Exercise 1

From your home directory:

mkdir films

mkdir films/horror films/comedy films/action

mkdir films/horror/zombie films/horror/slasher

touch films/horror/theHowling films/comedy/bigMommasHouse films/comedy/ghostbusters films/comedy/ghostbusters2 films/comedy/shawnOfTheDead films/action/rambo films/horror/zombie/dawnOfTheDead films/horror/slasher/halloween films/horror/slasher/fridayThe13th films/horror/slasher/predator

Exercise 2

1. cd films/horror/zombie
2. mv ../slasher/predator ~/films/action/
3. mv ~/films/action/rambo ~/films/action/firstBlood  
   alternatively: mv ../../action/rambo ../../action/firstBlood
4. mkdir ~/films/comedy/supernaturalComedy  
   alternatively: mkdir ../../comedy/supernaturalComedy
5. mv ~/films/comedy/ghostbusters\* ~/films/comedy/supernaturalComedy
6. rm -i ../../comedy/bigMommasHouse
7. touch ~/films/action/rocky{I,II,III,IV}

Exercise 4

1. wc -m accounts
2. wc -w accounts
3. wc -l accounts
4. fgrep “Sheldon Cooper” accounts  
   alternatively: fgrep -i sheldon accounts
5. fgrep “:3:” accounts
6. fgrep “620” accounts
7. cut -d: -f2 accounts
8. cut -d: -f1 accounts
9. cut -d: -f4,2 accounts
10. sort –n -r -t: -k4 accounts

Exercise 5a

1. touch regFile

chmod 700 regFile  
(check w/ ls –l regFile)

1. chmod 640 regFile
2. chmod 511 regFile
3. mkdir newDir  
   chmod u-w newDir  
   (You will not be able to create files/directories within newDir)
4. chmod 300 newDir  
   (Not able to list directory contents, can descend into directory, can create files in directory)
5. chmod u-x newDir  
   (Prevents you from descending into the directory)

Exercise 5b

cd ~/films

1. find . -name shawnOfTheDead\*
2. find -mmin -30
3. find . -name "\*[tT]he\*"
4. find . -name "\*[tT]he\*" –exec chmod a-w {} \;
5. find . -name "\*[tT]he\*" –exec rm -i {} \;

Exercise 6

1. cat accounts | tr [:upper:] [:lower:]
2. cat accounts | tr : ‘ ‘
3. fgrep ‘Sheldon Cooper’ accounts > sheldon
4. fgrep ‘Leonard’ accounts >> sheldon
5. echo –n “characters” | wc –m
6. cat accounts | wc –l
7. ls –l | tr –s ‘ ‘ | sort –n –t’ ‘ –k2 sorts by folder depth  
   ls –l | tr –s ‘ ‘ | sort –t’ ‘ –k9 sorts by file name  
   ls –l | tr –s ‘ ‘ | sort –n –t’ ‘ –k5 sorts by file size

Exercise 7

1. egrep '^07[0-9]{9}$' newFile
2. egrep '^[[:alpha:]][[:alpha:]][[:digit:]]{6}[[:alpha:]]$' newFile  
   alternatively: egrep ‘^[a-zA-Z]{2}[0-9]{6}[a-zA-Z]$’ newFile  
   or: egrep -i ‘^[a-z]{2}[0-9]{6}[a-z]$’ newFile
3. egrep '^01223[0-9]{6}$' newFile
4. egrep "^([[:digit:]]{2}-){2}[[:digit:]]{2}$" newFile
5. egrep "^B[[:digit:]]{1,3}[[:alpha:]]{3}$" newFile
6. egrep "^[^[:alpha:]]\*$" newFile

Exercise 8

1. x=Andy  
   y=Bruce
2. x=4  
   y=9  
   echo $(($x+$y))
3. x=$(ls)  
   echo $x
4. balances=$(cut -d: -f4 accounts)  
   echo $balances
5. echo $((4+3\*2))  
   echo $(((4+3)/2)) OR echo “scale=2;(4+3)/2” | bc
6. varname=$(cat file | bc)
7. cut -d$(head -1 fileName) –f$[$(tail -1 fileName)] accounts

Exercise 9

1. sleep 1000 &
2. ps
3. kill <pid>  
   ps to check
4. sleep 1000 &
5. jobs
6. fg <jid>
7. ctrl C