

## COMPRESSION

One can find compression quite useful, especially in case of work with raw data. This tutorial is intended for basic compression techniques ( there is additional tip in Cplusplus repository for in-RAM compression ). Generally it uses two packages 7za and pbzip2:

```
#sudo aptitude install pbzip2 p7zip-full
```

### 7za

1) 7za uses 7z compression algorithm. For making an archive from file1 and file2:

```
#7za a -t7z archiveName.7z file1 file2
```

2) decompression command is as follow:

```
#7za x archiveName.7z
```

3) compression directories with subdirectories:

```
#7za a -t7z -r archiveName.7z pathToDirectory1 pathToDirectory2
```

### pbzip2

1) parallel files compression without deletion as a result files are compressed in bz2 format:

```
#pbzip2 -zk file1 file2
```

2) parallel decompression

```
#pbzip2 -d file1.bz2 file2.bz2
```

### tar+pbzip2

1) parallel directory compression with archive

```
#tar -cf tmp.tar.bz2 --use-compress-prog=pbzip2 tmp/
```

2) parallel directory decompression

```
#tar -jcf tmp.tar.bz2 tmp.tar.bz2 tmp_decompress/
```