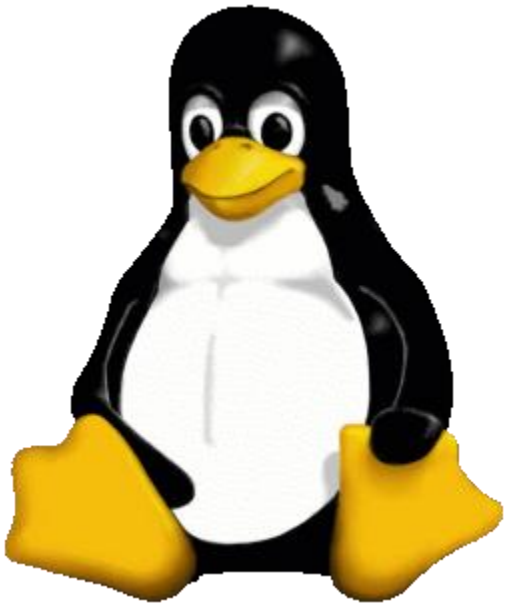
Lesson 8

By Dr. Amir

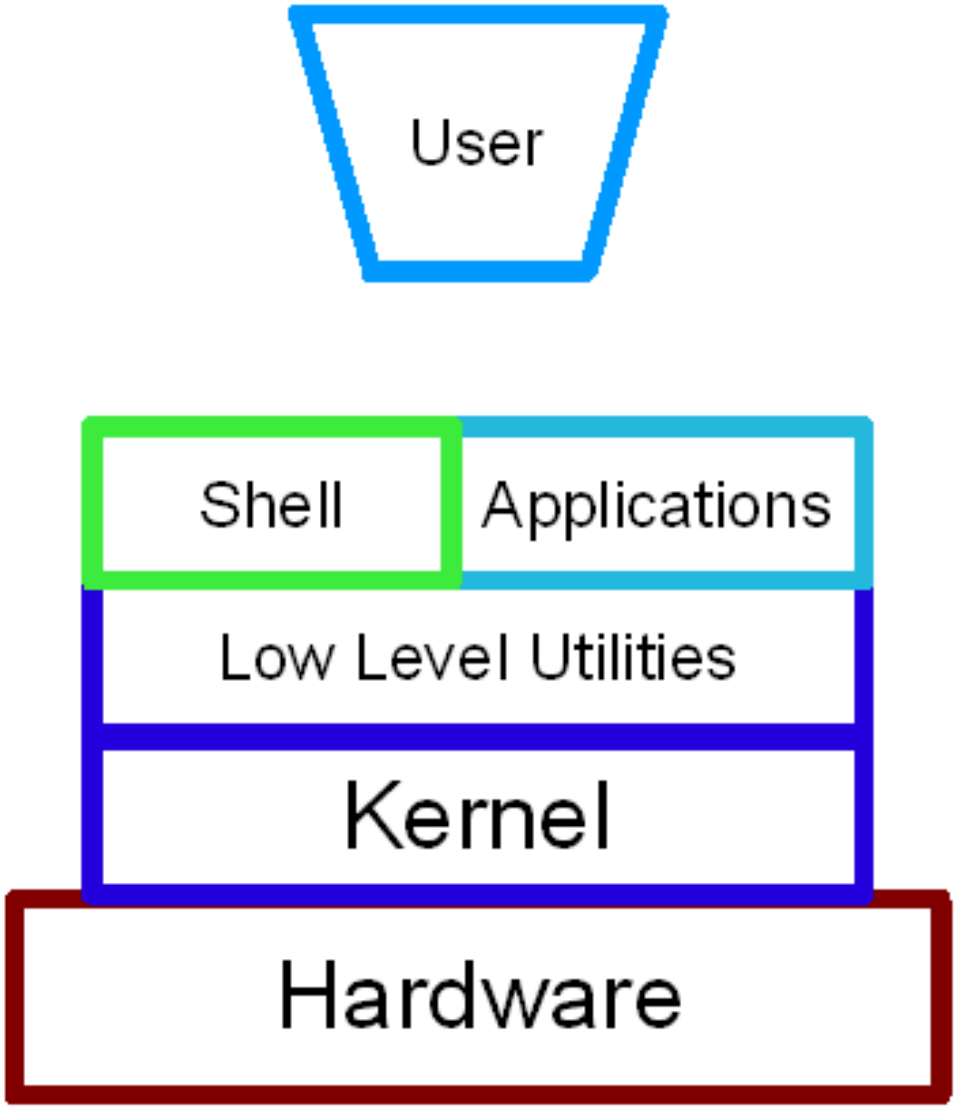
GNU/Linux

Linux shells
& Editors



Linux Shell

The shell is the command prompt within Linux where you can type commands. If you have logged into a machine over a network (using ssh or telnet) then you will in a shell.


User
Shell
Applications
Low Level Utilities
Kernel
Hardware

Different shells

In the same way that different variants of UNIX were developed there are also different variants of the shell.

