

# Practice 3

Sebastian R. Ovelar Anderson

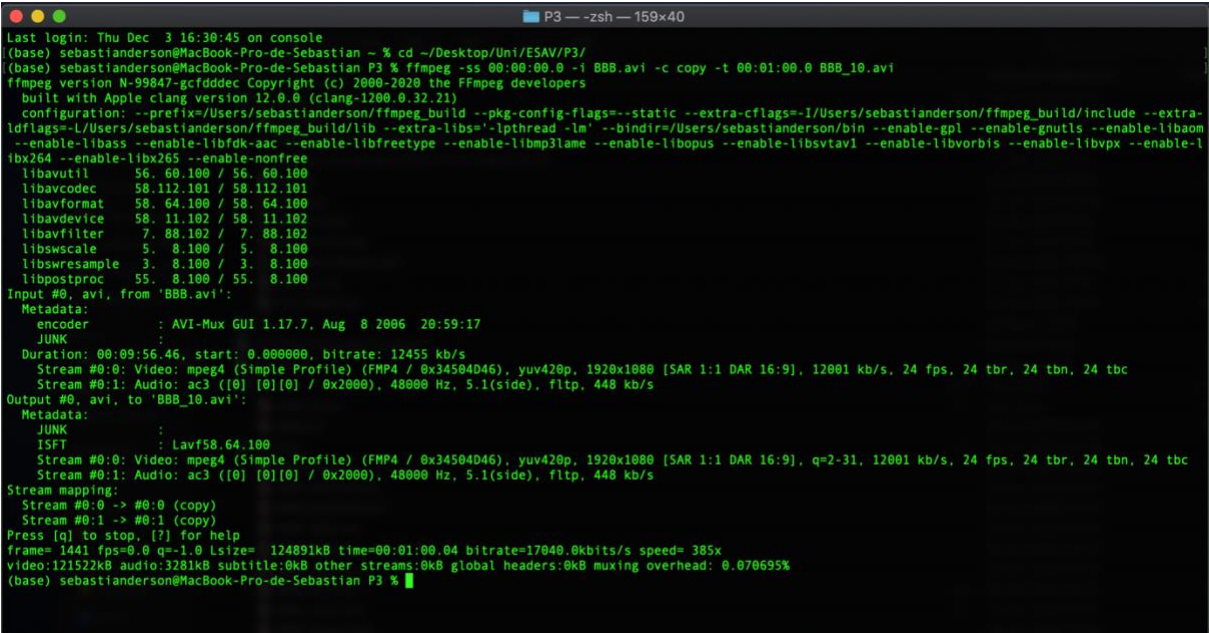
NIA:206384

1) You're going to create a new BBB container:

-Cut BBB into 1 minute only video.

