1 Compilation:

g++: run make in ./linux/

2 Usage Information:

Binaries in ./linux/bin/

2.1 For non-segmented files:

```
ValidateMP4 [-filetype <type>] [-printtype <options>] [-checklevel <level>] [-infofile
<Segment Info File>] [-leafinfo <Leaf Info File>] [-segal] [-ssegal]
            [-samplenumber <number>] [-verbose <options> [-help] inputfile
    -a[tompath] <atompath> - limit certain operations to <atompath> (e.g. moov-1:trak-2)
                      this effects -checklevel and -printtype (default is everything)
    -p[rinttype] <options> - controls output (combine options with +)
                      atompath - output the atompath for each atom
                      atom - output the contents of each atom
                      fulltable - output those long tables (e.g. samplesize tables)
                      sample - output the samples as well
                                  (depending on the track type, this is the same as sampleraw)
                      sampleraw - output the samples in raw form
                      hintpayload - output payload for hint tracks
    -c[hecklevel] <level> - increase the amount of checking performed
                      1: check the moov container (default -atompath is ignored)
                      2: check the samples
                      3: check the payload of hint track samples
    -i[nfofile] <Segment Info File> - Offset file generated by assembler
    -leafinfo <Leaf Info File> - Information file generated by this software (named
leafinfo.txt) for another representation, provided to run for cross-checks of alignment
    -segal - Check Segment alignment based on <Leaf Info File>
    -ssegal - Check Subegment alignment based on <Leaf Info File>
    -s[amplenumber] <number> - limit sample checking or printing operations to sample <number>
                      most effective in combination with -atompath (default is all samples)
    -h[elp] - print this usage message
```

Output and errors (if any) will be printed on console.

Description of `-infofile and -leafinfo is provided in the following sections.`

2.2 For segmented files:

Segmented files must first be re-assembled. A script “Assemble” is provided with the following usage.

```
Assemble [1/0] (initialization segment), segment 1, segment 2,...
1: first file is an initialization segment, 0 otherwise.
```

This script generates an assembled file “tempMerged.mp4” and a corresponding segment information file “segmentSizeInfoFile.txt”. The former file will be the inputfile and the latter will be used in conjunction with `-infofile` for segment validation.

2.3 For segment/subsegment Alignment checks:

ValidateMP4.exe creates a leaf subsegment information file “leafinfo.txt”. If segment or subsegment alignment of a representation B is to be cross checked with representation A:

1. Run `ValidateMP4.exe representation A`
2. Run `ValidateMP4.exe representation B -leafinfo leafinfo.txt -segal` or `ValidateMP4.exe representation B -leafinfo leafinfo.txt -ssegal` (for checking segment or subsegment alignment, respectively)