The shell is more than just a way of typing commands. It can be used to stop, start, suspend programs and by writing script files it becomes a programming language in itself.

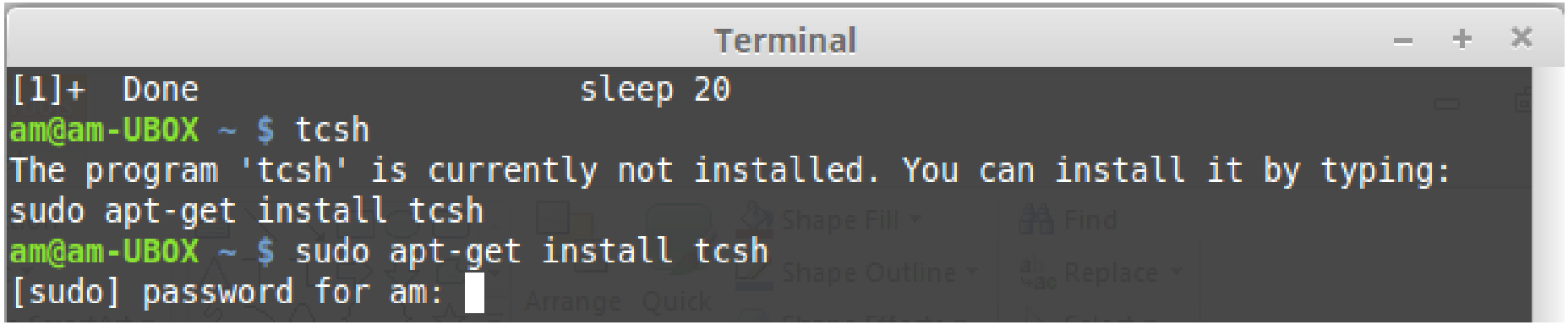
Common Unix shells

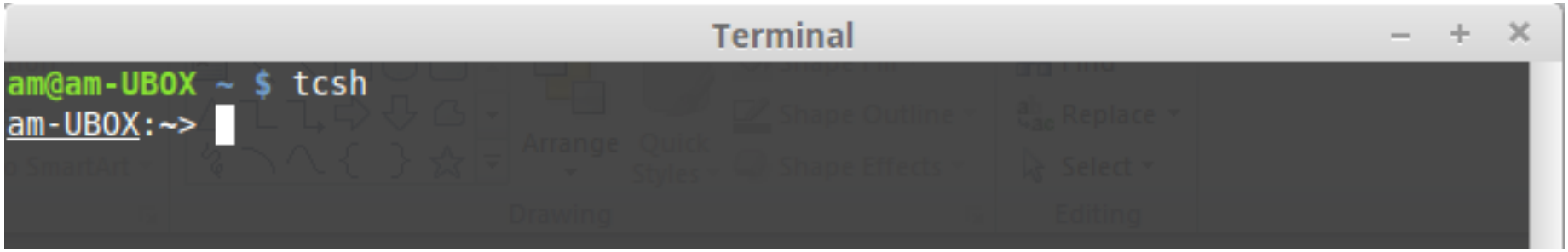
Name of shell	Command name	Description
Bourne shell	sh	The most basic shell available on all UNIX systems
Korn Shell	ksh / pdksh	Based on the Bourne shell with enhancements
C Shell	csh	Similar to the C programming language in syntax
Bash Shell	bash	Bourne Again Shell combines the advantages of the Korn Shell and the C Shell. The default on most Linux distributions.
tcsh	tcsh	Similar to the C Shell

