
00 00       Unused
00 00 00 00 Random objects:

```

```

00 00 00 00          first code unused (0%)
                      second code unused (0%)
                      third code unused (0%)
                      fourth code unused (0%)

Cave layout:
87 00 02 28 16 07   FilledRect of zSteel from ( 0, 2); length = 40; height
= 22; fill = zSteel
87 00 02 14 0C 01   FilledRect of zSteel from ( 0, 2); length = 20; height
= 12; fill = zDirt
50 01 03 09 03     Line of zBouS from ( 1, 3); length = 9; direction =
down/right
48 02 03 08 03     Line of zFFly1 from ( 2, 3); length = 8; direction =
down/right
54 01 05 08 03     Line of zDiaS from ( 1, 5); length = 8; direction =
down/right
50 01 06 07 03     Line of zBouS from ( 1, 6); length = 7; direction =
down/right
50 12 03 09 05     Line of zBouS from (18, 3); length = 9; direction =
down/left
54 12 05 08 05     Line of zDiaS from (18, 5); length = 8; direction =
down/left
50 12 06 07 05     Line of zBouS from (18, 6); length = 7; direction =
down/left
25 01 04           StoreChar zPRFd1 at ( 1, 4)
04 12 04           StoreChar zPreOut at (18, 4)
FF                End of cave data.

```

```

Map #18
002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 Wrq.....r.WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
004 WXrq.....rP.WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
005 Wd.rq.....r.d.WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
006 Wrd.rq.....r.dr.WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
007 W.rd.rq.....r.dr..WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
008 W..rd.rq.....r.dr...WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
009 W...rd.rq...r.dr....WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
010 W....rd.rq.r.dr.....WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
011 W.....rd.rr.dr.....WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
012 W.....rd..dr.....WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
013 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
014 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
015 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
016 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
017 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
018 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
019 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
020 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
021 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
022 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
023 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW

```

## Cave 19 (Intermission 3)

```

13          Cave 19
04          Magic wall/amoeba slow growth for: 4 seconds
0A          Diamonds worth: 10 points
00          Extra diamonds worth: 0 points
0A 0B 0C 0D 0E Randomiser seed values for difficulty levels 1-5
0E 0E 0E 0E 0E Diamonds needed: 14, 14, 14, 14, 14 (for difficulty
levels 1-5)

```

```

14 14 14 14 14      Cave time: 20, 20, 20, 20, 20 seconds
06                  Background color 1: Blue
08                  Background color 2: Orange
09                  Foreground color: Brown
00 00               Unused
00 00 00 00        Random objects:
00 00 00 00          first code unused (0%)
                    second code unused (0%)
                    third code unused (0%)
                    fourth code unused (0%)

Cave layout:
87 00 02 28 16 07  FilledRect of zSteel from ( 0, 2); length = 40; height
= 22; fill = zSteel
87 00 02 14 0C 00  FilledRect of zSteel from ( 0, 2); length = 20; height
= 12; fill = zSpace
54 01 0C 12 02     Line of zDiaS from ( 1,12); length = 18; direction =
right
88 0F 09 04 04 08  FilledRect of zFFly1 from (15, 9); length = 4; height =
4; fill = zFFly1
25 08 03           StoreChar zPRFd1 at ( 8, 3)
04 12 07           StoreChar zPreOut at (18, 7)
FF                 End of cave data.

```

```

Map #19
002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 W          X          WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
004 W          WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
005 W          WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
006 W          WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
007 W          P WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
008 W          WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
009 W          qqqq WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
010 W          qqqq WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
011 W          qqqq WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
012 Wdddddddddq WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
013 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
014 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
015 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
016 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
017 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
018 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
019 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
020 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
021 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
022 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
023 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW

```

## Cave 20 (Intermission 4)

```

14                  Cave 20
03                  Magic wall/amoeba slow growth for: 3 seconds
1E                  Diamonds worth: 30 points
00                  Extra diamonds worth: 0 points
00 00 00 00 00     Randomiser seed values for difficulty levels 1-5
06 06 06 06 06     Diamonds needed: 6, 6, 6, 6, 6 (for difficulty levels
1-5)
14 14 14 14 14     Cave time: 20, 20, 20, 20, 20 seconds
06                  Background color 1: Blue
08                  Background color 2: Orange
09                  Foreground color: Brown

```

```

00 00                 Unused
00 00 00 00          Random objects:
00 00 00 00              first code unused (0%)
                           second code unused (0%)
                           third code unused (0%)
                           fourth code unused (0%)

Cave layout:
87 00 02 28 16 07   FilledRect of zSteel from ( 0, 2); length = 40; height
= 22; fill = zSteel
87 00 02 14 0C 01   FilledRect of zSteel from ( 0, 2); length = 20; height
= 12; fill = zDirt
D0 0B 03 03 02      Rect of zBouS from (11, 3); length = 3; height = 2
80 0B 07 03 06 00   FilledRect of zSpace from (11, 7); length = 3; height =
6; fill = zSpace
43 0B 06 03 02      Line of zMagic from (11, 6); length = 3; direction =
right
43 0B 0A 03 02      Line of zMagic from (11,10); length = 3; direction =
right
50 08 07 03 03      Line of zBouS from ( 8, 7); length = 3; direction =
down/right
25 03 03            StoreChar zPRFd1 at ( 3, 3)
04 09 0A            StoreChar zPreOut at ( 9,10)
FF                 End of cave data.

```

Map #20

```

002 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
003 W..X.....rrr.....WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
004 W.....rrr.....WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
005 W.....WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
006 W.....mmm.....WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
007 W.....r..    ....WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
008 W.....r.     ....WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
009 W.....r      ....WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
010 W.....P.mmm. ....WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
011 W.....      ....WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
012 W.....      ....WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
013 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
014 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
015 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
016 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
017 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
018 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
019 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
020 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
021 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
022 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
023 WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW

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