

I worked with a friend who has a lot of music on his computer. He also uses linux, so getting his music collection and manipulating the text would be relatively straightforward. We chose only to share our full albums rather than singles as well to make the sorting process easier. Luckily we both had the same file/folder format. In the top level we had the Artist name, with the Album name under that, with the files within the album folder. We chose the categories to be:

- Albums (for whole albums by a single artist)
- Compilations (Tracks by various artists)
- Soundtracks (Tracks by various artists from movies/tv programmes etc)

I worked out the commands to run in order to manipulate to output of the 'ls' command and then instant messaged my friend the command. Once he ran it, he emailed the text file. The command is shown below:

```
ls -R | grep -v .mp3 > ~/dave_music.txt
```

This lists all the files and folder, but doesn't display the actual music files. This gave a text that looks like this:

```
./3 Doors Down:  
The Better Life/  
  
./3 Doors Down/The Better Life:  
  
./50 Cent:  
Get Rich Or Die Tryin'/  
  
./50 Cent/Get Rich Or Die Tryin':  
  
./Afroman:  
The Good Times/  
  
./Afroman/The Good Times:
```

which isn't in a very readable or useful for comparing to another file. I thus ran the following command to clean up the output (and get rid of the artist folder):

```
cat dave_music.txt | grep './' | egrep '\.\/.*\/.*:' | sed 's/\.\/\\/'  
| sed 's/:\\/' | sed 's/\\\/ -\\ /' > dave_results.txt
```

The output is now this:

```
3 Doors Down - The Better Life  
50 Cent - Get Rich Or Die Tryin'  
Afroman - The Good Times
```

Now I had my music in an easily readable format. I got my friend to do the same thing, and he sent back the results via email.

To just get the uniq items, appended his file on the end of mine, and then sorted it. I next ran the uniq command which only prints non-duplicated lines in a sorted file. As only 60 albums

were needed, i used the head command and then printed the output to a text file. The command is show below:

```
cat dave_results.txt vipul_results.txt | sort | uniq -iu | head -n 60  
> music_list.txt
```

As I was working with a friend and we instant message quite a lot I didn't find it too difficult. The hardest part was the exchanging of long lists of text and trying to get the data into exactly the same format so the uniq command would work. It didn't work perfectly however, as some albums names were not exactly the same, for example a missing single quote mark.

If we had used email and not instant messaging, it would've taken a lot longer as instant messaging is almost equivalent to talking as you get an instant response. It is much easier to use im when dealing with data though because we were able to post/email the results rather than print out the results.

Obviously, if someone is in a different hemisphere, they are not in the same time zone as you so this makes it very difficult to contact the other person in real-time. Email is very impersonal and very slow for fixing a simple problem (like a missing '|' for example). When we would be working on the solution, the other person would be sleeping and therefore not able to answer any questions we may have. This could also stop us working if we can't get a response to a question. This could result in a whole wasted day. Some compromises may need to be made, for example staying up late on certain days to instant message with the other person.

Below is the complete list of our music collection after all the above commands:

3 Doors Down - Away From The Sun  
3 Doors Down - The Better Life  
48 May - The Mad Love  
50 Cent - Get Rich Or Die Tryin'  
Afroman - The Good Times  
Alanis Morissette - Under Rug Swept  
All Saints - All Saints  
American Hi-Fi - American Hi-Fi  
Art Garfunkel - Fate For Breakfast  
Ashlee Simpson - Autobiography  
Atomic Kitten - Feels So Good  
Avril Lavigne - My World  
Avril Lavigne - My World (Bonus Disc)  
Basement Jaxx - Remedy  
Basement Jaxx - Rooty  
Basement Jaxx - The Singles  
Ben Harper - Diamonds on the Inside  
Ben Lummis - One Road  
Beyonce Knowles - Dangerously In Love  
Billy Joel - The Best of Billy Joel  
Blindspott - Blindspott (Bonus Disc)  
Blink 182 - Enema of the State  
Blink 182 - Take Off Your Pants & Jacket  
Blondie - Atomic - The Very Best Of Blondie  
Bloodhound Gang - One Fierce Beer Coaster  
Bomfunk MC's - In Stereo  
Britney Spears - Baby One More Time (1999)  
Britney Spears - Britney (2002)  
Britney Spears - In The Zone  
Britney Spears - Oops!...I Did It Again (2000)  
Bryan Adams - So Far So Good  
Bus Stop - Kung Fu Fighting  
Carly Binding - Passenger  
Carpenters - Carpenters (1971)  
Carpenters - Close To You  
Cat Stevens - Remember  
Cat Stevens - The Very Best of Cat Stevens  
Che Fu - Navigator  
Chemical Brothers - Surrender  
Christina Milian - It's About Time  
Christmas - Christmas Hits 60 Festive Favourites (3cds)/cd1  
Christmas - Christmas Hits 60 Festive Favourites (3cds)/cd2  
Christmas - Christmas Hits 60 Festive Favourites (3cds)/cd3  
Christmas - Now! The Christmas Album/Disk 1  
Christmas - Now! The Christmas Album/Disk 2  
Christmas - Songs For Christmas 2004  
Christmas - The Best Christmas Album In The World Ever CD1  
Christmas - The Best Christmas Album In The World Ever CD2  
Coldplay - X&Y  
Compilations - 32 Ones on One - Radio 1FM's 25th Birthday - Disc 1  
Compilations - 32 Ones on One - Radio 1FM's 25th Birthday - Disc 2  
Compilations - Big Day Out 05  
Compilations - Lazy Sunday 2  
Compilations - Lazy Sunday 4  
Compilations - Now That's What I Call Music 16  
Compilations - Now That's What I Call Music 17  
Compilations - Now That's What I Call Music Vol 3  
Compilations - The Rhythm Vol 22  
Compilations - Unleashed  
Concord Dawn - Uprising