GNU/Linux - An Introduction
Part 2 - Exercise

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1. You are a movie freak and would like to buy latest movie DVDs. You have recently purchased one such movie DVD. You are interested in sharing the DVD with your friends but worried about loosing the DVD because of scratches. So, you decide to take a backup of the DVD onto your hard drive. But, again, you know that copying all the files of the video DVD is not good enough to recreate a video DVD. So, you want to take an exact copy of the DVD onto a file in your hard drive.

   (a) What is the command you would use in the linux terminal?

   (b) You have a brother who plays lots of games on Windows. So, the space that you have for linux partition is limited. Hence, you decide to move the previously created DVD file onto a Windows partition. But, Oh! No! You have a FAT32 file system on all Windows partitions which allows the maximum size of a file to be only 4.0GiB. But, your DVD file is definitely more than that size ($\sim$4.3GiB). What will you do on the linux terminal to solve this issue?

   (c) BAD! BAD! Worst has come! Your friend just spoilt the DVD. You can fight with him/her, but, the DVD is gone! What will you do create a new DVD?

   Hint: On a typical current day GNU/Linux machine, DVD device file is /dev/dvd.

2. You are the main system administrator of a company's website. The website uses a huge database of registered users. The company manager asks you to give him a list of countries from which the users have registered. You forward the task to a subordinate. The subordinate being a novice, got the list of countries from the database somehow. After he leaves, before sending the list to the manager, you decide to look at it once. Oh, dear! What has the subordinate done!? The list of countries that he has given, has repeated country names. *Actually, the novice subordinate had simply queried for country names for each user and had made a list of the same.* Just then, the company manager calls you and asks for the list immediately. Now, what will you do!? You do not have enough time to call your subordinate and get the work done. Immediately, you open a shell and type a single line of command and then, send the new proper list of countries to the company manager. Can you please explain what that single line of command is?

   Hint: Go through the manual pages of the two shell commands 'sort' and 'uniq'.