Fundamentals of Computing: Lecture 38

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November 11, 2009

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```
$ cmd arg1 arg2 <foo  # get input from foo
$ cmd arg >bar
```

```
$ cmd 2>&1 | less # 0-s
```

0-stdin 1-stdout 2-stderr

```
$ cmd >>foo
```

append to the file foo instead

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stdin/stdout/stderr redirection
   $ cmd arg1 arg2 <foo  # get input from foo</pre>
   $ cmd arg >bar
                           # 0-stdin 1-stdout 2-stderr
   $ cmd 2>&1 | less
   $ cmd >>foo
                           # append to the file foo instead
Pipes
   $ cmd1 | cmd2 | cmd3 | cmd
```

Shell variables

To assign a shell variable

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To get the value of foo use \$foo

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Some important shell variables

- ► PATH The directories where an executable is searched \$ export PATH=/bin/:/usr/bin:/usr/local/bin:
- ► PS1 The first prompt
- ▶ PS2 the second prompt etc

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```
$ ls *.c
```

\$ rm *.o

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Quoting with '
$ ls 'filename with spaces'
$ rm '*'  # actually removes a file called *
$ echo I am an invisible file > ' '
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- ▶ Use \ to protect funny characters
 - \$ ls filename\ with\ spaces
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- Quoting with '
 - \$ ls 'filename with spaces'
 - \$ rm '*' # actually removes a file called *
 - \$ echo I am an invisible file > ' '
- Double quoting ". Similar to ' but shell variables expand
 - \$ foo=bar
 - \$ echo '\$foo is the value of foo'
 - \$ ech "\$foo is the value of foo"

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ls | grep '^\..*' | less #
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```
ls | grep '^\..*' | less #
```

- ^ means start of the line
- . means any character
- r * means many r's
- ▶ I have written the \. to escape the special meaning