1 Compilation:

g++: run make in ./linux/

2 Usage Information:

Binaries in ./linux/bin/

2.1 For non-segmented files:

```
Usage: %s [-filetype <type>]
[-printtype <options>] [-checklevel <level>] [-infofile <Segment Info File>] [-leafinfo <Leaf Info File>] [-segal] [-
ssegal] [-startwithsap] [-level] [-isolive] [-isoondemand] [-isomain]\n", "ValidateMP4" );
                  [-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>
            -isolive           Make checks specific for media segments conforming to ISO Base media file format live
profile
            -isoondemand       Make checks specific for media segments conforming to ISO Base media file format On
Demand profile
            -isomain           Make checks specific for media segments conforming to ISO Base media file format main
profile
            -startwithsap      Check for a specific SAP type as announced in the MPD
            -level             SubRepresentation@level checks
            -bss               Make checks specific for bitstream switching
            -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)