

lab 7 | Managing Data

Question 1

```
question1 question2 question3 question4
miguel@miguel-VirtualBox:~/lab7$ cd question1
miguel@miguel-VirtualBox:~/lab7/question1$ ls
89-Berries.svg  Mangoes.svg  mynotes.txt  Pineapple-89.jpg  something.txt
Banana_78.png  my-fortune.txt  Papaya.svg  sentences.txt  Video.mp4
miguel@miguel-VirtualBox:~/lab7/question1$ tar cd allfiles.tar *.txt *[0-9].{jpg,png,svg} Video.mp4
tar: You may not specify more than one '-Acctrux', '--delete' or '--test-label' option
Try 'tar --help' or 'tar --usage' for more information.
miguel@miguel-VirtualBox:~/lab7/question1$ tar -tf allfiles.tar
tar: allfiles.tar: Cannot open: No such file or directory
tar: Error is not recoverable: exiting now
miguel@miguel-VirtualBox:~/lab7/question1$ tar cd allfiles.tar *.txt *[0-9].{jpg,png,svg} Video.mp4
tar: You may not specify more than one '-Acctrux', '--delete' or '--test-label' option
Try 'tar --help' or 'tar --usage' for more information.
miguel@miguel-VirtualBox:~/lab7/question1$ tar cf allfiles.tar *.txt *[0-9].{jpg,png,svg} Video.mp4
tar: *[0-9].svg: Cannot stat: No such file or directory
tar: Exiting with failure status due to previous errors
miguel@miguel-VirtualBox:~/lab7/question1$ tar cf allfiles.tar *.txt *[0-9]*.{jpg,png,svg} Video.mp4
miguel@miguel-VirtualBox:~/lab7/question1$ tar -tf allfiles.tar
my-fortune.txt
mynotes.txt
sentences.txt
something.txt
Pineapple-89.jpg
Banana_78.png
89-Berries.svg
Video.mp4
miguel@miguel-VirtualBox:~/lab7/question1$ lorem > randomtext.txt
miguel@miguel-VirtualBox:~/lab7/question1$ ls
89-Berries.svg  Banana_78.png  my-fortune.txt  Papaya.svg  randomtext.txt  something.txt
allfiles.tar  Mangoes.svg  mynotes.txt  Pineapple-89.jpg  sentences.txt  Video.mp4
miguel@miguel-VirtualBox:~/lab7/question1$ ls randomtext.txt
randomtext.txt
miguel@miguel-VirtualBox:~/lab7/question1$ cat randomtext.txt
Doloremque iusto nesciunt aliquam blanditiis accusamus. Non dolore quis ea. Nobis deserunt eos molestiae
occaecati. Saepe ex eos sit.miguel@miguel-VirtualBox:~/lab7/question1$ tar -rf allfiles.tar randomtext.t
xt
miguel@miguel-VirtualBox:~/lab7/question1$ tar -tf allfiles.tar
my-fortune.txt
mynotes.txt
sentences.txt
something.txt
Pineapple-89.jpg
Banana_78.png
89-Berries.svg
Video.mp4
randomtext.txt
miguel@miguel-VirtualBox:~/lab7/question1$
```

