Electronic Computer Center
Al-Nahrain University
Linux Module
A. Altaher
Lecture 5 & 6

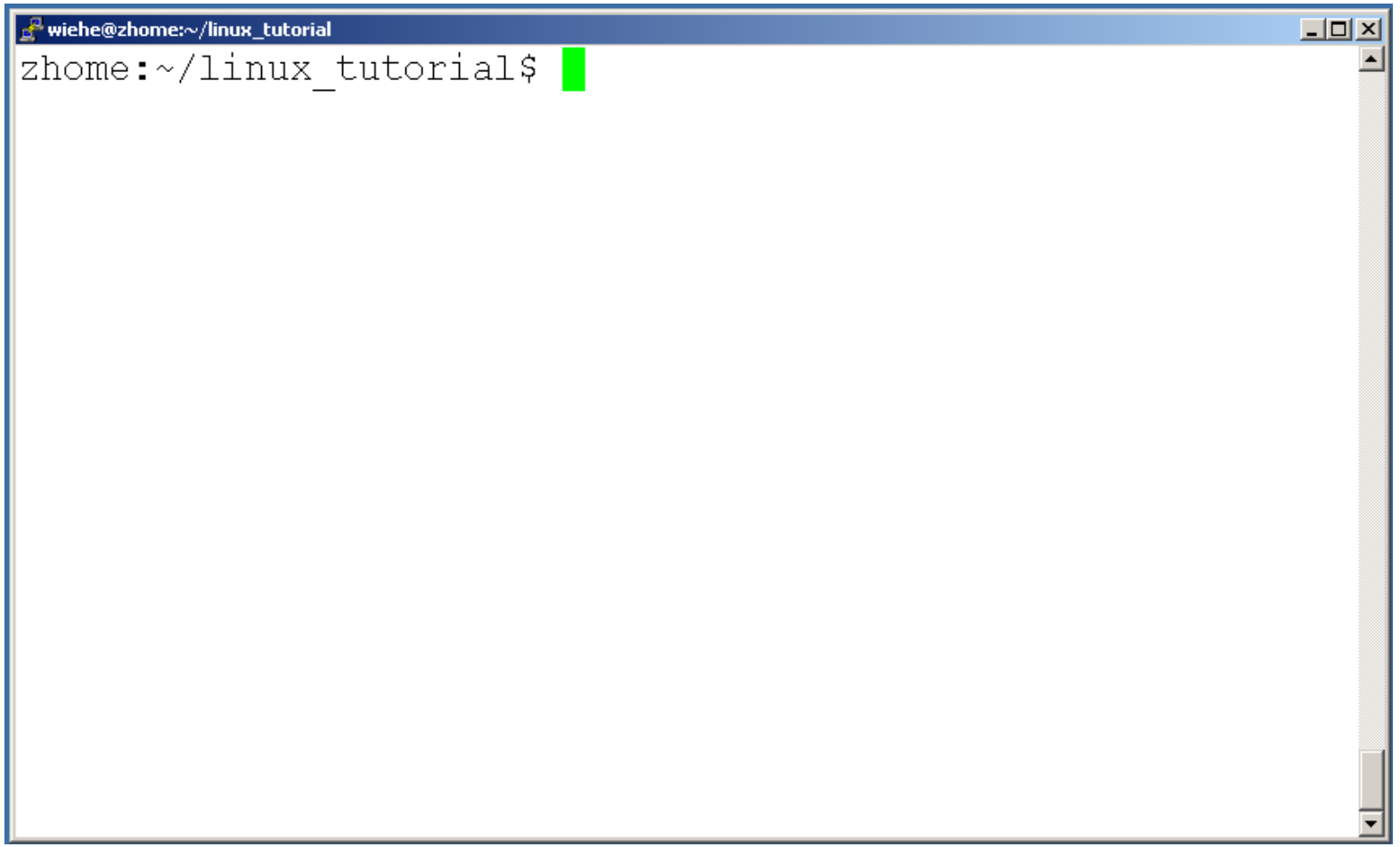
Unix / Linux

- Command line (Terminal)