I did this using the command:

```
ffmpeg -ss 00:00:00.0 -i BBB.avi -c copy -t 00:01:00.0 BBB_10.avi
```



```
P3 — zsh — 159x40
Last login: Thu Dec 3 16:30:45 on console
(base) sebastiananderson@MacBook-Pro-de-Sebastian ~ % cd ~/Desktop/Uni/ESAV/P3/
(base) sebastiananderson@MacBook-Pro-de-Sebastian P3 % ffmpeg -ss 00:00:00.0 -i BBB.avi -c copy -t 00:01:00.0 BBB_10.avi
ffmpeg version N-99847-gcfddec Copyright (c) 2000-2020 the FFmpeg developers
  built with Apple clang version 12.0.0 (clang-1200.0.32.21)
  configuration: --prefix=/Users/sebastiananderson/ffmpeg_build --pkg-config-flags=--static --extra-cflags=-I/Users/sebastiananderson/ffmpeg_build/include --extra-ldflags=-L/Users/sebastiananderson/ffmpeg_build/lib --extra-libs='-lpthread -lm' --bindir=/Users/sebastiananderson/bin --enable-gpl --enable-gnutls --enable-libaom --enable-libbass --enable-libfdk-aac --enable-libfreetype --enable-libgsm --enable-liblame --enable-libopus --enable-librtmp --enable-libsvtav1 --enable-libvorbis --enable-libvpx --enable-libx264 --enable-libx265 --enable-nonfree
  libavutil      56. 60.100 / 56. 60.100
  libavcodec     58.112.101 / 58.112.101
  libavformat    58. 64.100 / 58. 64.100
  libavdevice    58. 11.102 / 58. 11.102
  libavfilter     7. 88.102 /  7. 88.102
  libswscale     5.  8.100 /  5.  8.100
  libswresample  3.  8.100 /  3.  8.100
  libpostproc   55.  8.100 / 55.  8.100
Input #0, avi, from 'BBB.avi':
  Metadata:
    encoder      : AVI-Mux GUI 1.17.7, Aug  8 2006  20:59:17
    JUNK         :
  Duration: 00:09:56.46, start: 0.000000, bitrate: 12455 kb/s
    Stream #0:0 Video: mpeg4 (Simple Profile) (FMP4 / 0x34504D46), yuv420p, 1920x1080 [SAR 1:1 DAR 16:9], 12001 kb/s, 24 fps, 24 tbr, 24 tbn, 24 tbc
    Stream #0:1 Audio: ac3 ([0] [0] [0] / 0x2000), 48000 Hz, 5.1(side), fltp, 448 kb/s
Output #0, avi, to 'BBB_10.avi':
  Metadata:
    JUNK         :
    ISFT         : Lavf58.64.100
    Stream #0:0 Video: mpeg4 (Simple Profile) (FMP4 / 0x34504D46), yuv420p, 1920x1080 [SAR 1:1 DAR 16:9], q=2-31, 12001 kb/s, 24 fps, 24 tbr, 24 tbn, 24 tbc
    Stream #0:1 Audio: ac3 ([0] [0] [0] / 0x2000), 48000 Hz, 5.1(side), fltp, 448 kb/s
Stream mapping:
  Stream #0:0 -> #0:0 (copy)
  Stream #0:1 -> #0:1 (copy)
Press [q] to stop, [?] for help
frame= 1441 fps=0.0 q=-1.0 Lsize= 124891kB time=00:01:00.04 bitrate=17040.0kbts/s speed= 385x
video:121522kB audio:3281kB subtitle:0kB other streams:0kB global headers:0kB muxing overhead: 0.070695%
(base) sebastiananderson@MacBook-Pro-de-Sebastian P3 %
```

