Tutorial: Reading FITS files in IDL

In order to work with FITS files, which are the data standard in astronomy, you need the IDL-astron package. To install it in your home directory, enter the following commands, one on each line:

```
cd
mkdir astron
cd astron
wget http://idlastro.gsfc.nasa.gov/ftp/astron.tar.gz
tar -xzvf astron.tar.gz
ls
pwd
```

Then, *in IDL*, you need to change your `!PATH` variable to include the new paths:

```
!PATH = expand_path('~/astron/pro/:') +":"+ !PATH
```

Note that you'll need to do this *each time* you reset your session! So it may be a good idea to include that line verbatim in a "startup script".

To read a `.fits` file, you use the `readfits` function:

```
img1 = readfits('img1.fits')
```

You should then have a look at it:
```
i = image(img1)
```

There are plenty of other tools in the IDL astro libraries. A good place to start, if you want to know what capabilities are available, is here:
http://idlastro.gsfc.nasa.gov/contents.html