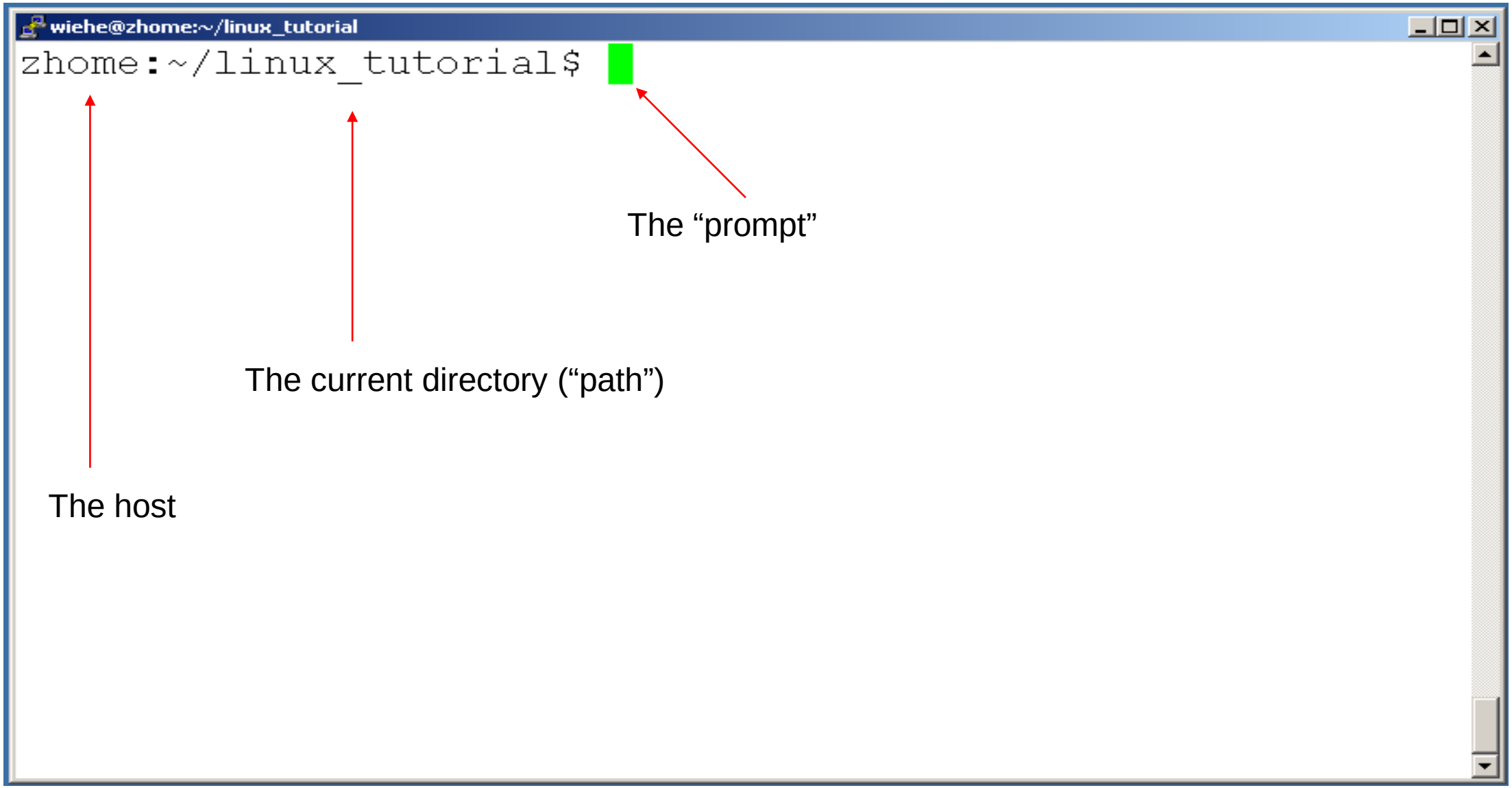
Linux Terminal

Open up a terminal:

- Ctrl + Alt + T
- Double click selection



Linux Terminal Info



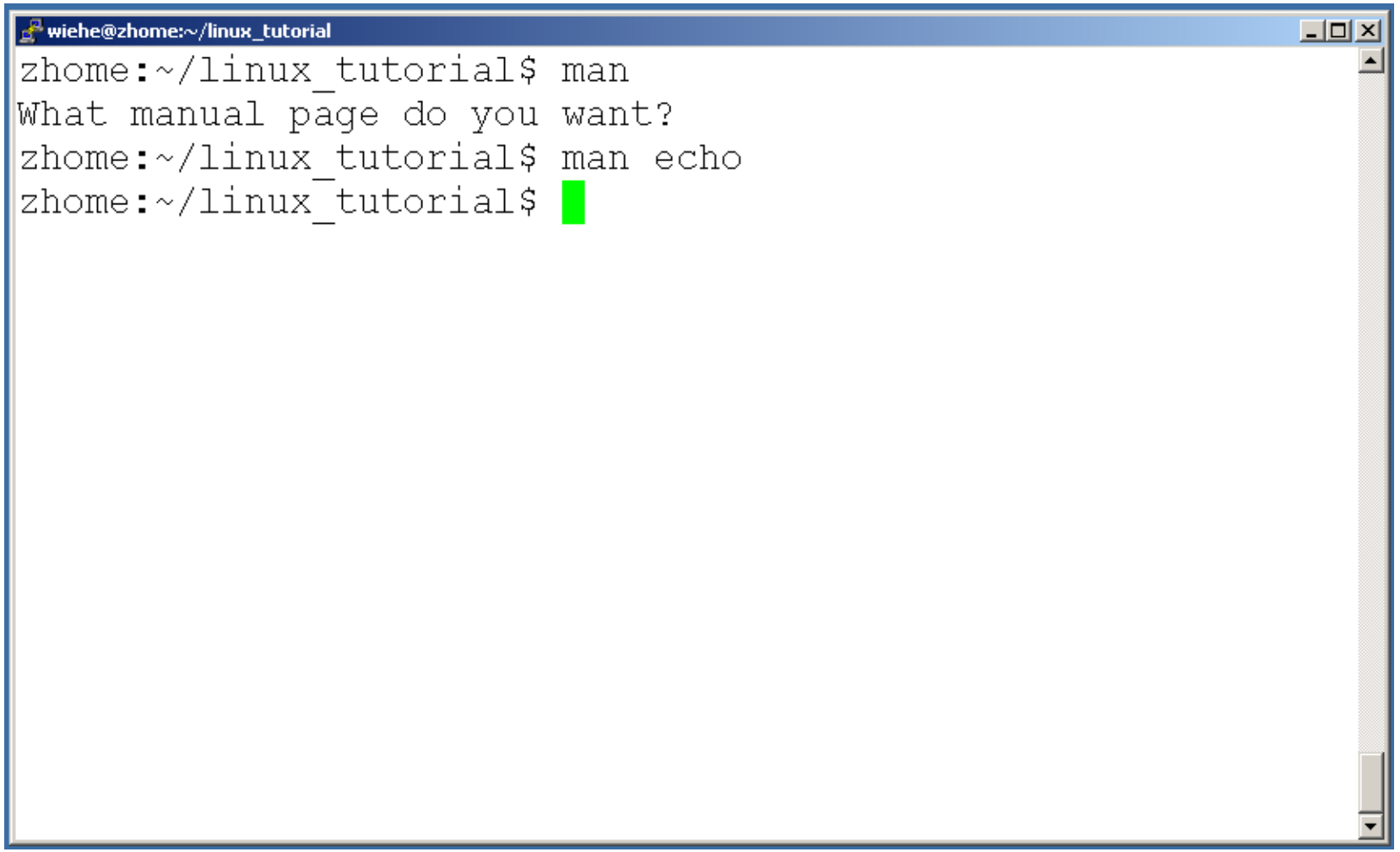
Shell

- After logging in, Linux/Unix starts another program called the **shell**
- The shell interprets commands the user types and manages their execution
  - The shell communicates with the internal part of the operating system called the **kernel**
  - The most popular shells are: tcsh, csh, korn, and bash
  - The differences are most times subtle
  - For this tutorial, we are using bash
- Shell commands are **CASE SENSITIVE!**

