Exercise for the topic Command Line (20 points)

1. Please investigate how many and which editors are available in the Debian Lenny distribution:

   use the lenny--allpackages.txt file (listed bei the Course material in the topic Linux) and select the lines in which the word 'editor' is listed (e.g. use the *grep* command). Save this as a file: linux-editors-all.txt in the exercises/comline/ directory in your CBWE lecture home directory.

   Create a table, where the following types of editors are mandatory listed: text, audio, sound, video, mpg, mp3, html, xml, emacs, vi; with the number of editors for these types (e.g. use the command *wc*).
   (Use a simple table in OpenOffice writer).

   Delete the already grouped editors from the linux-editors-all.txt file and save this as linux-editors-remained.txt file (use *grep* with appropriate option for this). Investigate the remained editors and group them similarly as above and list the number of items in the groups into the table (at least for 10 further groups) .

   Append the full output you got in the terminal window during your work to the OpenOffice writer file you created above and export it as a file: linux-editors.pdf.
   Save this file in the directory: exercises/comline/ in your CBWE lecture home directory.

   remark: you should use I/O redirecting, pipelining.

   5 points

2. Manipulate output lines

   - use the command *dpkg* to list all Debian packages, which have the word *editor* in their name.

   - the package name is the second listed field, which is separated by two white spaces from the 1st field. Use the *cut* command to select the 2nd field only from the output.

- To get the correct input for the *cut* command you have change dpkg output. Use the *sed* command please, to manipulate the dpkg output.

- please create a pdf file: dpkg-sed.pdf from the terminal window contents for this exercise and save it in the directory: exercises/comline/ in your CBWE lecture home directory.

2 points

3. Start *kdirstat* in your CBWE course home directory in full screen mode, open the exercises subdirectory with all subdirectories (as possible) and make a screenshot about the directory tree. Save the screenshot as kdirstat.jpg in exercises/comline/ directory.

1 point

4. Using the *find* command in your /home/cbwe-login/ directory:

a- search for the pdf files in the exercises/ directory and make a long list about the found files

b- search for all directories and make a long list about the directories only (not about the contents of the directories)

c- search for files which occupy more than 130 Kilobyte and make a long list

d- search for files which are readable for everybody and make a long list

e- search for files which are writable for the group and make a long list

f- create one or two screenshots about the output in the terminal window and save them as find-1.jpg and find-2.jpg in the exercises/comline/ directory.

3 points

5. Copy directories using the *tar* command:

- create a subdirectory in your /home/cbwe-home directory named as backup-exercise

a- create a tar file about the exercises directory tree as exercises.tar
- list the first 10 lines of the exercises.tar archive

b- create a backup of the exercises directory using the tar utility in one complex command. The backup should be located under backup-exercises/ directory.

c- create a screenshot about the terminal output as tar-list.jpg and save it in the exercises/comline/ directory.

2 points

6. Using the shell

A/ 2 points

a- start acroread in the background in a terminal window
b- list all processes by *ps*, select acroread by *grep*, and extract the processid from the output. Print this processid on the terminal window.
c- use this processid to kill the acroread process (complete the complex command in the step b.
d- create a screenshot about the terminal window and save it as ps-kill.jpg in the exercises/comline/ directory.

B/ 3 points

to be specified yet !!