ENGLISH 494
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BASIC UNIX

There are a lot of web resources to help you. Here's one from the University of Surrey in England:
http://www.ee.surrey.ac.uk/Teaching/Unix/

In the document that follows, you will log into your UNIX account and make a web page. At any point, you can ask what a command means by typing **whatis** *command* (for example **whatis ping**). A longer explanation can be had from the manual (**man**). Try **man ping**.

1. GETTING THERE

a) Open a terminal.

> *What is a terminal? In the early days, computers were very expensive. Organizations would have only one computer and connect it to lots of screens. The screens were much cheaper. Those screens would be attached to keyboards and basic processors that sent commands to the central computer. We called those screens "terminals." So, a Terminal application is one that turns your personal computer into a "screen" for a distant computer.*

b) You should have a *prompt*. Either a dollar sign ($) or a carat (>).

1. Find out who you are. Type: **> whoami**
2. Find out who else is on the server with you. Type: **> w**
3. See which shell you are using: **> shell**
   A shell is a scripting environment that translates your commands into something that the computer can understand. The easiest to use, in my opinion, is the bash shell. If you are not using bash, then type **bash**
4. Check if you're connected to the internet. Type: **> ping umass.edu** (Don't forget the space!)

To **stop** the output (now and always) type CONTROL-C

Ping is a process that sends out a request to connect to a server. It returns four pieces of information. The IP header (or internet address of the host), the sequence of the ping request, the number of bytes sent, and the time elapsed during transmission in milliseconds. With many commands, you can set options, or "flags."

Try ping with the –o flag. –o sends only one packet and reports back.
> ping -o umass.edu

Try ping with the –r flag. –r asks if the server is on the same network as you.

> **ping -r umass.edu**

To **stop** the output (now and always) type CONTROL-C

c) Now let's get onto the UMass server:

> **ssh** *username*@webadmin.oit.umass.edu your username is the first part of your email address.

It will ask for your password. Type it in and hit <ENTER>.

d) Look at your files: > **ls -a**

The –a flag lists all the files, even the invisible ones. It also shows file permissions (drwxr-xr-r); that is, who can read, write, and execute each file.

e) Try out **whoami** and **w**.

f) Try whois: > **whois umass.edu**

Whois queries the INTERNIC database, which keeps a record of all websites on earth. Every web domain is required to submit a contact name and the name and address of the server.

g) Let's make a directory for your private files. > **mkdir** *myFiles*

2. MAKING HTML

a) Let's change directories (in Macintosh, a *directory* is called a *folder*). > **cd public_html**

*public_html is where all your public files are kept. Anyone on the internet can access it. If you don't want to type the whole thing, use the wildcard * (a star).* > **cd pu*** *will get you to public_html.*

b) Make sure where you are. Ask what the present working directory is: > **pwd**

c) See what's there: > **ls -a**

d) Now, let's make an html page. Open a text editor in the UNIX shell. > **nano**

d) Now type out your html and save it by "writing out" CONTROL-O. If this is your first file on your site, name your file **index.html**

e) You now have a web page. http://people.umass.edu/*username*