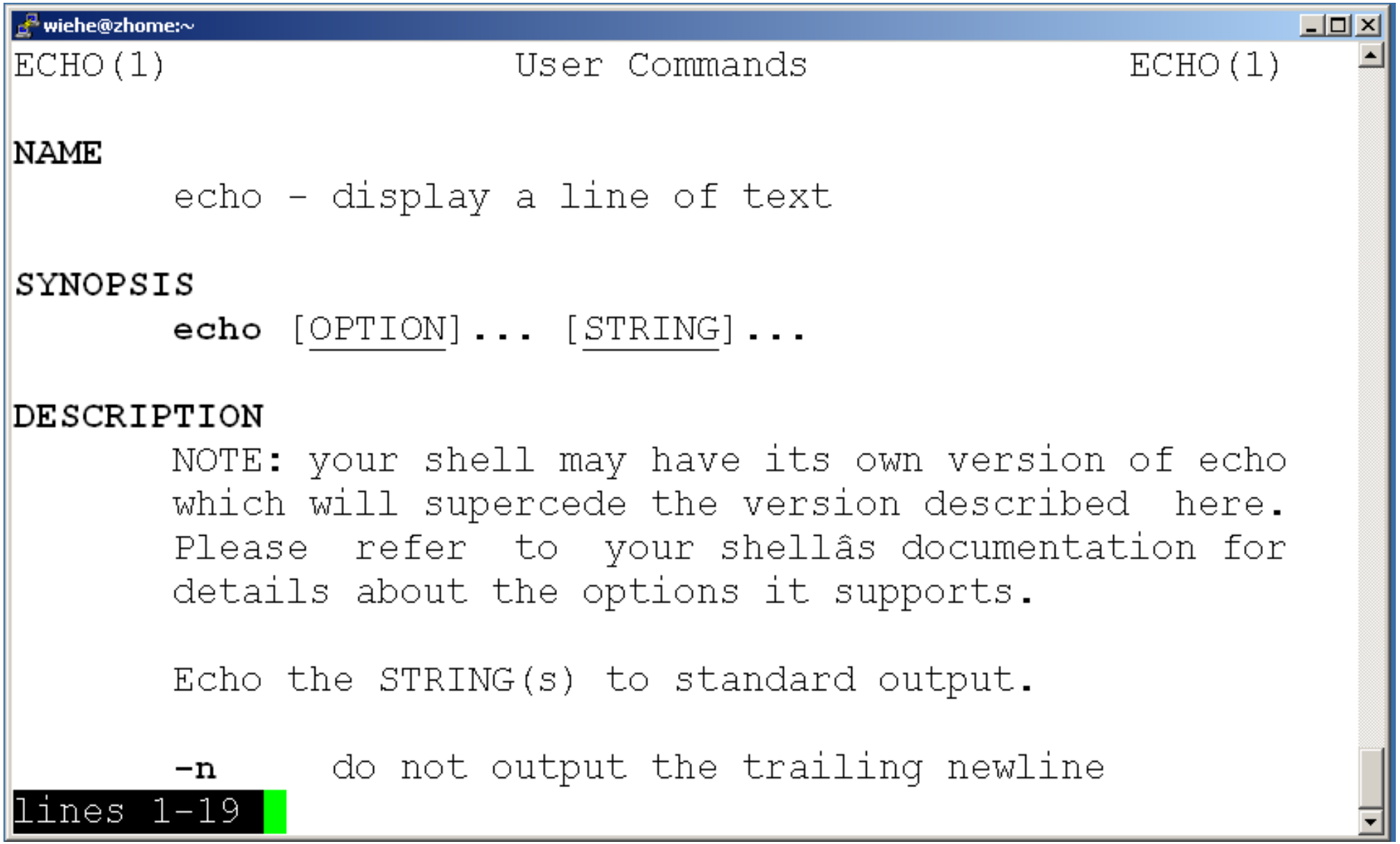
Linux Terminal Help

Linux man

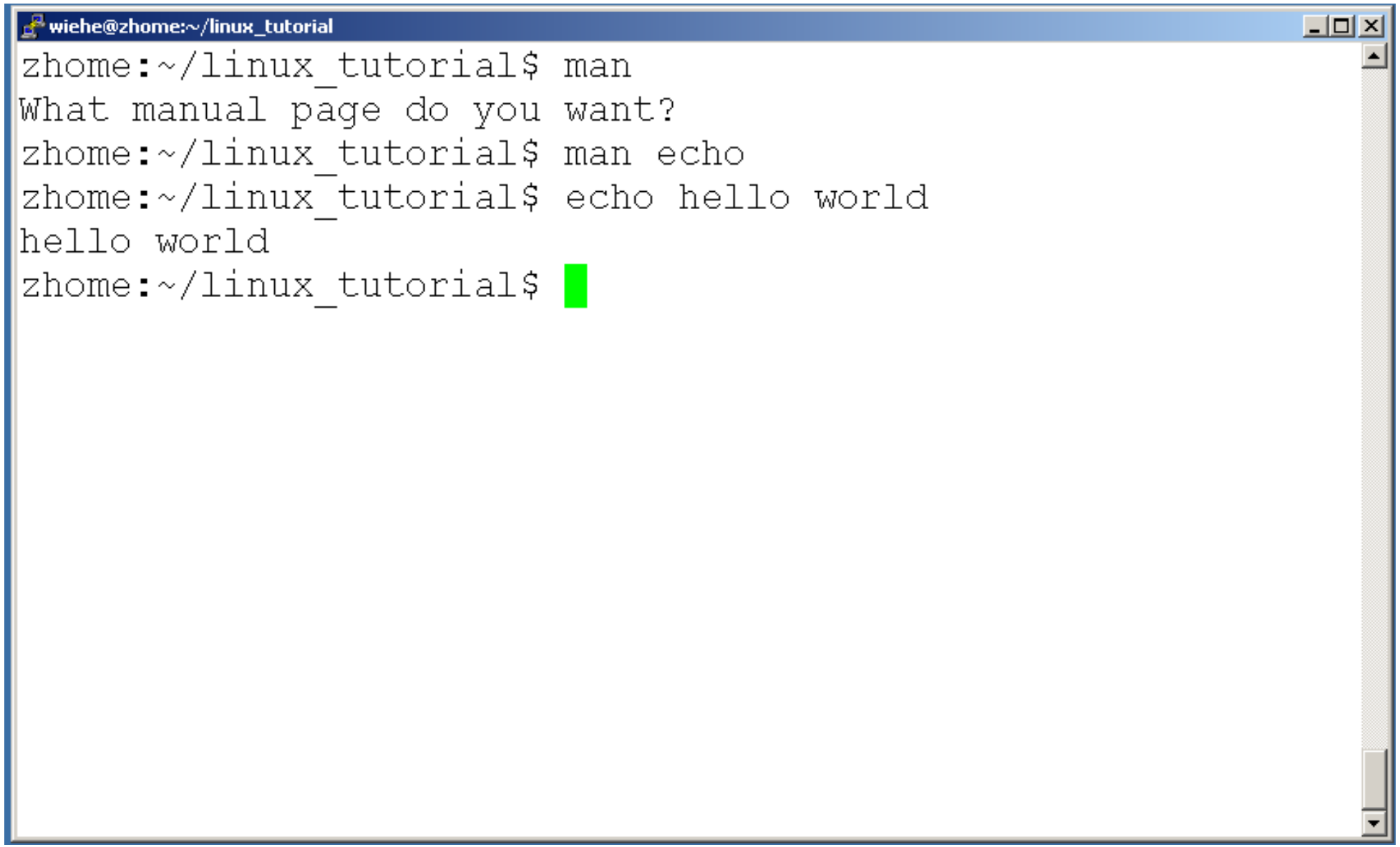
Whenever you need help with a command type "**man**" and the command name



