Homework 4

Programming for Scientists
Due on: Feb 17

§1 QUESTIONS

Question I: Alice and Bob are pair-programming again. This time, Alice writes the following code (assume that the function parse is previously defined, as is ParseError, which is raised when the file cannot be parsed):

```python
try:
    parse(input)
    ...
except ParseError:
    print 'Error: file format unrecognised.'
```

Bob suggests that, since this is an error, it should be

```python
import sys
...

try:
    parse(input)
    ...
except ParseError:
    print >>sys.stderr, 'Error: file format unrecognised.'
```

Alice argues "Both go to the screen when I run the program, so printing errors to sys.stderr is just pedantic traditionalism." Bob says "Well, if you run it directly, both stdout and stderr go to the screen, but you can redirect stdout or pipe it to some other program and then it makes a big difference."

What is Bob talking about? (You can simply give an example of where things work differently if you use Bob or Alice's version.) He Bob just a pedantic traditionalist?

Question II: Recall the printargs.py script:

```python
import sys
```

```
print len(sys.argv)
print sys.argv
```

What gets printed when you run the following (the dollar sign is the prompt):

```
$python printargs.py
$python printargs.py one two three
$python printargs.py *.py
$python printargs.py *py
```

§2   PROGRAMMING ASSIGNMENT

Create a subversion repository in one computer and check-out in another.
(You are going to have to read up on this or look through the show-me-do
video: check the website for links).

1. Create a Subversion repository.

2. Create a checkout in another computer.

3. Add a file `hello.py` which prints 'Hello World'

4. Change the file to print more things.

5. Commit that change.

6. Make some new change.

7. Run `svn diff` and email me the results.