Question 2

```

miguel@miguel-VirtualBox:~/lab7/question1$ mv allfiles.tar
mv: missing destination file operand after 'allfiles.tar'
Try 'mv --help' for more information.
miguel@miguel-VirtualBox:~/lab7/question1$ mv allfiles.tar ../question2/
miguel@miguel-VirtualBox:~/lab7/question1$ cd ../question2/
miguel@miguel-VirtualBox:~/lab7/question2$ ls
allfiles.tar
miguel@miguel-VirtualBox:~/lab7/question2$ cpio -iv < allfiles.tar
my-fortune.txt
mynotes.txt
sentences.txt
something.txt
Pineapple-89.jpg
Banana_78.png
89-Berries.svg
Video.mp4
randomtext.txt
9972 blocks
miguel@miguel-VirtualBox:~/lab7/question2$ ls
89-Berries.svg  Banana_78.png  mynotes.txt      randomtext.txt  something.txt
allfiles.tar    my-fortune.txt Pineapple-89.jpg sentences.txt    Video.mp4
miguel@miguel-VirtualBox:~/lab7/question2$ rm *.tar
miguel@miguel-VirtualBox:~/lab7/question2$ ls
89-Berries.svg  my-fortune.txt  Pineapple-89.jpg  sentences.txt  Video.mp4
Banana_78.png   mynotes.txt     randomtext.txt    something.txt
miguel@miguel-VirtualBox:~/lab7/question2$ ls | cpio -ov > allmyfiles.cpio
cpio: File allmyfiles.cpio grew, 853504 new bytes not copied
allmyfiles.cpio
Banana_78.png
my-fortune.txt
mynotes.txt
Pineapple-89.jpg
randomtext.txt
sentences.txt
something.txt
Video.mp4
11625 blocks
miguel@miguel-VirtualBox:~/lab7/question2$ ls
89-Berries.svg  Banana_78.png  mynotes.txt      randomtext.txt  something.txt
allmyfiles.cpio my-fortune.txt Pineapple-89.jpg sentences.txt    Video.mp4
miguel@miguel-VirtualBox:~/lab7/question2$ ls | cpio -ovH tar -f allmyfiles.tar
cpio: Too many arguments
Try 'cpio --help' or 'cpio --usage' for more information.
miguel@miguel-VirtualBox:~/lab7/question2$ ls
89-Berries.svg  Banana_78.png  mynotes.txt      randomtext.txt  something.txt
allmyfiles.cpio my-fortune.txt Pineapple-89.jpg sentences.txt    Video.mp4
miguel@miguel-VirtualBox:~/lab7/question2$ ls | cpio -ovH tar -F allmyfiles.tar
89-Berries.svg
allmyfiles.cpio
cpio: File allmyfiles.tar grew, 6807040 new bytes not copied
allmyfiles.tar
Banana_78.png
my-fortune.txt
mynotes.txt
Pineapple-89.jpg
randomtext.txt
sentences.txt
something.txt
Video.mp4
34894 blocks
miguel@miguel-VirtualBox:~/lab7/question2$ ls
89-Berries.svg  allmyfiles.tar  my-fortune.txt  Pineapple-89.jpg  sentences.txt  Video.mp4
allmyfiles.cpio Banana_78.png   mynotes.txt     randomtext.txt    something.txt

```

```

miguel@miguel-VirtualBox:~/lab7/question2$ rm allfiles.tar
miguel@miguel-VirtualBox:~/lab7/question2$ rm allmyfiles.cpio
miguel@miguel-VirtualBox:~/lab7/question2$ rm *.{png,txt,jpg}
miguel@miguel-VirtualBox:~/lab7/question2$ rm *.{svg} Video.mp4
rm: cannot remove '*.{svg}': No such file or directory
miguel@miguel-VirtualBox:~/lab7/question2$ rm *.svg Video.mp4
rm: cannot remove 'Video.mp4': No such file or directory
miguel@miguel-VirtualBox:~/lab7/question2$ rm *.svg
rm: cannot remove '*.svg': No such file or directory
miguel@miguel-VirtualBox:~/lab7/question2$ ls
allmyfiles.tar
miguel@miguel-VirtualBox:~/lab7/question2$

```

Question 3

```

miguel@miguel-VirtualBox:~/lab7/question2$ cd ../question3/
miguel@miguel-VirtualBox:~/lab7/question3$ ls
miguel@miguel-VirtualBox:~/lab7/question3$ lorem > mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question3$ ls
mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question3$ ls -lh
total 4.0K
-rw-rw-r-- 1 miguel miguel 303 Dec 10 16:58 mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question3$ lorem >> mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question3$ lorem >> mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question3$ lorem >> mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question3$ ls -lh
total 4.0K
-rw-rw-r-- 1 miguel miguel 862 Dec 10 16:59 mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question3$ curl http://metaphorpsum.com/sentences/100 >> mynotes.txt
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 6326    0 6326    0    0 19645    0 --:--:-- --:--:-- --:--:-- 19645
miguel@miguel-VirtualBox:~/lab7/question3$ ls -lh
total 8.0K
-rw-rw-r-- 1 miguel miguel 7.1K Dec 10 17:00 mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question3$