Man example


wiehe@zhome:~
ECHO(1) User Commands ECHO(1)
NAME
echo - display a line of text
SYNOPSIS
echo [OPTION]... [STRING]...
DESCRIPTION
NOTE: your shell may have its own version of echo
which will supercede the version described here.
Please refer to your shellâs documentation for
details about the options it supports.
Echo the STRING(s) to standard output.
-n do not output the trailing newline
lines 1-19

echo example

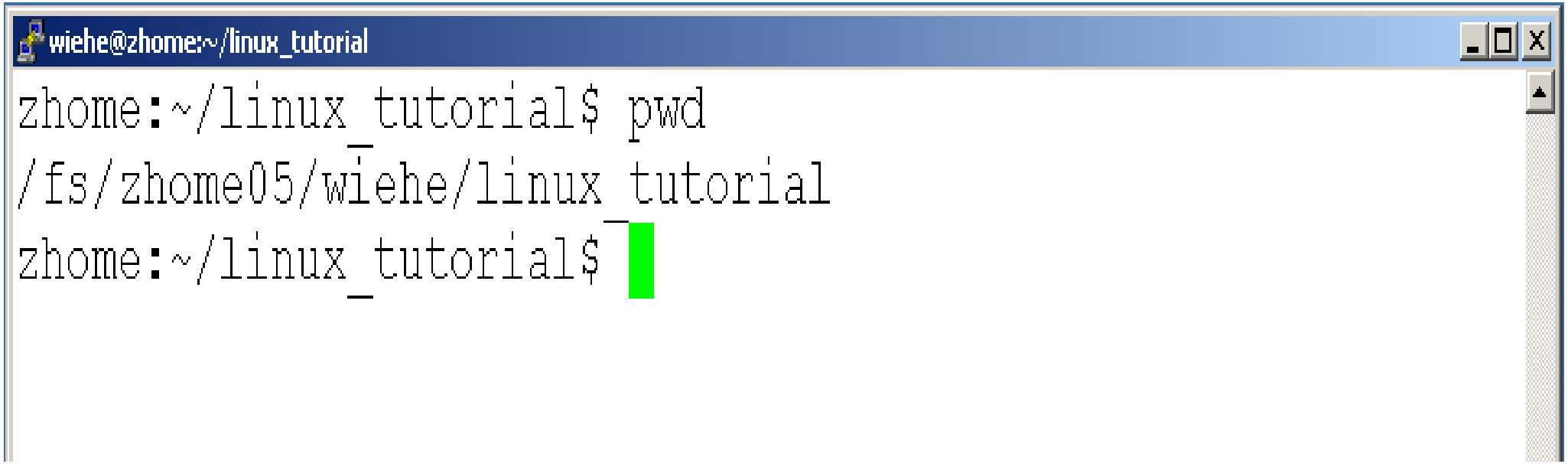


Linux Terminal Commands

- **pwd (print [current] working directory)**

  To find your current path use “pwd”

  $ pwd (Enter) output /usr/bin



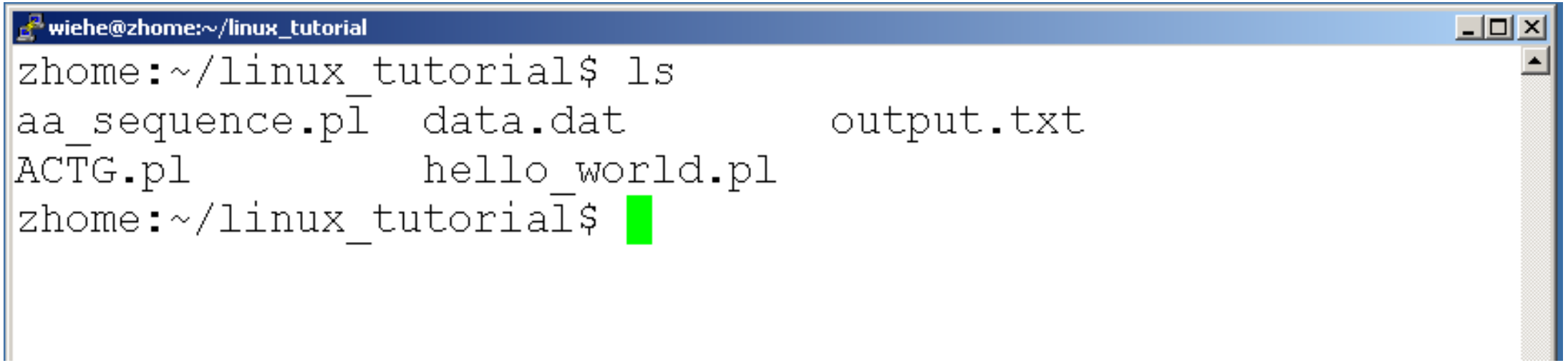
Linux Terminal Commands

- **ls (list directory)**

  To list the files in the current directory use “ls”