$ - Bourne, Korn and Bash Shells
% - C Shell

Switching to another shell

Type the name of the shell

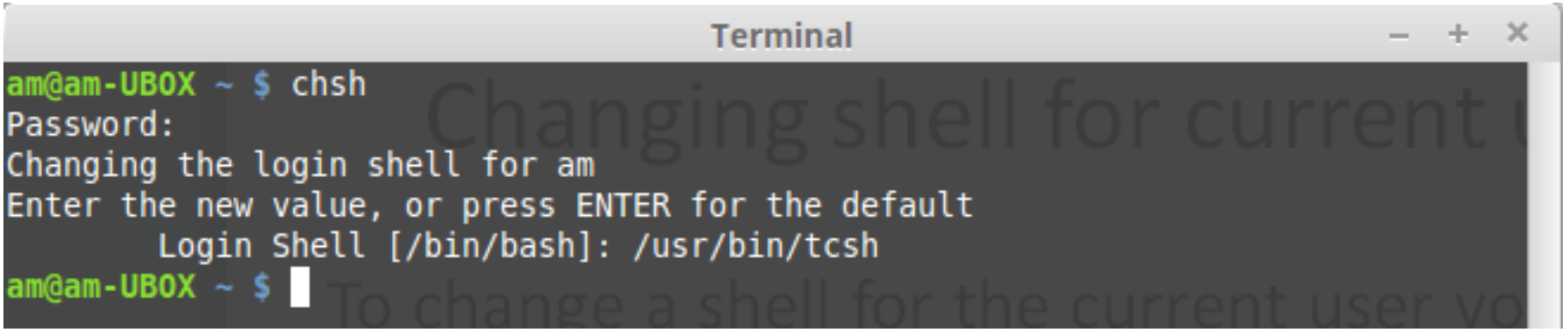




chsh

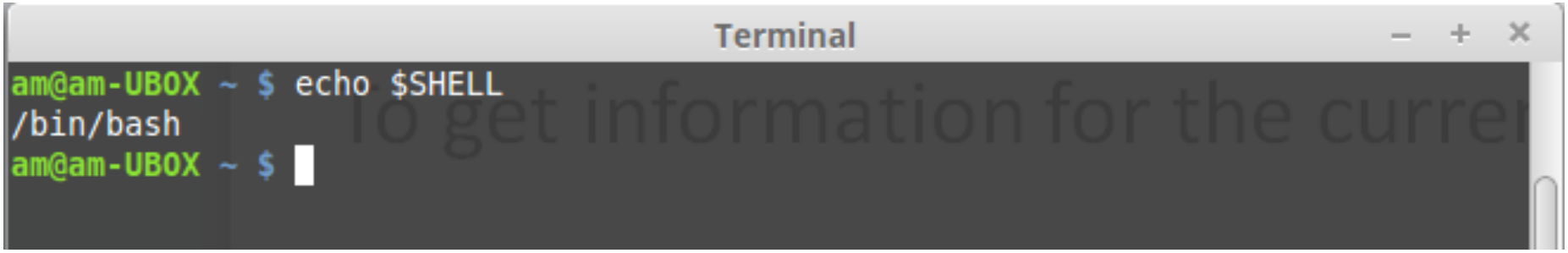
To change a shell for the current user you must know the address for that shell.

Note: the change will take effect after the next log-in.