```

```

miguel@miguel-VirtualBox:~/lab7/question3$ gzip -k mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question3$ bzip2 -k mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question3$ xz -k mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question3$ ls -lh
total 20K
-rw-rw-r-- 1 miguel miguel 7.1K Dec 10 17:00 mynotes.txt
-rw-rw-r-- 1 miguel miguel 2.9K Dec 10 17:00 mynotes.txt.bz2
-rw-rw-r-- 1 miguel miguel 2.9K Dec 10 17:00 mynotes.txt.gz
-rw-rw-r-- 1 miguel miguel 2.9K Dec 10 17:00 mynotes.txt.xz
miguel@miguel-VirtualBox:~/lab7/question3$

```

Question 4

```
miguel@miguel-VirtualBox:~/lab7/question3$ cd ../question4/
miguel@miguel-VirtualBox:~/lab7/question4$ ls
miguel@miguel-VirtualBox:~/lab7/question4$ gzip -dkc < ../question3/mynotes.txt.gz > mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question4$ ls
mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question4$ mv mynotes.txt mynotes2.txt
miguel@miguel-VirtualBox:~/lab7/question4$ bzip2 -dkc < ../question3/mynotes.txt.bz2 > mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question4$ ls
mynotes2.txt mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question4$ mv mynotes.txt mynotes3.txt
miguel@miguel-VirtualBox:~/lab7/question4$ xz -dkc < ../question3/mynotes.txt.xz > mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question4$ ls
mynotes2.txt mynotes3.txt mynotes.txt
miguel@miguel-VirtualBox:~/lab7/question4$ zip notestaken.zip mynotes.txt mynotes2.txt mynotes3.txt
  adding: mynotes.txt (deflated 60%)
  adding: mynotes2.txt (deflated 60%)
  adding: mynotes3.txt (deflated 60%)
miguel@miguel-VirtualBox:~/lab7/question4$ ls
mynotes2.txt mynotes3.txt mynotes.txt notestaken.zip
miguel@miguel-VirtualBox:~/lab7/question4$ 7z a notestaken.7z mynotes.txt mynotes2.txt mynotes3.txt

7-Zip [64] 16.02 : Copyright (c) 1999-2016 Igor Pavlov : 2016-05-21
p7zip Version 16.02 (locale=en_US.UTF-8,Utf16=on,HugeFiles=on,64 bits,2 CPUs AMD Ryzen 5 3600 6-Core Proc
essor
(870F10),ASM,AES-NI)

Scanning the drive:
3 files, 21564 bytes (22 KiB)

Creating archive: notestaken.7z

Items to compress: 3

Files read from disk: 3
Archive size: 3127 bytes (4 KiB)
Everything is ok
miguel@miguel-VirtualBox:~/lab7/question4$ ls notestaken.7z
notestaken.7z
miguel@miguel-VirtualBox:~/lab7/question4$ ls
mynotes2.txt mynotes3.txt mynotes.txt notestaken.7z notestaken.zip
miguel@miguel-VirtualBox:~/lab7/question4$ rar a notestaken.rar mynotes.txt mynotes2.txt mynotes3.txt

RAR 5.50 Copyright (c) 1993-2017 Alexander Roshal 11 Aug 2017
Trial version Type 'rar -?' for help

Evaluation copy. Please register.

Creating archive notestaken.rar

Adding mynotes.txt OK
Adding mynotes2.txt OK
Adding mynotes3.txt OK
Done
miguel@miguel-VirtualBox:~/lab7/question4$
```