  $ ls (Enter) out put

  bin dev home mnt share usr var boot etc lib proc sbin tmp vol



Linux Terminal Commands

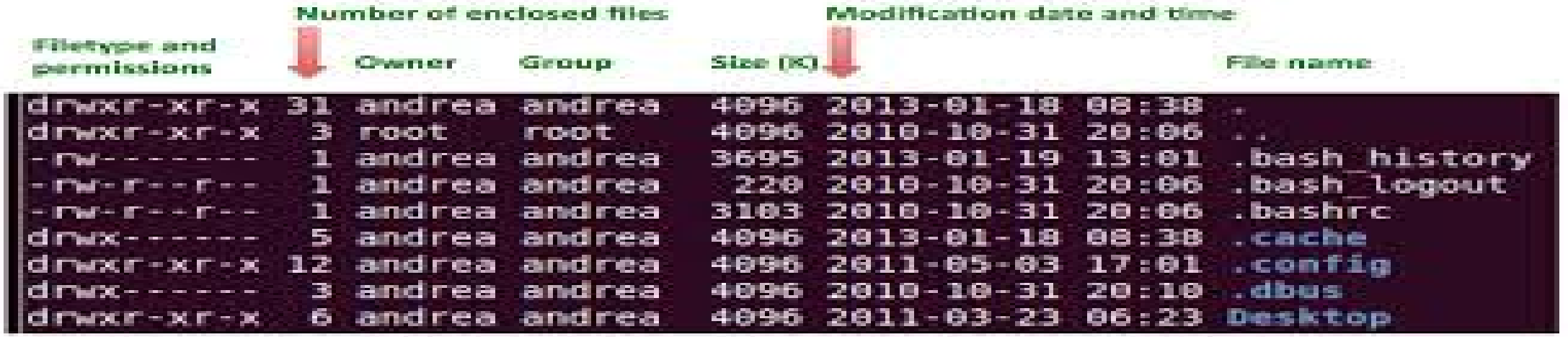
ls has many options

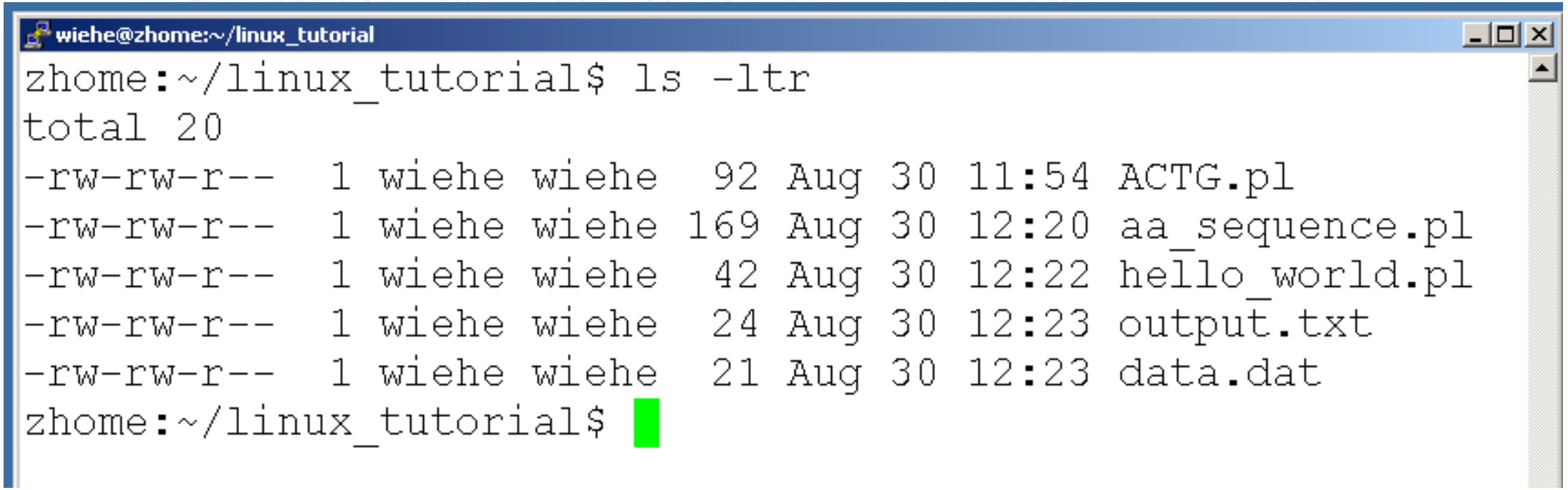
- -a (all)
- -l long list (displays lots of info)
- -t sort by modification time
- -S sort by size
- -h list file sizes in human readable format
- -r reverse the order

“man ls” for more options

Options can be combined: “ls -ltr” , “ls -al”

Linux Terminal Commands

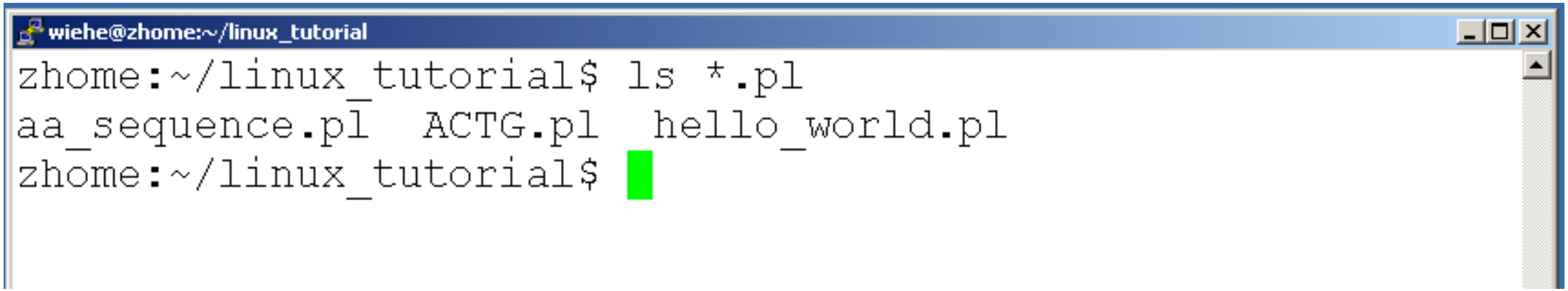




Linux Terminal Commands

General Syntax: *

“*” can be used as a wildcard in unix/linux



Linux Terminal Commands

- **cd (change [current working] directory)**

  To change to a specific directory use “cd”

  $ cd *path*

  $ cd ../.. (Enter) Output root

  $ cd .. (Enter) Output one step backward (Parent directory)

