- # Answers Lab7

  ## Question 1

    - A

```
andro@andro-VirtualBox:~$ ls
 cis106                GNU+linux.md       lab7              share
 Desktop               lab4               linux.md          snap
 Documents             lab4-audio         linux+other.md    Templates
 Downloads             lab4-docs          Music             Videos
 exa_0.9.0-4_amd64.deb lab4-imgs          Pictures          website.html
 folder                lab4olddir.tar     Public
 food2.txt             lab4-video         'samba file.txt'
 food.txt              lab5               scripts
andro@andro-VirtualBox:~$ cd lab7/
andro@andro-VirtualBox:~/lab7$ ls
question1  question2  question3  question4
andro@andro-VirtualBox:~/lab7$ cd question1
andro@andro-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
```

    - B

```
andro@andro-VirtualBox:~/lab7/question1$ tar cf allfiles.tar *.txt *[0-9]*.{jpg,png,svg} video.mp4
tar: video.mp4: Cannot stat: No such file or directory
tar: Exiting with failure status due to previous errors
andro@andro-VirtualBox:~/lab7/question1$ tar cf allfile.tar *.txt *[0-9]*.{jpg,png,svg}
andro@andro-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
```

    - C

```
andro@andro-VirtualBox:~/lab7/question1$ lorem > randomtext.txt
andro@andro-VirtualBox:~/lab7/question1$ cat randomtext.txt
Sunt sunt aperiam ratione quisquam voluptates rerum quam. Ut exercitationem sequ
i ipsa voluptatem qui. Quis tempora est et. Id numquam at molestiae incidunt qui
andro@andro-VirtualBox:~/lab7/question1$ █
```

    - D

```
andro@andro-VirtualBox:~/lab7/question1$ tar rf allfiles.tar randomtext.txt
andro@andro-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
randomtext.txt
```

  ## Question 2

- A B C

```
andro@andro-VirtualBox:~/lab7/question1$ mv allfiles.tar ../question2/
andro@andro-VirtualBox:~/lab7/question1$ cd ../question2/
andro@andro-VirtualBox:~/lab7/question2$ ls
allfiles.tar
andro@andro-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
randomtext.txt
2985 blocks
andro@andro-VirtualBox:~/lab7/question2$ rm *.tar
andro@andro-VirtualBox:~/lab7/question2$ ls
89-Berries.svg  Banana_78.png  my-fortune.txt  mynotes.txt  Pineapple-89.jpg  randomtext.txt  sentences.txt  something.txt
andro@andro-VirtualBox:~/lab7/question2$ ls | cpio -ov > allmyfiles.cpio
89-Berries.svg
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
4640 blocks
andro@andro-VirtualBox:~/lab7/question2$ ls
89-Berries.svg  allmyfiles.cpio  Banana_78.png  my-fortune.txt  mynotes.txt  Pineapple-89.jpg  randomtext.txt  sentences.txt  something.txt
andro@andro-VirtualBox:~/lab7/question2$ ls | cpio -ovH tar -F allmyfiles.tar
89-Berries.svg
allmyfiles.cpio
cpio: File allmyfiles.tar grew, 3230720 new bytes not copied
allmyfiles.tar
Banana_78.png
my-fortune.txt
mynotes.txt
Pineapple-89.jpg
randomtext.txt
sentences.txt
something.txt
13937 blocks
```

- D E

```
something.txt
13937 blocks
andro@andro-VirtualBox:~/lab7/question2$ ls
89-Berries.svg  allmyfiles.cpio  allmyfiles.tar  Banana_78.png  my-fortune.txt  mynotes.txt  Pineapple-89.jpg  randomtext.txt  sentences.txt  something.txt
andro@andro-VirtualBox:~/lab7/question2$ rm -v  !("allmyfiles.tar")
removed '89-Berries.svg'
removed 'allmyfiles.cpio'
removed 'Banana_78.png'
removed 'my-fortune.txt'
removed 'mynotes.txt'
removed 'Pineapple-89.jpg'
removed 'randomtext.txt'
removed 'sentences.txt'
removed 'something.txt'
andro@andro-VirtualBox:~/lab7/question2$ ls
allmyfiles.tar
andro@andro-VirtualBox:~/lab7/question2$ cpio -iv < archive
bash: archive: No such file or directory
andro@andro-VirtualBox:~/lab7/question2$ cpio -iv < allmyfiles.tar
89-Berries.svg
allmyfiles.cpio
cpio: allmyfiles.tar not created: newer or same age version exists
allmyfiles.tar
Banana_78.png
my-fortune.txt
mynotes.txt
Pineapple-89.jpg
randomtext.txt
sentences.txt
something.txt
13936 blocks
andro@andro-VirtualBox:~/lab7/question2$ ls
89-Berries.svg  allmyfiles.cpio  allmyfiles.tar  Banana_78.png  my-fortune.txt  mynotes.txt  Pineapple-89.jpg  randomtext.txt  sentences.txt  something.txt
andro@andro-VirtualBox:~/lab7/question2$
```