-Export BBB(1min) audio as a mono track.

```
ffmpeg -i BBB_10.avi -vn -ac 1 -acodec copy BBB-audio.mp4
```

```

P3 -- zsh -- 184x55
Stream #0:1: Audio: ac3 ([0] [0] [0] / 0x2000), 48000 Hz, 5.1(side), fltp, 448 kb/s
[mp4 @ 0x7f8c5688200] track 0: codec frame size is not set
Output #0, mp4, to 'BBB-audio.mp4':
  Metadata:
    encoder      : Lavf58.64.100
    Stream #0:0: Audio: ac3 (ac-3 / 0x33206361), 48000 Hz, 5.1(side), fltp, 448 kb/s
Stream mapping:
  Stream #0:1 -> #0:0 (copy)
Press [q] to stop, [?] for help
size= 3282kB time=00:00:59.96 bitrate= 448.3kbits/s speed=2.18e03x
video:0kB audio:3281kB subtitle:0kB other streams:0kB global headers:0kB muxing overhead: 0.022702%
(base) sebastianderson@MacBook-Pro-de-Sebastian P3 % ffmpeg -i BBB-audio.mp4 -ac 1 BBB-audio.wav
ffmpeg version N-99847-gcfddec Copyright (c) 2000-2020 the FFmpeg developers
  built with Apple clang version 12.0.0 (clang-1200.0.32.21)
  configuration: --prefix=/Users/sebastianderson/ffmpeg_build --pkg-config-flags=--static --extra-cflags=-I/Users/sebastianderson/ffmpeg_build/include --extra-ldflags=-L/Users/sebastianderson/ffmpeg_build/lib --extra-libs=-lpthread -lm --bindir=/Users/sebastianderson/bin --enable-gpl --enable-gnutls --enable-libaom --enable-libass --enable-libfdk-aac --enable-libfreetype --enable-libgsm --enable-liblame --enable-libopus --enable-librtmp --enable-libsvtavi --enable-libvorbis --enable-libvpx --enable-libx264 --enable-libx265 --enable-nonfree
  libavutil      56. 60.100 / 56. 60.100
  libavcodec     58.112.101 / 58.112.101
  libavformat    58. 64.100 / 58. 64.100
  libavdevice    58. 11.102 / 58. 11.102
  libavfilter     7. 80.102 / 7. 80.102
  libbswap       5.   0.100 / 5.   0.100
  libswscale     5.   0.100 / 5.   0.100
  libswresample  3.   0.100 / 3.   0.100
  libpostproc   55.  0.100 / 55.  0.100
Input #0, mov,mp4,m4a,3gp,3g2,mj2, from 'BBB-audio.mp4':
  Metadata:
    major_brand      : isom
    minor_version    : 512
    compatible_brands: isomiso2mp41
    encoder          : Lavf58.64.100
  Duration: 00:01:00.00, start: 0.000000, bitrate: 448 kb/s
  Stream #0:0(und): Audio: ac3 (ac-3 / 0x33206361), 48000 Hz, 5.1(side), fltp, 448 kb/s (default)
  Metadata:
    handler_name      : SoundHandler
  Side data:
    audio service type: main
Stream mapping:
  Stream #0:0 -> #0:0 (ac3 (native) -> pcm_s16le (native))
Press [q] to stop, [?] for help
Output #0, wav, to 'BBB-audio.wav':
  Metadata:
    major_brand      : isom
    minor_version    : 512
    compatible_brands: isomiso2mp41
    ISFT             : Lavf58.64.100
  Stream #0:0(und): Audio: pcm_s16le ([1][0][0] [0] / 0x0001), 48000 Hz, mono, s16, 768 kb/s (default)
  Metadata:
    handler_name      : SoundHandler
    encoder           : Lavc58.112.101 pcm_s16le
  Side data:
    audio service type: main
size= 5025kB time=00:01:00.00 bitrate= 768.0kbits/s speed= 259x
video:0kB audio:5025kB subtitle:0kB other streams:0kB global headers:0kB muxing overhead: 0.001354%
(base) sebastianderson@MacBook-Pro-de-Sebastian P3 %