  $ cd (Enter) Output home directory

Or the path to a particular distention

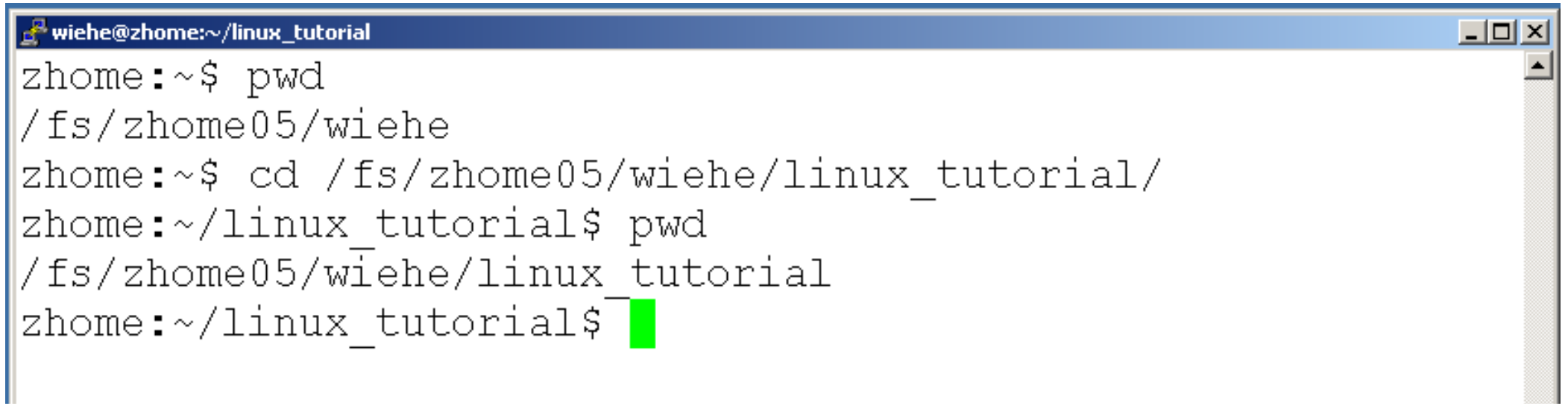
(the current home dir /directory name

/directory name from root ../user or specific directory/…….

Linux Terminal Commands

- **cd (change [current working] directory)**

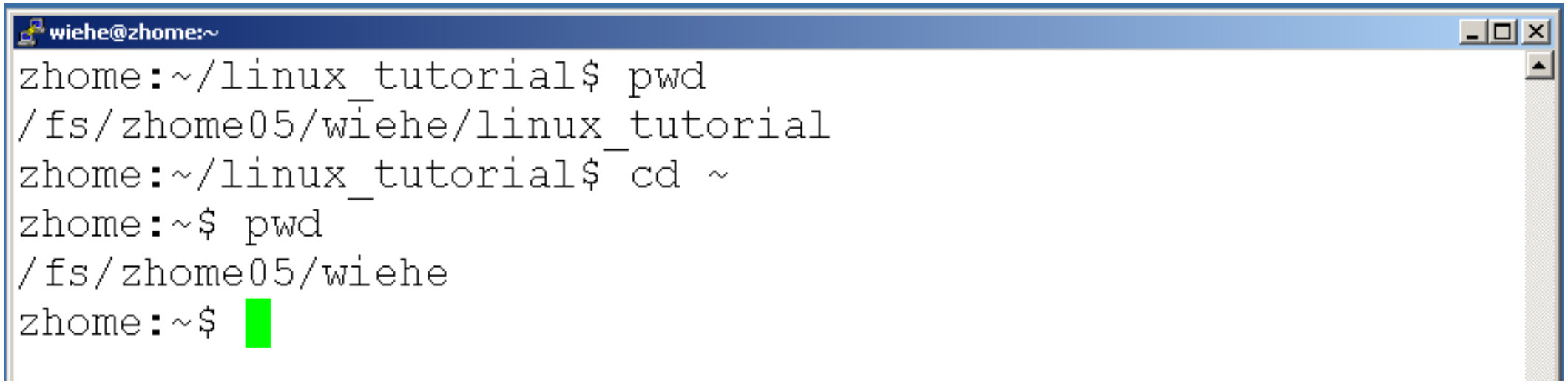
  To change to a specific directory use “cd”



Linux Terminal Commands

- **cd (change [current working] directory)**

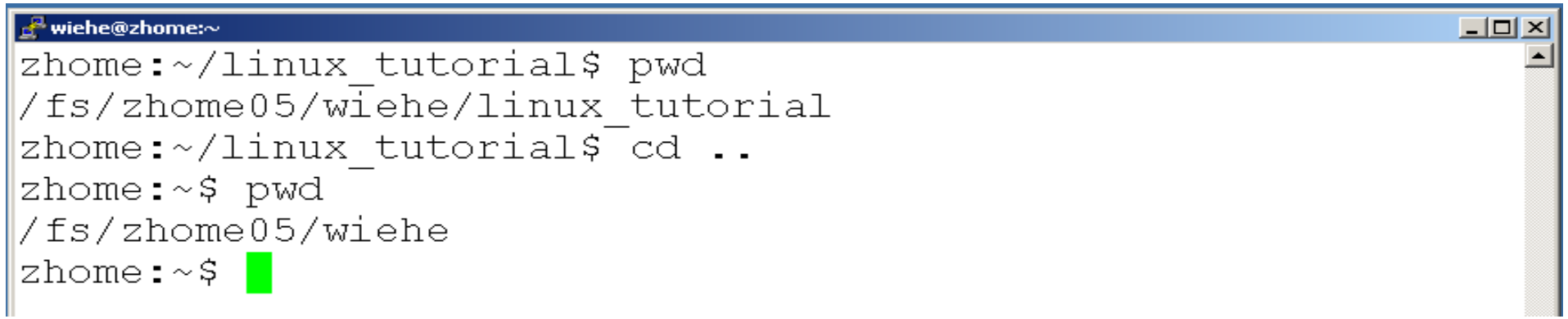
  “~” is the location of your home directory”



