```
1.cd data-shell/molecules/
              2.vi middle.sh
make
                     3.head -n 15 octane.pdb | tail -n 5
script
              4.bash middle.sh
              5. vi middle.sh
argument
                     6.head -n 15 $1 | tail -n 5
              7. bash middle.sh octane.pdb
              8.bash middle.sh "high octane.pdb"
              5.vi middle.sh
quote your
                     6.head -n 15 "$1" | tail -n 5
variable
              8.bash middle.sh "high octane.pdb"
              9. vi middle.sh
multiple
                     10. # Select lines from the middle of a file.
arguments
                     11. # Usage: bash middle.sh filename end line num lines
                     12.head -n "$2" "$1" | tail -n "$3"
              13.bash middle.sh pentane.pdb 15 5
              14. bash middle.sh pentane.pdb 20 5
              15.cd ../creatures
loops
              16.vi list creatures.sh
                     17. for filename in basilisk.dat unicorn.dat
                     18. do
                     19. head -n 2 $filename | tail -n 1
                      20.done
              21.bash list creatures.sh
              22.cp *.dat original-*.dat
Expanding
              23.vi copy files.sh
wildcard
                     24. for filename in *.dat
Processing
                     25.do
Files
                     26.
                             echo "$filename"
                      27. done
```

```
28.bash copy files.sh
              29.vi copy files.sh
                     30. for filename in *.dat
                     31.do
                     32.
                            echo "cp $filename original-$filename"
                     33.done
              34.bash copy files.sh
              35.vi copy files.sh
Introduce $@
                     36. for filename in $@
                     37.do
                            echo cp "$filename" original-"$filename"
                     38.
                     39.done
              40.bash copy files.sh
```

Permission to execute and define shebang