Echo $SHELL

To get information for the current shell



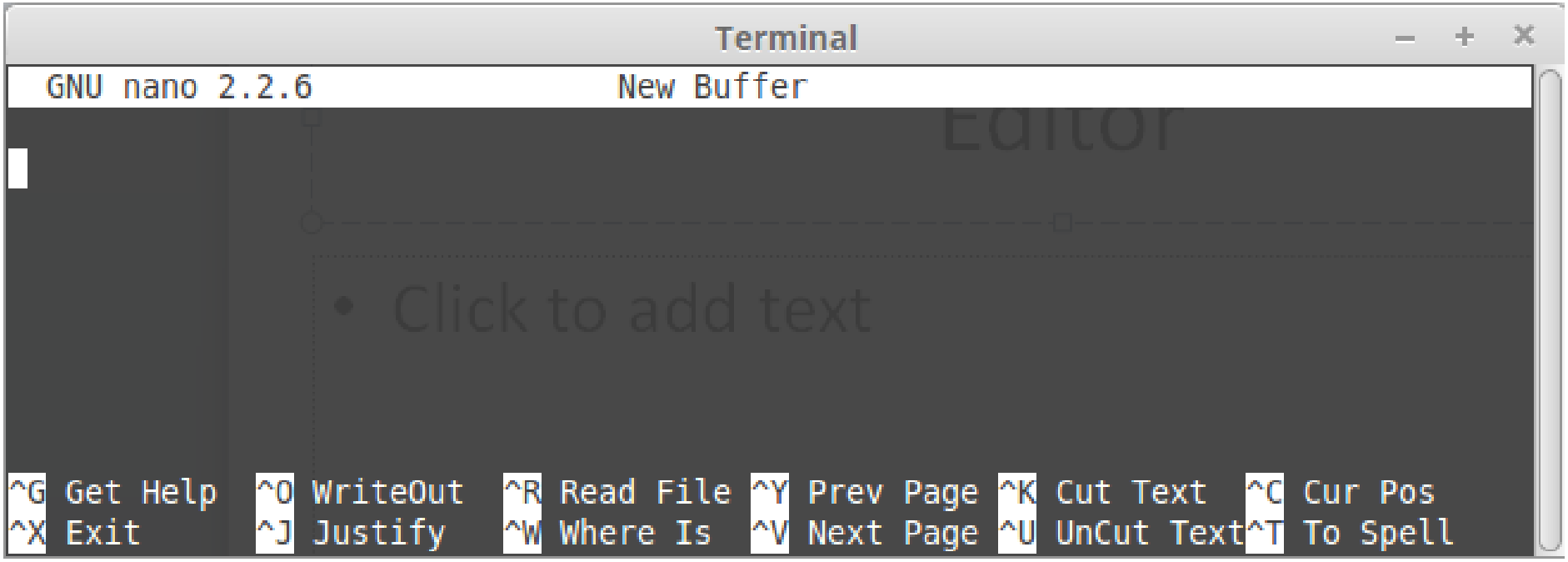
Apt-get install

To install a new program

Apt-get purge

To remove a program completely

nano


Terminal
GNU nano 2.2.6 New Buffer
^G Get Help ^O WriteOut ^R Read File ^Y Prev Page ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where Is ^V Next Page ^U UnCut Text ^T To Spell

Vi(m)

The vi editor is installed on almost every Unix. Linux will very often install vim (vi improved) which is similar. Every system administrator should know vi(m), because it is an easy tool to solve problems.

Command mode and Insert mode

key	action
Esc	set vi(m) in command mode.

a A i I o O

command	action
a	start typing after the current character
A	start typing at the end of the current line
i	start typing before the current character
I	start typing at the start of the current line
o	start typing on a new line after the current line
O	start typing on a new line before the current line

r x X

command	action
x	delete the character below the cursor
X	delete the character before the cursor
r	replace the character below the cursor
p	paste after the cursor (here the last deleted character)
xp	switch two characters