

## Command Line: Bash Scripting Workshop Handout

|            |  |
|------------|--|
|            | 1.cd data-shell/molecules/                             |
|            | 2. head -n 15 octane.pdb                               |
|            | 3. head -n 15 octane.pdb   tail -n 5                   |
| make       | 4.vi middle.sh   |
| script     | 5.head -n 15 octane.pdb   tail -n 5                    |
|            | 6.bash middle.sh                                       |
| argument   | 7.vi middle.sh   |
|            | 8.head -n 15 \$1   tail -n 5                           |
|            | 9.bash middle.sh octane.pdb                            |
|            | 10.bash middle.sh "high octane.pdb"                    |
| quote your | 11.vi middle.sh  |
| variable   | 12.head -n 15 "\$1"   tail -n 5                        |
|            | 13.bash middle.sh "high octane.pdb"                    |
| multiple   | 14.vi middle.sh  |
| arguments  | 15.# Select lines from the middle of a file.           |
|            | 16.# Usage: bash middle.sh filename end_line num_lines |
|            | 17.head -n "\$2" "\$1"   tail -n "\$3"                 |
|            | 18.bash middle.sh pentane.pdb 15 5                     |
|            | 19.bash middle.sh pentane.pdb 20 5                     |
| loops      | 20.cd ../creatures                                     |
|            | 21.vi list_creatures.sh                                |
|            | 22.for filename in basilisk.dat unicorn.dat            |
|            | 23.do  |
|            | 24.    head -n 2 \$filename   tail -n 1                |
|            | 25.done  |
|            | 26.bash list_creatures.sh                              |

|               |  |
|---------------|--|
| Expanding     | 27. cp *.dat original-*.dat                        |
| wildcard      | 28. vi copy_files.sh                               |
| Processing    | 29. for filename in *.dat                          |
| Files         | 30. do   |
|               | 31.     echo "\$filename"                          |
|               | 32. done   |
|               | 33. bash copy_files.sh                             |
|               | 34. vi copy_files.sh                               |
|               | 35. for filename in *.dat                          |
|               | 36. do   |
|               | 37.     echo "cp \$filename original-\$filename"   |
|               | 38. done   |
|               | 39. bash copy_files.sh                             |
| Introduce \$@ | 40. vi copy_files.sh                               |
|               | 41. for filename in \$@                            |
|               | 42. do   |
|               | 43.     echo cp "\$filename" original-"\$filename" |
|               | 44. done   |
|               | 45. bash copy_files.sh *.dat                       |
| Permission    | 46. ls -l copy_files.sh                            |
| to execute    | 47. chmod +x copy_files.sh                         |
| and define    | 48. vi copy_files.sh                               |
| shebang       | 49. #!/usr/bin/env bash                            |