```

## -Export BBB(1min) audio in lower bitrate

ffmpeg -i BBB\_10.avi -i BBB-audio.wav -shortest -c:v copy -c:a aac -b:a 256k -ac 1 BBB\_mono.avi

```

(base) sebastianderson@MacBook-Pro-de-Sebastian P3 % ffmpeg -i BBB_10.avi -i BBB-audio.wav -shortest -c:v copy -c:a aac -b:a 256k -ac 1 BBB_mono.mp4
ffmpeg version N-99847-gcfddec Copyright (c) 2000-2020 the FFmpeg developers
  built with Apple clang version 12.0.0 (clang-1200.0.32.21)
  configuration: --prefix=/Users/sebastianderson/ffmpeg_build --pkg-config-flags=--static --extra-cflags=-I/Users/sebastianderson/ffmpeg_build/include --extra-ldflags=-L/Users/sebastianderson/ffmpeg_build/lib --extra-libs=-lpthread -lm --bindir=/Users/sebastianderson/bin --enable-gpl --enable-gnutls --enable-libaom --enable-libass --enable-libfdk-aac --enable-libfreetype --enable-libgsm --enable-liblame --enable-libopus --enable-librtmp --enable-libsvtavi --enable-libvorbis --enable-libvpx --enable-libx264 --enable-libx265 --enable-nonfree
  libavutil      56. 60.100 / 56. 60.100
  libavcodec     58.112.101 / 58.112.101
  libavformat    58. 64.100 / 58. 64.100
  libavdevice    58. 11.102 / 58. 11.102
  libavfilter     7. 80.102 / 7. 80.102
  libbswap       5.   0.100 / 5.   0.100
  libswscale     5.   0.100 / 5.   0.100
  libswresample  3.   0.100 / 3.   0.100
  libpostproc   55.  0.100 / 55.  0.100
Input #0, avi, from 'BBB_10.avi':
  Metadata:
    encoder      : Lavf58.64.100
  Duration: 00:01:00.04, start: 0.000000, bitrate: 17039 kb/s
  Stream #0:0: Video: mpeg4 (Simple Profile) (FMP4 / 0x34504046), yuv420p, 1920x1080 [SAR 1:1 DAR 16:9], 16591 kb/s, 24 fps, 24 tbr, 24 tbn, 24 tbc
  Stream #0:1: Audio: ac3 ([0] [0] [0] / 0x2000), 48000 Hz, 5.1(side), fltp, 448 kb/s
Guessed Channel Layout for Input Stream #1.0 : mono
Input #1, wav, from 'BBB-audio.wav':
  Metadata:
    encoder      : Lavf58.64.100
  Duration: 00:01:00.00, bitrate: 768 kb/s
  Stream #1:0: Audio: pcm_s16le ([1][0][0] [0] / 0x0001), 48000 Hz, mono, s16, 768 kb/s
Stream mapping:
  Stream #0:0 -> #0:0 (copy)
  Stream #0:1 -> #0:1 (ac3 (native) -> aac (native))
Press [q] to stop, [?] for help
Output #0, mp4, to 'BBB_mono.mp4':
  Metadata:
    encoder      : Lavf58.64.100
  Stream #0:0: Video: mpeg4 (Simple Profile) (mp4v / 0x76347060), yuv420p, 1920x1080 [SAR 1:1 DAR 16:9], q=2-31, 16591 kb/s, 24 fps, 24 tbr, 5000k tbn, 24 tbc
  Stream #0:1: Audio: aac (LC) (mp4a / 0x61347060), 48000 Hz, mono, fltp, 256 kb/s
  Metadata:
    encoder      : Lavc58.112.101 aac
  frame= 1441 fps=985 q=1.0 Lsize= 123076kB time=00:00:59.99 bitrate=16804.0kbits/s speed= 41x
video:121522kB audio:1523kB subtitle:0kB other streams:0kB global headers:0kB muxing overhead: 0.025169%
[aac @ 0x7fdef202c000] Qavg: 58602.430
(base) sebastianderson@MacBook-Pro-de-Sebastian P3 %

```

## -Get subtitles of BBB through the internet and cut only the first minute (sorry, I think this needs to be done manually)

ffmpeg -i BBB\_mono.mp4 -i BBB.srt -c copy -c:s mov\_text BBB\_monosub.mp4

```

Input #0, mp4, from 'BBB_mono.mp4':
  Metadata:
    major_brand      : isom
    minor_version    : 512
    compatible_brands: isomiso2mp41
    encoder          : Lavf58.64.100
  Duration: 00:01:00.04, start: 0.000000, bitrate: 16792 kb/s
  Stream #0:0(und): Audio: aac (LC) (mp4a / 0x61347060), 48000 Hz, mono, fltp, 208 kb/s (default)
  Metadata:
    handler_name      : VideoHandler
  Stream #0:1(und): Audio: aac (LC) (mp4a / 0x61347060), 48000 Hz, mono, fltp, 208 kb/s (default)
  Metadata:
    handler_name      : SoundHandler
  Stream #0:2(und): Subtitle: mov_text (tx3g / 0x67337874), 0 kb/s (default)
  Metadata:
    handler_name      : SubtitleHandler
At least one output file must be specified