Linux Terminal Commands

- **cd (change [current working] directory)**

  ".." is the location of the directory below current one

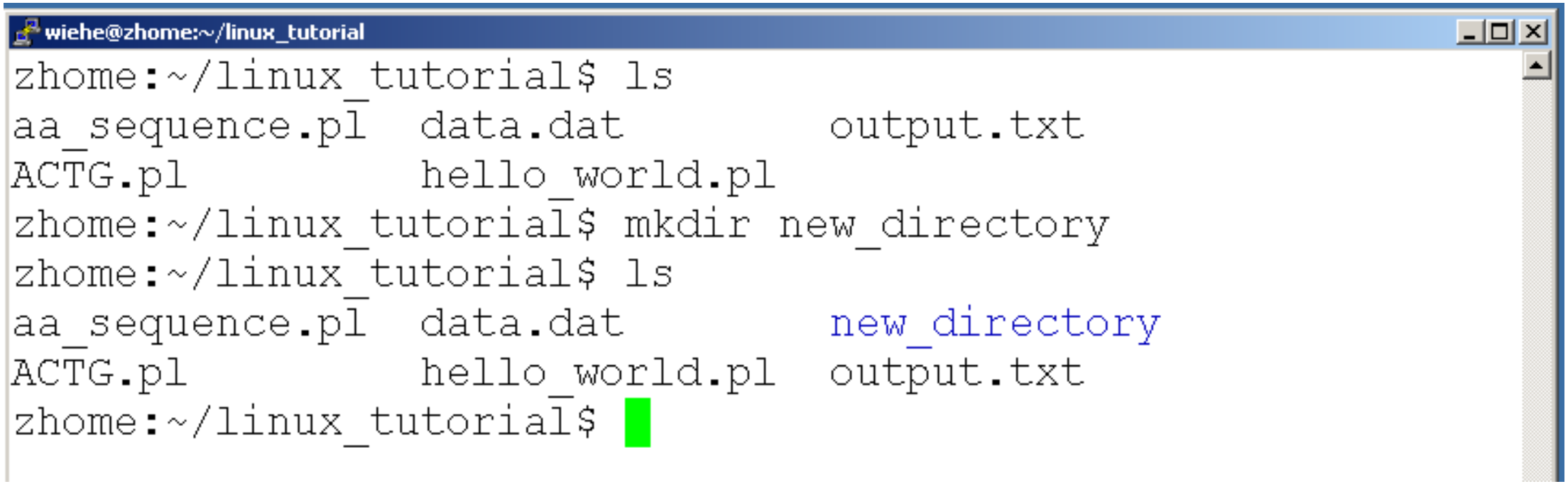


Linux Terminal Commands

- **mkdir (make directory)**

  To create a new directory use “mkdir”

  $ mkdir OS2016/17 output (OS2016/17 Subdirectory in current directory)

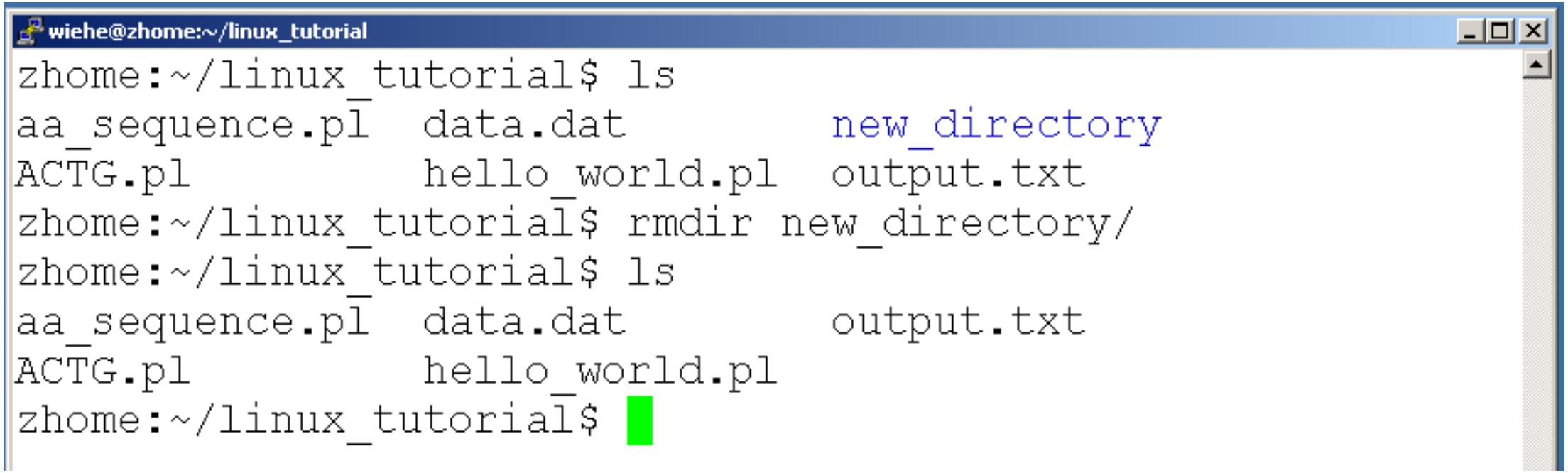


Linux Terminal Commands

- **rmdir (remove directory)**

  To remove and empty directory use “rmdir”

$ rmdir OS2016/17 output (Removes Subdirectory OS2016/17 in current directory)



Creating files in Unix/Linux

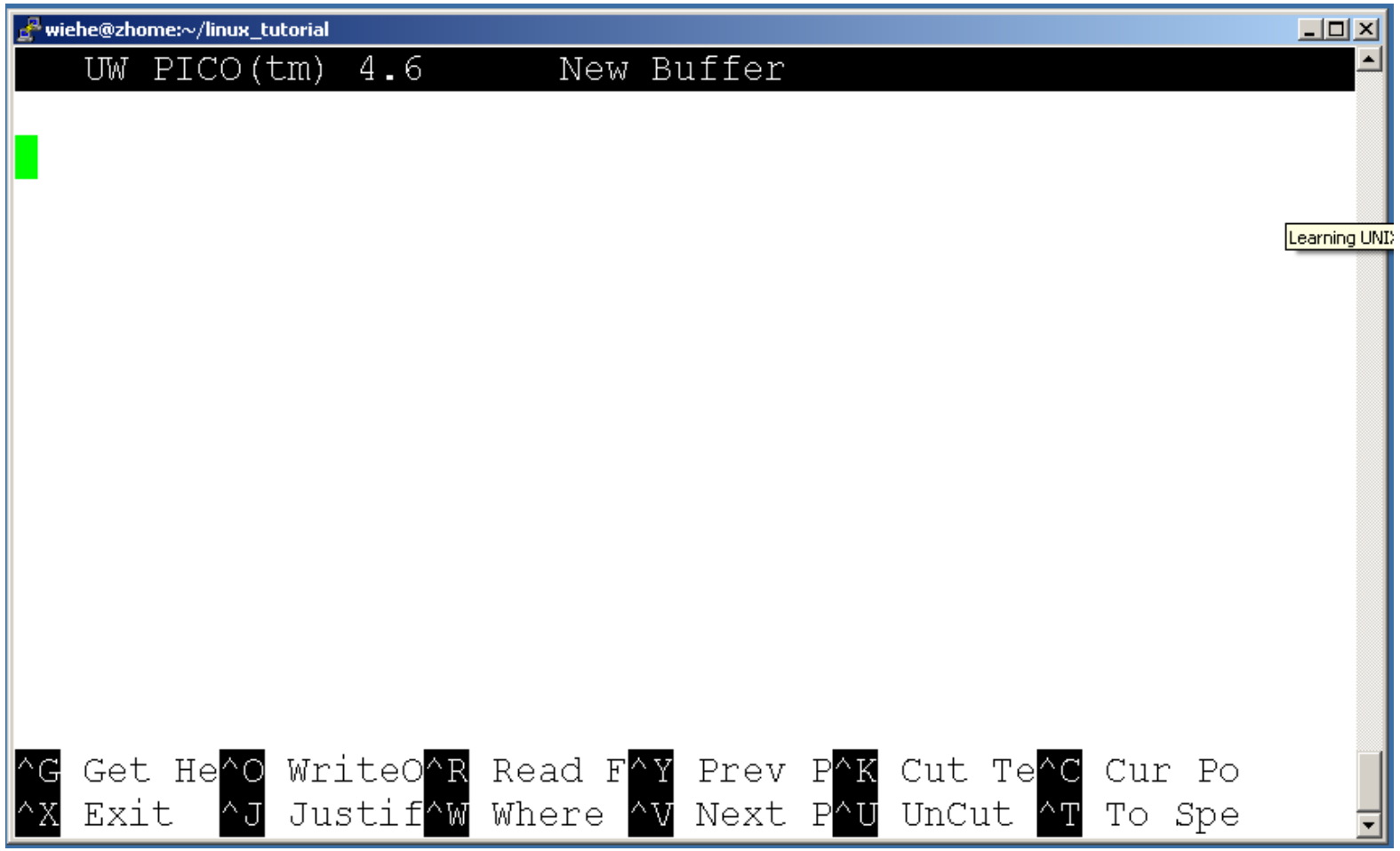
Various Editors:

