

```
object {  
  light_source { <3 3 -3> color red 1 green 1 blue 1 }  
}
```

And the final touch of the scene is the light source, remember without it all would be useless because we would not be able to see anything in the dark. It is located 3 units to the right 3 units above and 3 units behind the origin. The mixture of red green and blue make white, the natural color of light.

We are now done with creating a small and simple universe. This is one of the simplest scenes possible, so do not even begin to think this is anywhere close to the limit, when really the possibilities are absolutely endless! We will now move on to slightly more complicated scenes involving different shapes and combining these shapes to create more interesting shapes.

How to make Povray render or compile your scenes

We know how to describe a scene for Povray, but how do we turn all those statements into a picture? Well we need to render them. If you have ever done any programming, you may think of rendering as compiling. If you have not already, please save the text file you created with your text editor, the name may be anything with the .POV extension. Now the following command line will render a scene:

```
POVRAY +Imyfile +W640 +H480 +Omyfile.tga
```

First we typed in POVRAY, which is the execution file. Then we added the switch +I which is the Input file or your text file, it is immediately proceeded by the name of the text file which includes the povray description text file. Then we used the +W switch which determines the number of pixels wide the scene file should be, and the +H switch determines the number of pixels high the scene should be. Note that you should stick with these basic sizes:

320 by 200, 320 by 240, 320 by 400, 320 by 480, 360 by 480, 640 by 480, 640 by 400, 800 by 600, 1024 by 768, or 1280 by 1024.

If you use other dimensions you might get a distorted picture. Also note that the higher the set of numbers the finer the picture quality will be.

Finally we come to the +O switch, this is the filename you want your picture to be called. The format must be .TGA. But you can change this format with many different shareware programs, one that I can think of off the top of my head is GRAPHIC WORK SHOP, and you can find it on my bulletin board. (415) 348-8806