Question 3

```
andro@andro-VirtualBox:~/lab7/question3$ ls
andro@andro-VirtualBox:~/lab7/question3$ lorem > mynotes.txt
andro@andro-VirtualBox:~/lab7/question3$ ls
mynotes.txt
andro@andro-VirtualBox:~/lab7/question3$ ls -lh
total 4.0K
-rw-rw-r-- 1 andro andro 153 Dec  9 16:16 mynotes.txt
andro@andro-VirtualBox:~/lab7/question3$ gzip -k mynotes.txt
andro@andro-VirtualBox:~/lab7/question3$ bzip2 -k mynotes.txt
andro@andro-VirtualBox:~/lab7/question3$ xz -k mynotes.txt
andro@andro-VirtualBox:~/lab7/question3$ ls -lh
total 16K
-rw-rw-r-- 1 andro andro 153 Dec  9 16:16 mynotes.txt
-rw-rw-r-- 1 andro andro 139 Dec  9 16:16 mynotes.txt.bz2
-rw-rw-r-- 1 andro andro 137 Dec  9 16:16 mynotes.txt.gz
-rw-rw-r-- 1 andro andro 184 Dec  9 16:16 mynotes.txt.xz
```

Question 4

```
andro@andro-VirtualBox:~/lab7/question3$ ls
mynotes.txt   mynotes.txt.bz2   mynotes.txt.gz   mynotes.txt.xz
andro@andro-VirtualBox:~/lab7/question3$ cd ../question4/
andro@andro-VirtualBox:~/lab7/question4$ gzip -dkc < ../question3/mynotes.txt.gz > mynotes.txt
andro@andro-VirtualBox:~/lab7/question4$ ls
mynotes.txt
andro@andro-VirtualBox:~/lab7/question4$ mv mynotes.txt mynotes2.txt
andro@andro-VirtualBox:~/lab7/question4$ bzip2 -dkc < ../question3/mynotes.txt.bz2 > mynotes.txt
andro@andro-VirtualBox:~/lab7/question4$ ls
mynotes2.txt   mynotes.txt
andro@andro-VirtualBox:~/lab7/question4$ mv mynotes.txt mynotes3.txt
andro@andro-VirtualBox:~/lab7/question4$ xz -dkc < ../question3/mynotes.txt.xz > mynotes.txt
andro@andro-VirtualBox:~/lab7/question4$ ls
mynotes2.txt   mynotes3.txt   mynotes.txt
andro@andro-VirtualBox:~/lab7/question4$ zip ../question4/.zip mynotes2.txt mynotes3.txt mynotes.txt
  adding: mynotes2.txt (deflated 30%)
  adding: mynotes3.txt (deflated 30%)
  adding: mynotes.txt (deflated 30%)
andro@andro-VirtualBox:~/lab7/question4$ ls
mynotes2.txt   mynotes3.txt   mynotes.txt
andro@andro-VirtualBox:~/lab7/question4$ zip mynotes.zip mynotes2.txt mynotes2.txt mynotes.txt
  adding: mynotes2.txt (deflated 30%)
  adding: mynotes.txt (deflated 30%)
andro@andro-VirtualBox:~/lab7/question4$ ls
mynotes2.txt   mynotes3.txt   mynotes.txt   mynotes.zip
andro@andro-VirtualBox:~/lab7/question4$ zip question4.zip mynotes2.txt mynotes3.txt mynotes.txt
  adding: mynotes2.txt (deflated 30%)
  adding: mynotes3.txt (deflated 30%)
  adding: mynotes.txt (deflated 30%)
andro@andro-VirtualBox:~/lab7/question4$ ls
mynotes2.txt   mynotes3.txt   mynotes.txt   mynotes.zip   question4.zip
andro@andro-VirtualBox:~/lab7/question4$
```

```
andro@andro-VirtualBox:~/lab7/question4$ 7z a -tzip ../question4/.zip

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,3 CPUs AMD Ryzen 5 4500U with Radeon Graphics          (860F01),ASM,AES-NI)

Open archive: ../question4/.zip
--
Path = ../question4/.zip
Type = zip
Physical Size = 797

Scanning the drive:
6 files, 2591 bytes (3 KiB)

Updating archive: ../question4/.zip

Items to compress: 6


Files read from disk: 6
Archive size: 2086 bytes (3 KiB)
Everything is Ok
andro@andro-VirtualBox:~/lab7/question4$ ls
mynotes2.txt  mynotes3.txt  mynotes.txt   mynotes.zip   question4.zip
```