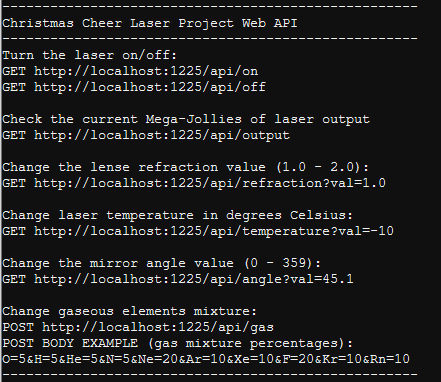
# Christmas Cheer Laser, part 10

Here is the API. The commands, except for gas, are easy GET statements given in the web page. The request we were given is a GET request, so we can cut and pasted most of the API calls.

(Invoke-WebRequest -Uri http://localhost:1225/).RawContent



The values we’ve collected, at considerable effort, are:

angle?val=65.5

temperature?val=-33.5

$correct\_gases\_postbody = @{`n O=6`n H=7`n He=3`n N=4`n Ne=22`n Ar=11`n Xe=10`n F=20`n Kr=8`n Rn=9`n}

refraction?val=1.867

For the gaseous elements, there needs to be an extra parameter in the Invoke-Web request,  
 -Body [contents of body]

It is easiest to put the contents into a variable and then put -Body $Body into the request along with -Method POST. We are given two example formats. The values are in JSON format as we found them in the hint.  
$Body = @{`n O=6`n H=7`n He=3`n N=4`n Ne=22`n Ar=11`n Xe=10`n F=20`n Kr=8`n Rn=9`n}  
The backtick is PowerShell’s escape character, so `n is the same as \n, the Linux newline. The gases could also be written this way. It is a PowerShell hash table, roughly equivalent to a Python dictionary.

$Body = @{

O=6

H=7

He=3

N=4

Ne=22

Ar=11

Xe=10

F=20

Kr=8

Rn=9

}

The example on the laser status page is in the text/application format.  
$Body = 'O=6&H=7&He=3&N=4&Ne=22&Ar=11&Xe=10&F=20&Kr=8&Rn=9' (correct values and quotes inserted)

Either of the three versions of $Body should work. I’ll use the last.

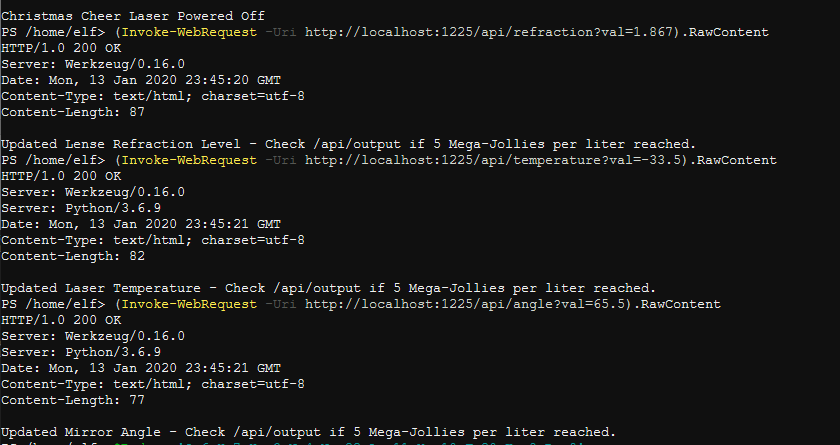
(Invoke-WebRequest -Uri [http://localhost:1225/api/](http://localhost:1225/api/on)off).RawContent  
(Invoke-WebRequest -Uri <http://localhost:1225/api/refraction?val=1.867>).RawContent  
(Invoke-WebRequest -Uri <http://localhost:1225/api/temperature?val=-33.5>).RawContent

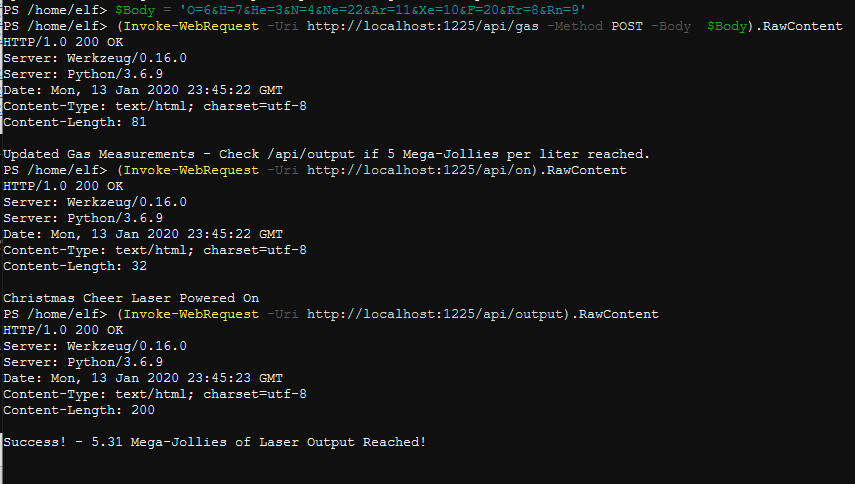
(Invoke-WebRequest -Uri <http://localhost:1225/api/angle?val=65.5>).RawContent

$Body = 'O=6&H=7&He=3&N=4&Ne=22&Ar=11&Xe=10&F=20&Kr=8&Rn=9'

(Invoke-WebRequest -Uri <http://localhost:1225/api/gas> -Method POST -Body $Body).RawContent

(Invoke-WebRequest -Uri <http://localhost:1225/api/on>).RawContent  
(Invoke-WebRequest -Uri <http://localhost:1225/api/output>).RawContent





Done at last.