```

```

P3 -z -zsh - 195x55

[jac @ 0x7dfe202c000] Qavg: 58602.438
(base) sebastianderson@MacBook-Pro-de-Sebastian P3 % ffmpeg -i B8B_mono.mp4 -i B8B_srt -c copy -c:s mov_text B8B_monosub.mp4
ffmpeg version N-98047-gcfddec Copyright (c) 2000-2020 the Ffmpeg developers
built with Apple clang version 12.0.0 (clang-1200.0.32.21)
configuration: --prefix=/Users/sebastianderson/ffmpeg_build --pkg-config-flags=--static --extra-cflags=-I/Users/sebastianderson/ffmpeg_build/lib --extra-libs=-lpthread -lm --bindir=/Users/sebastianderson/bin --enable-gpl --enable-gnutls --enable-libaom --enable-libass --enable-libfdk-aac --enable-libfreetype --enable-libmp3lame --enable-libopus --enable-libvorbis --enable-libvpx --enable-libx264 --enable-libx265 --enable-nonfree
libavutil 56. 60.100 / 56. 60.100
libavcodec 58.112.101 / 58.112.101
libavformat 58. 64.100 / 58. 64.100
libavdevice 58. 11.102 / 58. 11.102
libavfilter 7. 88.102 / 7. 88.102
libbscale 5.  8.100 / 5.  8.100
libswresample 3.  8.100 / 3.  8.100
libpostproc 55.  8.100 / 55.  8.100
Input #0: mov.mp4,m4a,3gp,3g2,mj2, from 'B8B_mono.mp4':
Metadata:
  major_brand      : isom
  minor_version    : 512
  compatible_brands: isomiso2mp41
  encoder          : Lavf58.64.100
Duration: 00:01:00.04, start: 0.000000, bitrate: 16792 kb/s
Stream #0(und): Video: mpeg4 (Simple Profile) (mp4v / 0x7634706D), yuv420p, 1920x1080 [SAR 1:1 DAR 16:9], 16580 kb/s, 24 fps, 24 tbr, 5000k tbn, 24 tbc (default)
Metadata:
  handler_name      : VideoHandler
Stream #0:1(und): Audio: aac (LC) (mp4a / 0x6134706D), 48000 Hz, mono, fltp, 208 kb/s (default)
Metadata:
  handler_name      : SoundHandler
Input #1: srt, from 'B8B.srt':
Duration: N/A, bitrate: N/A
Stream #1:0: Subtitle: subrip
Multiple -c, -codec, -acodec, -vcodec, -scodec or -dcodec options specified for stream 2, only the last option '-c:s mov_text' will be used.
Output #0: mp4, to 'B8B_monosub.mp4':
Metadata:
  major_brand      : isom
  minor_version    : 512
  compatible_brands: isomiso2mp41
  encoder          : Lavf58.64.100
Stream #0(und): Video: mpeg4 (Simple Profile) (mp4v / 0x7634706D), yuv420p, 1920x1080 [SAR 1:1 DAR 16:9], q=2-31, 16580 kb/s, 24 fps, 24 tbr, 5000k tbn, 5000k tbc (default)
Metadata:
  handler_name      : VideoHandler
Stream #0:1(und): Audio: aac (LC) (mp4a / 0x6134706D), 48000 Hz, mono, fltp, 208 kb/s (default)
Metadata:
  handler_name      : SoundHandler
Stream #0:2: Subtitle: mov_text (tx3g / 0x67337074)
Metadata:
  encoder          : Lavc58.112.101 mov_text
Stream mapping:
  Stream #0:0 -> #0:0 (copy)
  Stream #0:1 -> #0:1 (copy)
  Stream #1:0 -> #0:2 (subrip (srt) -> mov_text (native))
Press [q] to stop, [?] for help
frame=1441 fps=0.0 q=1.0 lsize= 12307708 time=00:00:59.99 bitrate=16894.1kbits/s speed=284x
video=11512x20 audio=1533k subtitle=0kB other streams=0kB global headers=0kB muxing overhead: 0.025869%
(base) sebastianderson@MacBook-Pro-de-Sebastian P3 % ffmpeg -i B8B_monosub.mp4

```