1) gedit
2) nano / pico
3) vi
4) emacs

Linux Terminal Commands

Editing a file using pico or nano

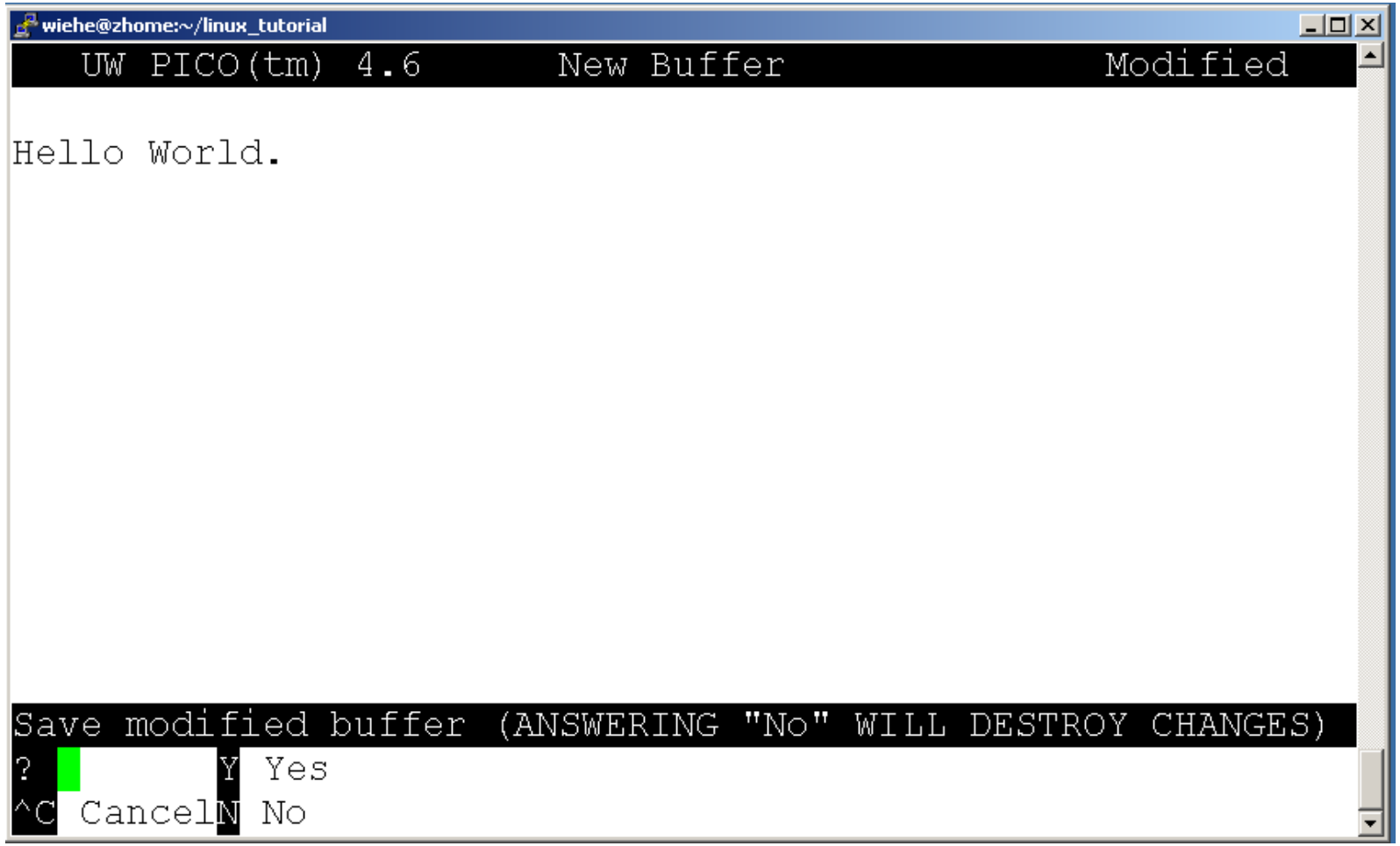
Type “pico” or “nano” at the prompt



Linux Terminal Commands

Editing a file using pico or nano

To save use “ctrl-x”



Linux Online Tutorial

Youtube

https://www.youtube.com/watch?v=9t_gJWC32zk

Linux Handout & Tutorial

http://www.guru99.com/unix-linux-tutorial.html

William Knottenbelt Imperial college London 2001
http://www.doc.ic.ac.uk/~wjk/UnixIntro/index.html

WORLD OF ASIC 2014

http://www.asic-world.com/scripting/unix3.html

Linux Online Resources

http://www.ee.surrey.ac.uk/Teaching/Unix/

http://www.ugu.com/sui/ugu/show?help.beginners

http://en.wikipedia.org/wiki/Unix