



Two Ways to Use Linux/Unix		
<i>interface</i>	Graphical Desktop	Text Command Line
<i>what</i>	Linux workstations connected to a local network and to the Internet.	Computers outside Halligan running any operating system and connected to the Internet.
<i>disk storage</i>	Lab computers share one disk. Your files are available from any of the computers.	The linux server uses the shared disk. Your files are available to your login session.
<i>advantages</i>	Easy to learn, point and click, drag and drop, menus and buttons Can use terminal, too.	Connect to your stuff from anywhere, powerful command syntax, access to tons of Linux tools, apps, programs.
<i>disadvantages</i>	Have to be at computer, limited syntax.	Less visual, takes more practice.
<i>login</i>	sit down, login	Mac: from Application/Utilities/Terminal, <code>ssh username@linux.cs.tufts.edu</code> Win: use SSHSecureShellClient or puTTY
<i>directories</i> <i>create</i> <i>rename</i> <i>delete</i> <i>list</i> <i>enter one</i> <i>go up</i>	called folders right click right click right click double click double click File/open parent	called directories <code>mkdir dirname</code> <code>mv dirname newname</code> <code>rmdir dirname</code> <code>ls -l</code> (that's an el, not a one) <code>cd dirname</code> <code>cd ..</code>
<i>files</i> <i>view</i> <i>create</i> <i>edit</i> <i>rename</i> <i>copy</i> <i>delete</i> <i>move</i>	double click jedit, kate, gvim jedit, kate, gvim right click copy/paste drag to trash drag to folder	<code>more filename</code> <code>emacs, vim</code> <code>emacs, vim</code> <code>mv oldname newname</code> <code>cp oldname newname</code> <code>rm filename</code> <code>mv oldname newdir</code>
<i>compiling</i>	use the terminal	<code>g++ -Wall -g program.cpp</code>
<i>running</i>	use the terminal	<code>./a.out</code>
<i>printing</i>	file/print	<code>a2ps -P hp116 program.cpp</code>
<i>debugging</i>	<code>ddd a.out</code>	<code>gdb a.out</code>

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//This command tells the compiler to
//include the library related to input/output

#include <iostream> //comments look like this too

//
// avg2.cpp -- compute average of three numbers
//           demonstrates:
//           input, output
//           variables, assignment
//           operations: +, / with ints, %, / with floats
//           comments
// modified by:
//           on:
//

//This is required to use cin cout without extra specification.
using namespace std;

int main()
{
    int    a,b,c;           // creates three storage boxes for ints
    int    sum;            // sum goes here
    int    quotient;
    int    remainder;
    int    num;

    num = 3;                // number of values to average

    cout << "Please enter three numbers: ";

    cin  >> a;
    cin  >> b;
    cin  >> c;

    // do the processing part now

    sum = a + b + c;        // add and store

    quotient = sum / num;
    remainder = sum % num;

    // output the result

    cout << "The average is " << quotient << " " ;
    cout << remainder << "/" << num << endl;
    cout << "In decimal form: " << sum/3.0 << endl;
}

```