Command Line: Bash Scripting Workshop Handout

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                    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 $filename | tail -n 1
                         25. done
                    26. bash list_creatures.sh
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Expanding        27. cp *.dat original-*.dat
wildcard         28. vi copy_files.sh
Processing             29. for filename in *.dat
Files                  30. do
                       31.    echo "$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
                       50. for filename in $@
                       51. do
                       52.    echo cp "$filename" original-"$filename"
                       53. done
                 54. ./copy_files.sh *.dat
```