

# Sample Object File

Below is a sample object file. This file describes the three-color hypercube which is displayed whenever HyperCuber is launched. I have included comments, but HyperCuber does not yet support comments in object files. Any object files you actually feed to HyperCuber should not contain any comments. However, you can put whitespace (spaces, tabs, returns) wherever you want, as long as it's between numbers. So you could put everything on one line, if you wanted, or (as I've done below) you could give some hint of the structure by adding extra returns between primitives.

```
1          ; version 1 (this should always be 1)
4          ; dimension of the object (4D hypercube)
0          ; reserved
0          ; reserved
16         ; there are 16 vertices in a hypercube
(1,1,1,1) ; here are the 16 vertices
(1,1,1,-1)
(1,1,-1,1)
(1,1,-1,-1)
(1,-1,1,1)
(1,-1,1,-1)
(1,-1,-1,1)
(1,-1,-1,-1)
(-1,1,1,1)
(-1,1,1,-1)
(-1,1,-1,1)
(-1,1,-1,-1)
(-1,-1,1,1)
(-1,-1,1,-1)
(-1,-1,-1,1)
(-1,-1,-1,-1)
3          ; three colors are used
0, 0, 65535 ; blue
0, 65535, 0 ; green
65535, 0, 0 ; red
16         ; the hypercube is split into 16 line segment paths

2          ; first primitive is a line segment path
1          ; color #1 (blue)
8          ; 8 points in path
2          ; start at point 2 (1,1,1,-1)
10         ; line segment to point 10 (-1,1,1,-1)
14         ; line segment to point 14 (-1,-1,1,-1)
6          ; line segment to point 6 (1,-1,1,-1)
2          ; line segment to point 2 (1,1,1,-1)
4          ; line segment to point 4 (1,1,-1,-1)
12        ; line segment to point 12 (-1,1,-1,-1)
10        ; line segment to point 10 (-1,1,1,-1)

2          ; second primitive is a line segment path
1
3
12
```

16  
14

2 ; third primitive is a line segment path  
1  
3  
4  
8  
6

2 ; four primitive is a line segment path  
1  
2 ; ...and so on  
8  
16

2  
2  
8  
1  
9  
13  
5  
1  
3  
11  
9

2  
2  
3  
11  
15  
13

2  
2  
3  
3  
7  
5

2  
2  
2  
7  
15

2  
3  
2  
1  
2

2  
3  
2

3  
4

2  
3  
2  
5  
6

2  
3  
2  
7  
8

2  
3  
2  
9  
10

2  
3  
2  
11  
12

2  
3  
2  
13  
14

2 ; last primitive is a line segment path  
3  
2  
15  
16